Attachment A to Ordinance 17485
12-3-12

King County

2012 King County Comprehensive Plan Update

December 3, 2012

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INTRODUCTION

I. About King County

King County has some of the most beautiful scenery in the country, some of the most productive farmlands, and one of the most vibrant economies. The King County Comprehensive Plan 2012 establishes a vision that preserves this incredible diversity while continuing to acknowledge that citizens want options as to where they live, work and play. The plan guides growth and development throughout the unincorporated areas of the county and establishes King County's position on major issues such as transportation, annexations, regional water supply and environmental protection.

King County Geography

King County, covering 2,130 square miles, is the size of the state of Delaware, but much more geographically diverse. It extends from Puget Sound in the west to 8,000-foot Mt. Daniel at the Cascade crest to the east. King County's various landforms include saltwater coastline, river floodplains, plateaus, slopes and mountains, punctuated with lakes and salmon streams. Lake Washington, covering 35 square miles, and Lake Sammamish with 8 square miles are the two largest bodies of fresh water. Vashon-Maury Island in Puget Sound and Mercer Island in Lake Washington provide different island environments.

The north-south trending shapes of the lakes and hills make east-west travel more difficult than north-south travel. Four major river basins with salmon-bearing streams are separated by steep-sided plateaus whose slopes are subject to landslides and erosion.

King County Jurisdictions

In 1994, when King County's first comprehensive plan under the Growth Management Act was adopted, the county had 34 cities with 1,116,000 people. More than 493,000 people lived in unincorporated King County – 31% of the county total population. More than a third of annual new residential development was occurring in unincorporated areas. Since December 1994, five new cities have incorporated and numerous annexations have occurred, shifting more than 220,000 people into city limits. As of 2011, there are 39 cities ranging in size from Seattle with more than 608,000 people to Skykomish and Beaux Arts with fewer than 350 each. King County's 39 cities now cover 404 square miles, or 19% of the county's total land area. The

incorporated population has increased by a total of 540,000 since 1994, primarily due to new cities and large annexations, but also due to growth within existing boundaries.

Unincorporated King County, the territory outside any city, now has about 253,000 people, or 13% of the county's population, on 81% of its land area. The unincorporated population has *decreased* by 239,000 since the 1994 Comprehensive Plan was initially adopted, chiefly through the incorporation of new cities.

King County Demographics

In 2011, with more than 1,942,000 people, King County is the largest county in Washington State and the 14th largest in the nation. As a populous, large county with a major central city, King County constitutes the majority of the "Seattle-Bellevue-Everett" metropolitan area of more than 2.7 million persons. King County exhibits growing diversity: more than one-third of our population are now persons-of-color. As of 2010, 65% of the population is non-Hispanic white, 15% Asian or Pacific Islander, 7.7% African-American, 1% Native American and 8.9% Latino (2010 census data).

King County's population has grown by about 330,000 residents, or 21%, since 1994; a modest rate compared with Sunbelt metro areas and nearby Puget Sound counties. However, given the large population already here, the growth numbers are significant. The population increase since 1994 equals the total existing population of the cities of Bellevue, Renton and Kent together. King County is forecasted to grow by an additional 320,000 persons (16%) to about 2,263,000 by 2030.

The number of housing units in King County is growing faster than its population. The 2010 Census counted more than 851,000 houses, apartment and condominium units, and mobile homes; and housing has increased by 159,000 units (23%) since 1994. Household size has stabilized after declining in the 1970s and 1980s and is now estimated at 2.39 persons per household – the same as in 2000. A slight decline in household size is anticipated in coming years to about 2.30 in 2022.

King County Economy

King County is truly the economic engine of Washington State and the Pacific Northwest, and King County’s economy is larger than that of several U.S. states. Nearly 1.2 million workers are employed within the borders of King County, at nearly 70,000 business firms, excluding sole proprietorships. King County’s $61.5 billion payroll is 50.3% of Washington State's $122.3 billion payroll and 72.6% of the region’s $84.7 billion payroll.

King County has a cyclical economy, with booms and recessions typically on a ten-year cycle. During the 1990s, the number of jobs grew by 26% to almost 1.2 million. Since 2000 we have had two major recessions, a boom, and a weak recovery. The result is that as of 2010 the number of jobs is the same as it was in 2000: about 1.1 million. Manufacturing employment remains important, but aerospace, the largest sector, lost 11,100 jobs between 2001 and 2006. It has remained stable since then. The economy has diversified from the traditional aerospace and resource bases to high tech, services and trade, both local and international. County unemployment rates fell steadily in 2006 and 2007 from the relative highs experienced in the five previous years, but increased after 2008 and have remained stubbornly high. Given the county's complement of healthy, innovative businesses and its industrial diversification, its future unemployment rates should be lower than in the state and the nation.

II. Growth Management Planning in King County

King County's comprehensive land use planning dates back to 1964. Its first comprehensive plan under the State Growth Management Act (GMA) was adopted in 1994. The GMA, passed in successive session of the Washington State Legislature in 1990 and 1991, seeks to further protect and enhance the quality of life in King County and the Pacific Northwest. The GMA directs the state's most populous and fastest growing counties and their cities to prepare comprehensive land use plans that anticipate growth over a 20 year horizon and provide for it in a managed manner. In the Puget Sound region, the GMA also requires development of multi-county planning policies (MPPs) by the counties of King, Kitsap, Pierce and Snohomish as well as the development of countywide planning policies (CPPs) by King County and its 39 cities. Each of these plans has recently undergone major revision, informing the 2012 update to the King County Comprehensive Plan.

Multi-county Planning. In April 2008, the assembly of the Puget Sound Regional Council adopted VISION 2040—containing the MPPs—as an update to the earlier Vision 2020 regional plan. VISION 2040 is a regional strategy to accommodate the population and job growth expected by 2040 in the four-county Puget Sound region. As an integrated, long-range vision for maintaining a healthy region, promoting economic vitality, a healthy environment and well-being of people and communities, VISION 2040 provides clear direction to regional, county, and local governments on topics such as setting priorities for transportation investment, stimulating economic development, planning for open space, making city and town centers more suitable for transit and walking, and improving transportation safety and mobility.

Countywide Planning. In response to VISION 2040, King County's Growth Management Planning Council approved a major overhaul and update to the Countywide Planning Policies (CPPs) in 2011. Originally adopted in 1992, the revised CPPs implement the regional vision within King County and the cities within the county, provide a framework for new housing and job growth targets, and provide broad direction to individual jurisdiction comprehensive plans including the King County Comprehensive Plan. The goals of the policies include: promoting a compact and centers-focused growth pattern that uses land and infrastructure efficiently, protecting the Rural Area and Resource Lands, providing affordable housing throughout the county and coordinating protection and restoration of the natural environment in King County.

The 2012 update is the fourth major review of the King County Comprehensive Plan. In accordance with GMA, it is designed to manage growth so that development is directed to

designated urban areas and away from the Rural Area and Resource Lands. The GMA also requires King County to designate and protect critical areas and commercially significant forestry, agriculture, and mining areas. The GMA requires a comprehensive plan to adhere to a set of fourteen goals and to include the following elements: land use, housing, capital facilities, utilities, rural, shorelines, and transportation.

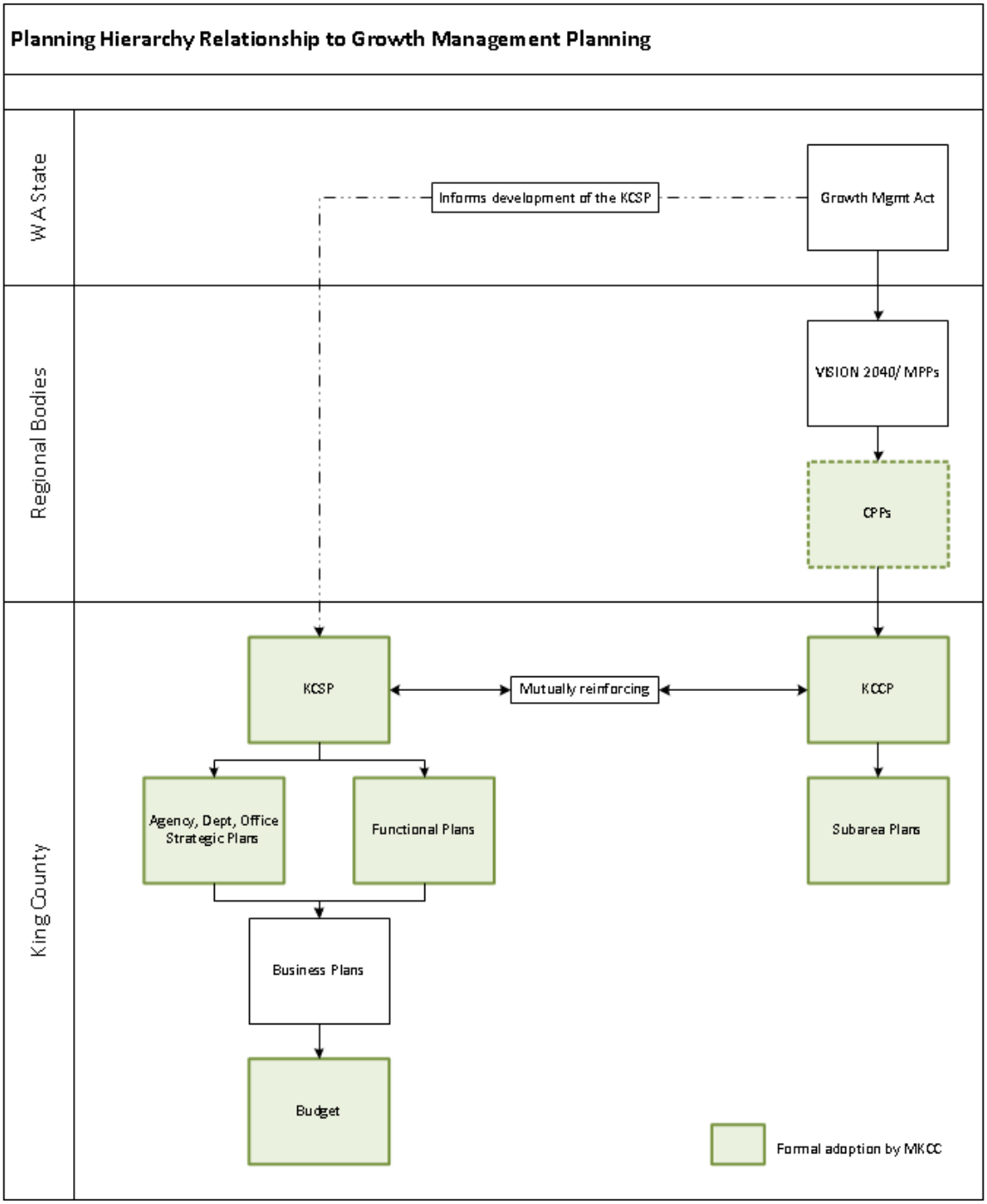
The King County Comprehensive Plan provides a legal framework for managing growth and making decisions about land use in unincorporated King County. Public and private agencies, property owners, developers, community groups and King County staff use the Comprehensive Plan in several ways.

The Comprehensive Plan provides guidance to county officials for decisions on proposals such as zoning changes and developments. It also gives the public direction on the county's position on proposed changes in land use or zoning, environmental regulations, or broader policy issues. The Plan also serves as a framework for other plans and regulations such as subarea plans and the King County Code that govern the location and density of land uses in unincorporated King County. The Plan provides a basis for decisions about public spending on facilities and services. Finally, the Plan presents other agencies, such as cities and special purpose districts, with King County's position on large-scale matters such as annexation, use of resource lands, environmental protection and others.

The GMA allows local comprehensive plan amendments to be considered once each year. In King County, those annual amendments allow technical changes only, except for once every four years. Then, during the "Four-Year Cycle review process," substantive changes to policies, land use designations and the Urban Growth Area boundary can be proposed and adopted.

In accordance with King County Code 2.10, King County has a Performance Management and Accountability System, shown in the diagram below. This system is enabled through the development of critical planning documents (including the King County Strategic Plan; agency, department and office strategic plans; business plans; functional plans; and the budget). The King County Council maintains a role in enabling the growth management planning hierarchy by adopting the CPPs, [1] Comprehensive Plan updates, and subarea plans into ordinance. In this manner, the county's growth management and strategic planning hierarchies are mutually reinforcing.

[1] The county council adopts and forwards the CPPs for city ratification.


Planning Hierarchy Relationship to Growth Management Planning
WA State
Regional Bodies
King County
Informs development of the KCSP
Growth Mgmt Act
VISION 2040/ MPPs
CPPs
KCSP
Mutually reinforcing
KCCP
Agency, Dept, Office Strategic Plans
Functional Plans
Subarea Plans
Business Plans
Budget
Formal adoption by MKCC

III. Moving Toward a Sustainable King County

The Comprehensive Plan is been based on the principles of creating sustainable neighborhoods, preserving open space, farmland, and rural communities, directing development toward existing communities, and providing a variety of transportation choices. These principles guide funding decisions, creation and operation of programs and projects, and how the county interacts with local, state and federal agencies. The impact of implementing these principles has been to:

- create higher urban densities by directing 96% of the growth into the urban cores of the region (Urban Growth Area),
- preserve irreplaceable resource lands, park and critical areas,
- improve mobility by making transit service more accessible,
- sustain a vibrant economy,
- improve water quality,
- improve air quality through the reduction of greenhouse gas emissions (King County operates one of the nation's largest hybrid transit fleets, and
- reduce fuel consumption.

In 2008, the county included three framework polices to form the broad foundation for more detailed and substantive implementing policies in the topical chapters of the Comprehensive Plan. Those framework policies addressed: 1) health, equity, social and environmental justice; 2) climate change; and 3) measurement and monitoring. They represented a commitment to adapt growth management strategies to take advantage of new and emerging ideas that have an expansive reach throughout the county.

In this 2012 update, the three framework policies, new in 2008, are incorporated to the existing guiding principles of the county's Comprehensive Plan.

A. Creating Sustainable Neighborhoods

Neighborhoods are the backbone of any community. Creating sustainable neighborhoods may mean using incentives, programs or regulations to help create new neighborhoods, and support existing neighborhoods.

Encouraging mixed land use and making access to jobs, shopping, and schools easier establishes the cohesiveness of a neighborhood. Having opportunities for physical activity and

social engagement as part of a person's daily routine enhances the vitality of a neighborhood. Providing for people, if they choose, to age in place and remain in their neighborhood as their lifestyle changes or they face changing physical capabilities establishes the stability of a neighborhood. In essence all of these factors contribute to creating a sustainable neighborhood.

Sustainability of a neighborhood also relates to the impact the neighborhood has on the environment. Incorporation of sustainable development practices into the design, construction and maintenance of the neighborhood can reduce greenhouse gas emissions, reduce pollution, reduce the use of natural resources, reduce energy and other maintenance costs, and enhance property values.

GP-101 **In its policies and regulations, King County shall strive to promote sustainable neighborhoods and communities.**

B. Preserving Open Space

The people of King County have long recognized that open space lands are essential to what makes this county unique. Since the inception of the CPPs, preserving open space, including working resource lands like farmlands and forests, has been a priority of the county and its 39 cities. It is a cornerstone of the GMA.

The GMA requires the county and its cities to form linkages between and within population centers with lands useful for recreation, trails, wildlife habitat and connection of critical areas. To fulfill that mandate, King County operates a regional open space system consisting of parks, trails, natural areas, working resource lands, and flood hazard management lands. These open spaces provide multiple benefits and functions, including visual variety and relief from developed areas, protecting environmental and ecological processes, providing wildlife habitat, and fostering opportunities for outdoor recreation. However, preserving open space requires careful planning and management to ensure compatibility and long-term viability of these benefits and functions.

GP-102 **King County shall pursue economically feasible opportunities to preserve open space lands.**

C. Directing Development Toward Existing Communities

Beginning in the 1940s, a sprawling pattern of low-density development emerged in King County. This sprawl resulted in the accelerated conversion of forests and farms to subdivisions and made it increasingly expensive to provide water, schools, sewer, streets, and other services. In

addition, zoning codes tended to separate the differing types of land uses, with jobs and stores in one location, homes in another, and schools and parks in yet another.

The separate land uses were served by a roadway system of wide streets, with infrequent crosswalks, designed to accommodate cars, but not people. This pattern did not support using transit, bicycling, or walking to meet daily transportation needs, thus leading to an overburdening of the roadway system and a loss of regional and personal mobility. Low-density patterns that emerged en mass relied on driving alone for many trips, contributing to persistent air pollution problems and increasingly significant greenhouse gas emissions.

Reducing sprawl is one of the statutory goals of the state's Growth Management Act. To achieve that goal, steering growth to already developed communities with existing infrastructure and services can result in (1) preserving rural lands, (2) conserving natural resources, and (3) more economical provision of services and facilities.

This broader approach does not mean that all new urban development will be high-density. In many cases, existing moderate-density locations, especially single-family neighborhoods, will not significantly change. Rather, King County will work to better integrate the locations where people work, shop, live, and recreate in a manner that uses resources — public and private — more efficiently.

GP-103 **King County shall continue to support the reduction of sprawl by focusing growth and future development in the urban growth area.**

D. Providing a Variety of Transportation Choices

Transportation is critically important to King County and the surrounding region, facilitating access to jobs, education, services, recreation, and housing. King County plays a central role in the region's transportation sector, supporting a variety of motorized and nonmotorized travel modes, involving ground, air, and marine transportation. The county has direct responsibility for (1) the unincorporated area road network, (2) transit services and facilities throughout the county, (3) operation of the King County International Airport (KCIA) and (4) operation of passenger-only ferry service to Vashon Island and West Seattle on behalf of the King County Ferry District. King County's services and facilities affect not only the local bus passenger but the jumbo airliner loaded with cargo and bound for destinations overseas.

The ability to access to various transportation modes has a profound effect on quality of life for this county's residents and the vitality of its economy. The county's transportation system must be designed, operated and maintained in a manner that (1) provides access to mobility options

for a wide range of users, including historically disadvantaged populations, (2) contributes to safe communities and (3) respects the county's natural resources and environment.

GP-104 **King County shall continue to promote a transportation system that provides residents with a range of transportation choices that respond to both community needs and environmental concerns.**

E. Addressing Health Disparities and Equity, Social and Environmental Justice

Despite broad economic and social gains in society and in this country in recent history, major differences exist and continue to persist for significant segments of our population—particularly for communities of color and poor people—across the continuum of measures of health, well being and quality of life. King County is not immune to the national trends and statistics, despite its location in the relatively prosperous Puget Sound area. In the United States and in King County, children and adults who live at the bottom of the social ladder face life threatening and debilitating conditions far more often than those in the middle, who in turn are more at risk than those at the top.

Land use patterns and transportation investments can play key roles in making communities healthier. Well-planned neighborhoods have features like connected street networks, nearby shopping, walking paths, and transit service. These amenities reduce dependency on cars, increase opportunities to be physically active, decrease the likelihood to be overweight, and improve air quality.

Food is as essential to our health and well-being as air and water. For example, King County is experiencing a rise in the rate of obesity, and at the same time, an increase in food insecurity and malnutrition. Both can be caused by lack of access to adequate amounts of nutritious food, and both can lead to the same thing - a diminished quality of life that ends with premature death due to diet-related chronic disease. King County plays an important role in guiding and supporting system improvements that will result in King County residents eating local, healthy food. King County supports food systems that are ecologically and economically sustainable and that improve the health of the county's residents.

King County's groundbreaking *Land Use, Transportation, Air Quality and Health Study* (now known as HealthScape)—the first study of its kind for a local government—shows that low density, separated land uses, and poor street connectivity are associated with: (1) reduced transit ridership, walking, and physical activity; (2) increased auto use, air pollution, greenhouse gas emissions, and energy consumption; and (3) increased obesity, which increases the likelihood of

cardio vascular disease, type II diabetes, and colorectal cancer. HealthScape literally draws the link between sprawl, poor health, and greenhouse gas emissions.

Using data generated in King County, this study specifically concluded the following:

- People walk more in neighborhoods with a wide variety of retail services and easy access to those services. This improves health and reduces pollutants.
- Transit use is highest where walking is most prevalent, and walking is most prevalent where transit is convenient and efficient.
- Residents of more walkable areas are less likely to be overweight or obese and more likely to report being physically active.
- Residents in the most interconnected parts of the county drive 25% fewer miles than those who live in the most sprawling areas of the county.

With obesity rates rising at alarming rates, King County can use the findings from this study to update policies and plans to incorporate health, air quality, and greenhouse gas emission reductions into land use and transportation planning.

Equity and social justice are traditionally linked to land use planning through the concept of environmental justice. Generally, environmental justice encompasses the presence of industrial or commercial land uses that carry substantial adverse impacts to low-income and minority communities. But, environmental justice can also refer to *lack* of facilities and services and other amenities. The White Center Community Enhancement Initiative begun in 2005 is one example of a concerted community process that seeks to add infrastructure necessary for making a place safe, livable, and health-promoting. Collectively, these factors are the foundation of prosperity for all people and communities. In White Center, this is being accomplished through improving sidewalks, pedestrian connections, and spurring economic development in the neighborhood's commercial core. Land use planning brings the principles of community participation and community visioning to the equity and social justice movement, thus setting the stage for infrastructure improvements and policies that underpin achieving equity and social justice.

King County will work to reduce inequities and address concerns of social justice by incorporating these values into the daily practice of developing policies and programs, making funding decisions and delivering services. Further, King County will identify and address the conditions at the root of disparities, engage communities to have a strong voice in shaping their future, and raise and sustain the visibility of equity and social justice. The goal is to start by tackling problems further upstream than is typically done to get at the fundamental cause of the disparities in order to have a greater overall impact.

GP-105 King County will seek to reduce health disparities and address issues of equity, social and environmental justice when evaluating its land use policies, programs, and practices.

F. Achieving Environmental Sustainability

King County can influence environmental sustainability through its land use and transportation policies and plans, investments in capital projects and facilities, economic development initiatives, and day-to-day operations. To be effective, sustainability actions need to be taken at many scales – in coordination with neighboring local governments, across county departments, and through the day-to-day actions of individual employees.

The county's approach to mitigation of and adaption to the affects of climate change have evolved over the last four years. Responding to climate change is an important element of the broader concept of environmental sustainability, which means meeting the needs of the current generation without compromising the capacity of the environment to support future generations, while anticipating effects of natural and human factors, such as climate change and population growth. GP-106 encapsulates KCSP's Environmental Sustainability Goal.

GP-106 King County will protect, restore and enhance its natural resources and environment, encourage sustainable agriculture and forestry, reduce climate pollution and prepare for the effects of climate change.

G. Managing Performance

As part of a growing national movement at all levels of government, King County is embracing performance measurement and management. Performance measurement is measuring and reporting performance data while *performance management* is using performance information to inform management decisions. Successful organizations rely on performance management to inform leadership about how well they are reaching their goals and where improvements can be made. With adoption of the KCSP, King County committed to the development of a unified and meaningful measurement framework to manage performance at all levels of government. As part of its development, GP-107 ensures that appropriate monitoring of the CPPs and KCCP will contribute to this measurement framework.

King County is doing performance management for several important reasons:

- Ensure county goals are being met;
- Improve county services, where necessary;
- Increase transparency with the public;
- Increase use of data for more informed public discussion and decision-making;
- Increase accountability at all levels of government; and
- The King County Strategic Plan calls for increased attention to effective performance measurement.

GP-107 **King County will measure and assess agency performance and the achievement of Countywide Planning Policies and Comprehensive Plan goals.**

IV. King County Strategic Planning

In 2010, the King County Council adopted the “King County Strategic Plan, 2010-2014: Working Together for One King County" (KCSP). The KCSP serves as the framework for countywide priority setting, business planning, budget development, resource allocation and leadership and managerial accountability.

The KCSP embodies the priorities of the residents of King County. It guides decision-making in King County government and describes the results the county intends to achieve through its implementation. The KCSP recognizes the role of land use planning in shaping an environmentally sustainable, economically viable, and equitable future for the county. The Comprehensive Plan is shaped by the KCSP and supports the goals defined within the KCSP.

GP-108 **Planning in King County shall be consistent with the King County Strategic Plan by:**

- **a. Encouraging vibrant, economically thriving and sustainable communities;**
- **b. Enhancing the county’s natural resources and the environment;**
- **c. Supporting safe communities; and**
- **d. Providing equitable opportunities for all individuals.**

V. Summary of the King County Comprehensive Plan

Chapter 1: Regional Growth Management Planning

The vision and goals of this plan are based on the 14 planning goals specified in the Washington State Growth Management Act, the Countywide Planning Policies, the region's VISION 2040 and the values voiced by the residents of King County. The official King County Land Use Map is included in this chapter.

Chapter 2: Urban Communities

The Urban Communities chapter brings together several of the major elements necessary to make a community whole: housing, business centers, and human services. By merging these elements into one chapter, King County emphasizes the importance each plays as a part of a livable community. A major tenet of the GMA is to target growth in the urban areas, so the policies in this chapter better facilitate urban development where infrastructure and facilities exist or can be readily provided. This chapter also draws the connection between urban living and public health.

Chapter 3: Rural Area and Natural Resource Lands

Protecting rural lands and communities in King County is a major thrust of the Comprehensive Plan in compliance with both the GMA and the King County Strategic Plan. This chapter delineates the county's approach to conserving rural and natural resource lands, supporting rural communities and their heritage, and supporting the agriculture, forestry, and mining economies. Integral to these efforts are incentive tools such as the transfer of development rights program that ensure the protection of environmental quality and wildlife habitat, while respecting economic values and property rights.

Chapter 4: Environment

This chapter reflects the environment in King County that includes a rich and valuable array of land and water resources ranging from marine and freshwater bodies, to highly urbanized areas to nearly pristine landscapes in the foothills of the Cascades. King County's programs for protecting its environment include some of the most progressive in the country. Together King County's environmental programs and the King County code implement the policies in this chapter and ensure that the environment is protected and restored, and that the environmental sustainability goal of the Strategic Plan is achieved.

King County seeks to adapt to, and mitigate the effects of climate change including reductions in greenhouse gas emissions. King County seeks to promote environmental management practices that support habitats for native plant and animal species, including those listed as threatened under the Endangered Species Act and the restoration of environments threatened by past development, degraded water quality, and invasive species. Such practices include traditional treatment and habitat restoration projects, low impact development, incentive-based approaches and education and technical assistance. The chapter establishes policies to ensure future protection of the environment and its contribution to the quality of life in King County. This chapter also reflects the role of the Puget Sound Partnership in coordinating environmental management, including providing leadership for a coordinated and comprehensive environmental monitoring program across Puget Sound.

Chapter 5: Shorelines

King County adopted its first Shoreline Master Program (SMP) in 1977. In November, 2010, King County approved an update to the SMP. This update incorporated the shoreline policies in the Comprehensive Plan for the first time. Under the Shoreline Management Act, the SMP must be approved by the Washington Department of Ecology before it takes effect. King County is in the final process of obtaining that approval.

Chapter 6: Parks, Open Space and Cultural Resources

Protecting and enhancing King County's environment and quality of life through the stewardship and enhancement of its open space system of parks, trails, natural areas and working resource lands along with it valued cultural resources continues to be the central focus of this chapter. Furthering the regional trail system will be guided by the Regional Trails Needs Project map and corresponding project list found in the chapter. The chapter acknowledges the broad and growing support for the county's backcountry trails.

Chapter 7: Transportation

This chapter sets the policy framework that guides efficient provision of vital transportation infrastructure and services that support a vibrant economy, thriving communities, and the county's participation in critical regional transportation issues. The chapter reflects the goals of the King County Strategic Plan and the priorities established in the strategic plans for public transportation and road services. It also reflects the county's continuing transition to becoming a road service provider for a primarily rural road system, and speaks to the challenges of providing transportation services and infrastructure in a time of growing need and severely constrained financial resources.

The chapter promotes an integrated, multimodal transportation system that provides mobility options for a wide range of users, including historically disadvantaged populations. It also emphasizes safety, options for healthful transportation choices, and support for greenhouse gas emissions reduction goals. Additional policy focus is provided on maintaining and preserving existing services and infrastructure, implementing clear service priorities and guidelines, using transportation resources wisely and efficiently, and developing sustainable funding sources to support the level of services needed by communities.

Chapter 8: Services, Facilities and Utilities

This chapter guides service provision in King County recognizing the different service levels within the Urban Growth Area and in the Rural Area. The Growth Management Act requires coordinated planning so that the services required by new residents and their homes and businesses are available as growth occurs. This chapter addresses a wide range of facilities and services provided by the county consistent with specific operational plans such as the Flood Hazard Management Plan and the Energy Plan and recognizing that the county is both a regional and a local service provider. The chapter also clarifies County's intent regarding water supply planning.

Chapter 9: Economic Development

This chapter supports the county's long-term commitment to a prosperous, diverse, and sustainable economy by promoting public programs and actions that create the foundation for a successful economy whether within the Urban Growth Area or in the Rural Area. A successful economy is one in which the private, nonprofit, and public sectors can thrive and create jobs compatible with the environment and community and land use expectations. King County understands that a successful and diverse economy contributes to a strong and stable tax base and a high quality of life for all residents. This chapter recognizes businesses and the workforce as customers of an economic development system and supports actions and programs that promote the strength and health of both groups.

Chapter 10: Community Planning

King County's community plans (except for the Vashon Town, West Hill, and White Center Plans) are no longer in effect as separately adopted plans. In many cases, however, the plans contain valuable historical information about King County's communities and often provide background for the land uses in effect today. Policies from the community plans were retained as part of the Comprehensive Plan to recognize the unique characteristics of each community and to provide historical context.

Chapter 11: Implementation, Amendments & Evaluation

The comprehensive plan policies, development regulations and countywide planning policy framework have been adopted to achieve King County's and the region's growth management objectives. This chapter also describes the county's process for amending the Comprehensive Plan and outlines and distinguishes the annual cycle and the four-year-cycle amendments. This chapter further explains the relationship between planning and zoning.

Technical Appendices

Integral to the vision and goals of the comprehensive plan are the detailed inventories, forecasts, finance plans and Urban Growth Area analysis required by the Growth Management Act. Four technical appendices (Volume 1) are adopted as part of the plan to implement these Growth Management Act requirements (RCW 36.70A.070, 36.70A.110, 36.70A130*).* Technical Appendices A, B, C, and D were updated in 2008.

Volume 1

Technical Appendix A. Facilities and Services
Technical Appendix B. Housing
Technical Appendix C. Transportation
Technical Appendix D. Growth Targets and the Urban Growth Area

Additional important information also supports the plan vision and goals. Nine technical appendices (Volume2) were prepared to provide supporting documentation to the 1994 plan:

Volume 2

Technical Appendix D. Growth Targets and the Urban Growth Area
Technical Appendix E. Washington State Laws
Technical Appendix F. History of Planning in King County
Technical Appendix G. Economic Development
Technical Appendix H. Natural Resource Lands
Technical Appendix I. Natural Environment
Technical Appendix J. Potential Annexation Areas
Technical Appendix K. King County Functional and Community Plans
Technical Appendix L. Public Involvement Summary

Information that supported amendments subsequent to 1994 is included as follows:

Volume 3

Technical Appendix M. Public Participation Summary 2000

Volume 4

Technical Appendix N. Public Participation Summary 2004

Volume 5

Technical Appendix O. Public Participation Summary 2008

Volume 6

Technical Appendix P. Public Participation Summary 2012
Technical Appendix Q. School Siting Task Force Report

The Regulations

The King County Comprehensive Plan is implemented through the adopted regulations. These include the King County Zoning Code and other code titles such as Water and Sewer Systems, Roads and Bridges, and Land Segregation. All development proposals in King County must meet the requirements of the code.

For More Information

Copies of the plan are available in all King County libraries. Please visit the website of the King County Department of Development and Environmental Services at http://www.kingcounty.gov/compplan for current information on planning in King County and to view electronic versions of the plan and related documents.

As required by the GMA, King County maintains a docket for recording comments on the King County Comprehensive Plan and associated development regulations. Comments logged on the docket are reviewed by the county and made available for review by the public. The docket is also available on the King County Comprehensive Plan Website at http://www.kingcounty.gov/compplan. Select “Proposing a Change: The Amendment Process for the KCCP” for specific information on the docket and docketing process.

CHAPTER 1
REGIONAL GROWTH MANAGEMENT PLANNING

Passage of the Growth Management Act (GMA) in 1990 and 1991 sessions of the State Legislature was the first critical step in the development of rational policies to manage growth in Washington in a sustainable manner. For the first time in the state's history, all urban counties and their cities were required to develop and adopt comprehensive plans and regulations to implement these plans. To ensure consistent and compatible planning efforts, the Growth Management Act requires that comprehensive land use plans address specific issues including, but not limited to: land use, transportation, housing, facilities and services, utilities, natural environment, and economic development.

To achieve coordinated planning efforts, the GMA further requires that counties and cities develop a set of framework policies to guide development of each jurisdiction's comprehensive plan. In order to implement the GMA, King County is involved in planning on four different levels. These levels of planning encompass land areas ranging in size from small neighborhoods to multiple counties.

The GMA also provides for re-evaluation of the comprehensive plan to address emerging land use and regulatory issues. The GMA calls, as well, for jurisdictions to evaluate progress towards the implementation of respective comprehensive plans and countywide planning policies.

I. Growth Management Planning Objectives

Background

Prompted by residents concerned about sprawl, King County adopted its first comprehensive land use plan in 1964. Two decades later, the 1985 comprehensive land use plan was the first to identify an urban growth boundary line to limit urban growth to areas with the infrastructure needed for facilities and services. It also established policies to preserve the Rural Area, conserve the natural environment and designate resource lands for long-term agriculture and forest production.

Later, as King County's efforts to manage growth matured, it played a key role in the development of *Vision 2020*, a long-range growth management, economic and transportation strategy for the central Puget Sound region developed by the Puget Sound Regional Council. In 2008, VISION 2040 replaced Vision 2020 as the long range guide for the future of the four-county region.

The Growth Management Act (GMA), adopted by the state legislature in the 1990 and 1991 sessions, requires urban counties to develop comprehensive land use plans addressing growth. The county's first comprehensive plan under the GMA was adopted in 1994. The GMA also requires counties and cities to work together to develop framework policies to guide the comprehensive plan development. These Countywide Planning Policies (CPP), first adopted in 1992, subsequently updated, and substantially so in 2011 for adoption in 2012, establish a vision for the future of King County – its cities, unincorporated urban areas, rural areas, and farms and forests. Under the CPP vision for the year 2030, King County will boast a diversified sound regional economy and high quality of life with a viable Rural Area, vibrant urban centers linked by a high-capacity transit system, bountiful agricultural areas and productive forest lands, and protected critical areas. King County's Comprehensive Plan builds on this vision for the unincorporated part of the county.

Today's Objectives

The 2012 Comprehensive Plan update continues to be based on the mandates of the law, the goals voiced by residents during the 1994 comprehensive plan and repeated during the subsequent comprehensive plan update processes, and King County's new Strategic Plan adopted in 2010.

The policies in this Comprehensive Plan support the following objectives, which reflect the goals of the King County Strategic Plan, the GMA, VISION 2040, and the CPPs and are shaped by public opinion:

- *Preserve the high quality of life* by balancing infrastructure needs with social, cultural, educational, recreational, civic, health and safety needs.
- *Spend money wisely and deliver services efficiently by*:

  - Concentrating infrastructure investments and service delivery to support the regional development pattern in and near cities where a full range of local services are located or can be made available;
  - Solving service deficiencies within the county to meet existing service needs and phasing service improvements for the needs of future growth;
  - Looking to King County to provide countywide facilities and services; and
  - Relying primarily upon cities and special purpose districts as the providers of local facilities and services appropriate to serve those local needs, except where the county is the local service provider.
- *Continue our economic prosperity* by promoting a strong and diverse economy for King County residents through policies and programs that encourage new business opportunities, increase family-wage jobs and create a predictable regulatory environment for businesses and residents.
- *Increase the housing choices for all residents* by permitting a wide variety of home styles and by increasing the housing opportunities for all residents in locations closer to jobs.
- *Ensure that necessary transportation facilities and services are available to serve development* at the time of occupancy and use by targeting road and transit investments where growth is desired and for equitable contributions to the transportation system by new development.
- *Balance urban uses and environmental protection* through careful site planning that maximizes developable land while respecting natural systems.
- *Protect Rural, Resource and ecologically fragile areas for future generations* by maintaining low residential densities in the Rural Area and in areas containing regionally and nationally important ecosystems for fish and wildlife and by recognizing that resource lands, such as farms and forests, provide economic, social and environmental benefits.

The King County Strategic Plan is the new guiding document for decision-making in the county, with a five-year planning horizon. The KCSP represents a significant countywide effort that obligates all departments and agencies to work together as a single county government. There are eight goals, divided into two categories: (1) "what" goals that articulate what King County will accomplish or services it intends to provide, and (2) "how" goals that articulate how King County will conducts its work. It is the "what" goals that are most relevant to the King County Comprehensive Plan:

- Justice and Safety: Support safe communities and accessible justice systems for all.
- Health and Human Potential: provide equitable opportunities for all individuals to realize their full potential.
- Economic Growth and Built Environment: Encourage vibrant, economically thriving and sustainable communities.
- Environmental Sustainability: Safeguard and enhance King County's natural resources and environment.

To help achieve these goals, this King County Comprehensive Plan 2012 Update:

- Links comprehensive land use planning to the King County Strategic Plan;
- Renews emphasis on continued growth, climate change, equity and social justice, and planning for healthy communities;
- Renews emphasis on restoration and protection of the quality of the natural environment for future generations;
- Calls for the county to continue to work with its residents and other jurisdictions to tackle issues and develop solutions consistent with community values; and
- Brings together the people, businesses, and agencies needed to guide growth and development in unincorporated King County toward the goal of a thriving, healthy and environmentally sound county.

The general policies in this section call on King County to strive to provide a high quality of life by actively soliciting public participation to help shape its plans, including strategic, comprehensive, functional, and subarea plans, and use these planning processes to strengthen communities.

RP-101 **King County shall strive to provide a high quality of life for all of its residents by working with cities, special purpose districts and residents to develop attractive, safe and accessible urban communities, retain rural character and rural neighborhoods, support economic development, maintain resource lands preserve the natural environment, and to protect significant cultural and historic resources.**

RP-102 **King County shall actively solicit public participation from a wide variety of sources in its planning processes, including the development, amendment and implementation of its plans.**

RP-103 **King County shall seek comment from tribes during its planning processes.**

RP-104 **King County's planning should strengthen communities by addressing all the elements, resources and needs that make a community whole, including: economic growth and the built environment, environmental sustainability, health and human potential, and justice and safety.**

RP-105 **King County shall integrate mandated responses to the listings under the Endangered Species Act into future planning and economic development efforts and resource management programs to achieve, where consistent with the**

Endangered Species Act, a balance between environmental, social and economic goals and objectives. King County shall collaborate with others to conserve species and their habitats in order prevent future listings under the Endangered Species Act.

RP-106 **King County shall incorporate into its land use and transportation planning, economic development efforts, and natural resource management the most promising actions to respond to climate change, especially those actions that will reduce emissions of greenhouse gasses.**

RP-107 **The Urban Growth Area is considered long-term and can only be amended consistent with the Countywide Planning Policies, and the King County Comprehensive Plan policies.**

RP-108 **The Comprehensive Plan Land Use Map is adopted as part of this plan. It depicts the Urban Growth Area, Urban Growth Boundary, Rural Area, Resource Lands and other land uses. The Land Use Map at the end of this chapter generally represents the official Comprehensive Plan Land Use Map.**

RP 109 **Using best management practices, King County shall develop assessment and review tools to ensure that health, equity, social and environmental justice impacts are considered in the development, implementation and funding of county projects and programs.**

The GMA requires cities and counties to balance a variety of goals in the implementation of growth management. One of the goals of GMA is to provide for the protection of private property rights in relation to the comprehensive planning process of the county. In support of this goal, King County undertakes a review process designed to assess its regulatory and administrative actions to avoid unconstitutional takings of private property.

RP-110 **King County shall to continue its process of reviewing county regulatory and administrative actions so as to avoid unconstitutional takings of private property.**

II. Growth Management Planning Framework

There is a hierarchy of growth management planning in the county with consistency between the levels. Some issues, such as the establishment of the Urban Growth Area (UGA), are best decided at the countywide level, while others, such as the amount of commercial space needed in a neighborhood, are best determined at the subarea plan level. The county has been moving over time to become both a regional and a rural government, without responsibility for land use planning on a local level within the UGA. This transition has been gradual, depending on the desires of local communities and the ability of cities to provide services to newly annexed areas.

RP-201 **King County's planning should include multi-county, countywide, and subarea levels of planning. Working with residents, special purpose districts and cities as planning partners, the county shall strive to balance the differing needs identified across or within plans at these geographic levels.**

A. Multi-County Planning

The Growth Management Act states that multi-county planning must be done for the four-county region encompassing King, Pierce, Snohomish, and Kitsap Counties. This requirement has been fulfilled by the Puget Sound Regional Council (PSRC) through the creation of the Multi-county Planning Policies which are contained in VISION 2040. Multi-county planning will continue to be conducted under the auspices of the PSRC with participation by the four counties. The policies in VISION 2040 are designed to help the region achieve the growth strategy and address region wide issues including environmental planning, economic development, and transportation planning. The policies provide guidance and direction to regional, county, and local governments on priorities for transportation investments, stimulating economic development, planning for open space, making city and town centers more suitable for transit, walking, and bicycling, and improving transportation safety and mobility.

B. Countywide Planning

Countywide planning is conducted by King County in cooperation with the cities to address a wide range of issues that affect the entire county. State law requires that planning be coordinated on a countywide level, and that the county itself adopt a comprehensive plan to regulate those areas for which it has direct responsibility. The Countywide Planning Policies (CPPs) are required by the state Growth Management Act and provide a countywide framework to coordinate local comprehensive plans and implement VISION 2040. The CPPs were first adopted by the King County Council and ratified by the cities within the county

in 1992. The Growth Management Planning Council is the formal body charged with developing the CPPs and then sending a recommendation to the King County Council for its review and approval. The Growth Management Planning Council is a representative body consisting of elected officials from King County, Seattle, the Suburban Cities Association, and the City of Bellevue.

The CPPs describe an overall vision for the cities and unincorporated portions of King County, and provide general strategies and approaches to be used by local jurisdictions, acting individually and cooperatively, to achieve that vision. The policies address those issues that benefit from greater consistency across jurisdictions and those that are of a countywide or regional nature. The CPPs are currently undergoing the first major update since 1992 to reflect: the recent adoption of VISION 2040; revised population, housing, and employment growth targets; and the fact that the policies are out-of-date after nearly 20 years of growth and development.

King County and all cities and towns of King County are responsible for ensuring that their respective comprehensive plans are consistent with and implement the CPPs. As the regional government, King County provides leadership on issues of countywide importance.

King County, together with its cities, published the 2007 King County Buildable Lands Report. Ratified in 2008, the Report fulfills the requirements of the GMA for the county and its cities to, every five years, evaluate whether there is sufficient suitable land to accommodate the projected county-wide population. The Buildable Lands evaluation represents a mid-course check on achievement of GMA goals. The focus of the evaluation is on the designated urban areas of King County and growth targets for those areas as established in the CPPs. Based on data from 2001 through 2005, the 2007 Buildable Lands Report evaluated the actual housing constructed, densities of new residential development, and the amount of actual land developed for commercial and industrial uses within the UGA. Based on that data, it projected that there is a sufficient amount of land within the UGA to accommodate housing, commercial and industrial uses through 2022 and beyond.

The King County Comprehensive Plan provides policy guidance for unincorporated King County. The comprehensive plan addresses all of the mandatory and several of the optional elements of the GMA. The Comprehensive Plan serves as a vital guide to the future and provides a framework for managing change.

RP-202 **Except Four-to-One proposals, King County shall not expand the Urban Growth Area (UGA) prior to the Growth Management Planning Council taking action on the proposed expansion of the UGA.**

RP-203 **The county shall not forward to the Growth Management Planning Council, for its recommendation, any proposed expansion of the UGA unless the proposal was either**

a. Included in the scoping motion or an area zoning study of the proposal was included in the public review draft of proposed King County Comprehensive Plan updates; or

b. Subjected to the hearing examiner process for site specific map amendments as contemplated by the King County Code.

RP-204 **King County shall implement the Countywide Planning Policies through its comprehensive plan and through Potential Annexation Area, preannexation and other interlocal agreements with its cities.**

C. Subarea Planning

Subarea plans, previously called community plans and basin plans, focus the policy direction of the comprehensive plan to a smaller geographic area. Smaller-scale subarea plans, known as area zoning studies, address issues of concern at the neighborhood level. Examples of subarea plans and area zoning studies include the Duwamish Coalition Project, White Center Action Plan, Vashon Town Plan, Fall City Subarea Plan, the East Redmond subarea plan, and planning efforts within a watershed or basin. Development of subarea plans are guided by the following policy as well as other applicable policies of the comprehensive plan.

RP-205 **Subarea plans, including area zoning studies, provide detailed land use plans for local geographic areas. Subarea plans implement and shall be elements of the King County Comprehensive Plan and shall be consistent with the plan's policies, development regulations and Land Use Map. The subarea plans should be consistent with functional plans' facility and service standards. The subarea plans may include, but are not limited to:**

a. Identification of policies in the comprehensive plan that apply to the subarea;

b. Review and update of applicable community plan policies;

c. Specific land uses and implementing zoning, consistent with the comprehensive plan;

d. Identification of the boundaries of Unincorporated Activity Centers and Rural Towns;

e. Recommendations for the establishment of new Unincorporated Activity Centers, Community and Neighborhood Business Centers, if appropriate;

f. Recommendations for additional Open Space designations and park sites;

g. Recommendations for capital improvements, the means and schedule for providing them and amendments to functional plans to support planned land uses;

h. Resolution of land use and service issues in Potential Annexation Areas;

i. Identification of new issues that need resolution at a countywide level;

j. Identification of all necessary implementing measures needed to carry out the plan;

k. Specific land uses and zoning that encourage healthy, livable communities by promoting physical activity of walking and bicycling; and

l. Identification of locations and conditions for special overlay districts.

D. Functional Planning

Functional plans are detailed plans for facilities and services and also include action plans and programs for other governmental activities. Some functional plans are operational or programmatic and guide daily management decisions. Others include specific details of facility design and location. Plans that guide specific siting of facilities must be consistent with the comprehensive plan. Functional plans are prepared by King County, independent special purpose districts or other public and private agencies. Examples of functional plans in King County include: the Strategic Climate Action Plan, Juvenile Justice Operational Master Plan, Parks and Open Space Plan, Regional Wastewater Services Plan, Strategic Plan for Road Services, and Strategic Plan for Public Transportation.

Capital improvements are important components of functional plans. Capital facilities and spending on improvements and new facilities are closely linked to availability of funds. Functional plans must identify costs and services of needed facilities and distinguish between improvements needed for new growth verses those needed to support existing public health and welfare needs.

RP-206 Functional plans for facilities and services should:

a. Be consistent with the comprehensive plan and subarea and neighborhood plans;

b. Define required service levels for the Urban Growth Area, Rural Area and Resource Lands;

c. Provide standards for location, design and operation of public facilities and services;

d. Specify adequate, stable and equitable methods of pay for public facilities and services;

e. Be the basis for scheduling needed facilities and services through capital improvement programs; and

f. Plan for maintenance of existing facilities.

RP-207 **Existing functional plans that have not been adopted as part of this comprehensive plan shall remain in effect and continue as official county policy until reviewed and revised to be consistent with the comprehensive plan, or until repealed or replaced. In case of conflict or inconsistency between applicable policies in existing community and functional plans and the comprehensive plan, the comprehensive plan shall govern.**

RP-208 **King County shall prepare functional plans to identify countywide facility and service needs and define ways to fund these consistent with the King County Comprehensive Plan. Independent special purpose districts and other public agencies also prepare functional plans that should be considered by King County.**

Land Use 2012

King County Comprehensive Plan, 2012
Chapter One, Regional Planning

Notes

* du - dwelling unit, ac = acre

The maps in the King County Comprehensive Plan and its technical appendices are produced with a computer geographic information system. They are reduced in size but available at a larger scale.

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

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November 2012

King County
Department of Development and Environmental Services

Date: November 5, 2012
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MCCOMBSP

- Unincorporated Activity Center
- Agriculture
- Community Business
- Commercial Outside of Centers
- Forest
- Greenbelt/Urban Separator
- Industrial
- Mining
- Neighborhood Business Center
- Other Parks/Wilderness
- King County Open Space System
- Rural
- Rural Neighborhood Commercial Center
- Rural Town
- Rural City Urban Growth Area
- Urban Residential > 12du/ac*
- Urban Residential 1 du/ac*
- Urban Residential 4-12 du/ac*
- Urban Plan Development
- Incorporated City
- Tribal Lands
- Urban Growth Area Boundary
- Forest Production District Boundary
- Agricultural Production District Boundary

Source: King County Department of Development and Environmental Services

CHAPTER 2

URBAN COMMUNITIES

The Urban Communities chapter brings together the major elements that combine to make a healthy and vibrant urban community whole: housing, culture, recreation, business centers, jobs, sustainability and human services. By merging these elements of urban life into one chapter, King County emphasizes the importance each plays as part of a livable community.

The chapter first defines the Urban Growth Area, where most growth has, will, and should continue to occur, and major land uses within it. The chapter then provides the framework to guide the development of new urban communities and redevelopment of existing communities within the unincorporated portion of the Urban Growth Area.

It is the goal of King County to work toward a model sustainable community to balance growth with natural resource protection while addressing climate change. Sustainable development creates a balance between people, economy, and environment; balancing using resources to meet current needs while ensuring future generations can benefit from equivalent resources. Sustainable development seeks to achieve this goal by addressing the impacts of the built environment in which the residents of King County live and work. To highlight the importance of sustainable development and consolidate policies applicable to both rural and urban communities, text and policies regarding sustainable development for public projects have been moved to Chapter 8 Section II (Facilities and Services), subpart D (Capital Facility Planning). Text and policies regarding sustainable development in the private sector have been moved to move to Chapter 9 Section V (Sustainable Development in the Private Sector).

Urban Land Use

I. Urban Communities

A critical challenge for King County and its residents is to create urban communities that provide the sense of place and the range of choices people want for a quality urban life and experience, as well as respond to the cultural and economic needs of a diverse urban communities. Urban areas need more than physical infrastructure. They also need a broad range of amenities and human services that make them attractive and safe places to work and live, while protecting our physical environment and maintaining the quality of life we all value. In short, they need to become and be sustained as "healthy communities." The design goals of healthy communities including making it easier for people to live healthy lives by: encouraging mixed land use and greater land density to shorten distances between housing, workplaces, schools and recreation so people can choose to walk or bike more easily to them. Incorporating good pedestrian and bicycle infrastructure, including sidewalks and bike paths that are safely removed from automobile traffic, fosters the use of non-motorized travel. People are more likely to walk to their destination if the distance is less than one-half mile ("walking distance") or to bike if the distance is less than three miles ("biking distance"). Healthy communities provide opportunities for people to be physically active and socially engaged as part of their daily routine and include access to open space and parks. Allowing people, if they choose, to age in place and remain in their community as their lifestyle changes or as they face changing physical capabilities contributes to a healthy community, as does ensuring access to affordable and healthy food, especially fruits and vegetables. An integral part of a healthy community is "healthy housing," which protects residents from exposure to harmful substances and environments, and reduces the risk of injury. These goals can be achieved, in part, through implementing building practices that promote indoor health.

U-101 **Development within the Urban Growth Area should create and maintain safe, healthy and diverse communities. These communities should contain a range of affordable, healthy housing and employment opportunities, as well as school and recreational facilities, and should be designed to protect the natural environment and significant cultural resources.**

The Urban Growth Area

The Growth Management Act requires the county to designate an Urban Growth Area where most growth and development forecasted for King County will be accommodated. By designating an Urban Growth Area, King County and other counties in the state will:

- Limit sprawling development;
- Reduce costs by encouraging concentrated development;
- Improve the efficiency of transportation, human services and utilities;
- Protect the Rural Area and Resource Lands;
- Enhance open space; and
- Mitigate the impacts of climate change and adapt its effects.

The Urban Growth Area (UGA) for King County is designated on the official Land Use Map adopted with this plan. The Countywide Planning Policies (CPP) provide the framework that the Metropolitan King County Council used when adopting the UGA as part of the 1994 Comprehensive Plan.

The UGA includes all cities within the county including the cities in the Rural City Urban Growth Area, the cities' annexation areas, and land within the unincorporated part of the county characterized by urban-type growth. The UGA also includes the Bear Creek Urban Planned Developments east of Redmond. See Chapter 3, Rural Area and Natural Resource Lands, for additional policy guidance on growth within the rural cities' annexation areas.

King County's total UGA covers 461 square miles, less than one-quarter of the county's total land area of 2,134 square miles. Cities comprise most of the land mass of the UGA, at 404 square miles; the unincorporated portion of the UGA is now about 57 square miles, according to the King County Annual Growth Report online. A general representation of the official Land Use Map is located at the end of Chapter 1.

U-102 **The Urban Growth Area designations shown on the official Land Use Map include enough land to provide the capacity to accommodate growth expected over the period 2006-2031. These lands should include only those lands that meet the following criteria:**

a. Are characterized by urban development that can be efficiently and cost effectively served by roads, water, sanitary sewer and storm drainage, schools and other urban governmental services within the next 20 years;

b. Do not extend beyond natural boundaries, such as watersheds, which impede provision of urban services;

c. Respect topographical features that form a natural edge, such as rivers and ridge lines;

d. Are sufficiently free of environmental constraints to be able to support urban growth without major environmental impacts, unless such areas are designated as an urban separator by interlocal agreement between jurisdictions;

e. Are included within the Bear Creek Urban Planned Development sites; and

f. Are not rural land or unincorporated agricultural or forestry lands designated through the Countywide Planning Policies Plan process.

U-103 **Parcels that are split by the Urban Growth Area boundary line should be reviewed for possible redesignation to either all urban or all rural taking into consideration:**

a. Whether the parcel is split to recognize environmentally sensitive features;

b. The parcel's geographic features;

c. Whether the parcel will be added to an adjoining city's Potential Annexation Area; and

d. The requirements of interlocal agreements, or the requirements of King County plans.

Some cities that border the Urban Growth Area operate parks in the Rural Area. These parks may have been acquired by the city through a direct purchase or through a transfer agreement with King County. Cities can continue to operate parks in the Rural Area consistent with rural development standards. In specific circumstances, cities can request that these parks be redesignated to urban to allow future annexation by the city.

U-104 **Rural properties that are immediately adjacent to a city and are planned or designated for park purposes by that city may be redesignated to urban when the city has committed to designate the property in perpetuity in a form satisfactory to the King County Council for park purposes and:**

a. The property is no more than 30 acres in size and was acquired by the city prior to 1994;

b. The property is no more than 30 acres in size and receives county support through a park or recreation facility transfer agreement between King County and a city; or

c. The property is or was formerly a King County park and is being or has been transferred to a city.

U-105 Existing or proposed churches in the Rural Area may be included within the Urban Growth Area when all of the following criteria are met:

a. The church property must have an interior lot line as defined by 21A.06.730 that is adjacent to the original Urban Growth Area boundary as established by the 1994 King County Comprehensive Plan, excluding the Rural City Urban Growth Areas and excluding UGA boundaries established through the Four-to-One Program;

b. The church property shall not be adjacent to an Agricultural Production District or the Forest Production District;

c. Sewer service is required once the property is included in the UGA;

d. Direct vehicular access to a principal arterial road is required; and

e. The church property shall be included in the Potential Annexation Area of the appropriate city at the same time it is included in the UGA.

1. Growth in Urban Centers and the Promotion of Public Health for All

The Countywide Planning Policies guide the development of urban centers, which are principally located in cities, and should accommodate concentrations of housing and employment. However, in its unincorporated urban area, King County has a small number of urban centers, which includes an unincorporated activity center, community business centers and neighborhood business centers. These are represented on the Urban Centers map at the end of this chapter.

Focusing development in urban areas can have a positive effect on public health while also addressing climate change. The percentage of King County residents who are overweight or obese has risen rapidly since the late 1980s. With obesity comes increased risk for diabetes, hypertension and heart disease. Evidence suggests one major reason for rising obesity is the lack of physical activity. Growth patterns in suburban areas, which discourage active transportation modes such as walking and bicycling and promote a reliance on private auto use, have contributed to this public health problem. To help combat this obesity crisis, healthy communities, which feature a variety of land uses, access to healthy foods, higher housing density, sidewalks, bicycle infrastructure, and street connections to nearby services, encourage physical activity such as walking and bicycling.

While creating communities that have a positive effect on public health we are also creating communities that will have a positive effect on climate change. When people replace their auto trips with walking or biking, they are improving their health and reducing their carbon footprint at the same time. Communities that have integrated street networks, a mix of uses, and residential densities supportive of public transportation can reduce vehicle miles traveled because auto trips are being replaced with more walking, biking and transit use.

U-106 **Most population and employment growth should locate in the contiguous Urban Growth Area in western King County, especially in cities and their Potential Annexation Areas. Cities in the rural area should accommodate growth in accordance with adopted growth targets.**

U-107 **King County should support land use and zoning actions that promote public health by increasing opportunities for every resident to be more physically active. Land use and zoning actions include: concentrating growth into the Urban Area, promoting urban centers, allowing mixed-use developments, and adding pedestrian and bicycle linkages.**

U-108 **King County should support the development of Urban Centers to meet the region's needs for housing, jobs, services, culture and recreation and to promote healthy communities. Strategies may include exploring opportunities for joint development or transit-oriented development, siting civic uses in mixed-use areas, and leveraging or utilizing existing county assets in urban centers.**

U-109 **King County should concentrate facilities and services within the Urban Growth Area to make it a desirable place to live and work, to increase the opportunities for walking and biking within the community, to more efficiently use existing infrastructure capacity and to reduce the long-term costs of infrastructure maintenance.**

U-110 **King County shall work with cities, especially those designated as Urban Centers, in collaborative efforts that result in transfers of development rights from the Rural Area.**

U-111 **Development standards for urban areas should emphasize ways to allow maximum permitted densities and uses of urban land while not compromising**

the function of critical environmental areas. Mitigating measures should serve multiple purposes, such as drainage control, groundwater recharge, stream protection, air quality improvement, open space preservation, cultural and historic resource protection and landscaping preservation. When technically feasible, standards should be simple and measurable, so they can be implemented without lengthy review processes.

An impact of climate change is a greater likelihood that the frequency of hazardous heat islands in urban areas will increase. The term "heat island" refers to urban air and surface temperatures that are higher than the nearby Rural Areas. Heat islands form as cities replace natural land cover with pavement, buildings, and other infrastructure. The heat island effect can be reduced by requiring cool roofs, cool pavements, and vegetation.

U-112 **King County will work with cities, residents, and developers to design communities and development projects that employ techniques that reduce heat absorption throughout the community and the region.**

King County is successfully promoting and supporting policies and programs that focus on the health of students at school. However, the school environment is only one aspect of the overall health of the student. The environment surrounding a school and the routes a typical student travels to school or nearby school-related destinations also must be considered, including managing density of retail uses that primarily sell alcohol, tobacco, and low-nutrition products; enhancing green space sites; creating safe areas to walk and bicycle to school; providing for transit and related facilities; and, reducing exposure to environmental toxins and other types of unsafe environments

U-113 **King County should promote children's health by encouraging and supporting land uses in the environment surrounding a school and on travel routes to schools that complement and strengthen other formal programs, such as Safe Routes to School.**

2. Urban Growth Area Targets

The Countywide Planning Policies (CPPs) require the county and its cities to plan for future housing and employment growth target ranges for each jurisdiction. In 1994, the Growth Management Planning Council adopted household and job targets for each jurisdiction to distribute the expected growth.

Growth target ranges represent jurisdictions' policy choices regarding the amount of growth they intend to accommodate. King County and its cities have also developed targets for employment to foster a local

balance between population and employment. The countywide and unincorporated King County's housing growth target and employment targets are contained in the CPPs.

In November 2009, a new set of housing and job growth targets were established to guide growth for the period 2006-2031. Each urban jurisdiction including unincorporated King County was assigned a growth target based on land capacity and other factors. The complete table of city growth targets approved in December 2010 is included in this chapter to provide the regional context for the unincorporated area targets.

U-114 **Land use policies and regulations shall accommodate a growth target of approximately 12,470 housing units and approximately 9,060 jobs by 2031, established in the Countywide Planning Policies for the unincorporated portion of the Urban Growth Area.**

U-115 **King County shall provide adequate land capacity for residential, commercial and industrial growth in the urban unincorporated area. This land capacity shall include both redevelopment opportunities as well as opportunities for development on vacant lands.**

U-116 **King County shall use housing and employment targets to implement the comprehensive plan in urban communities. The targets allocated to subareas of unincorporated King County will be monitored and may be refined through future planning that includes communities, affected cities and service providers.**

U-117 **King County should work the Growth Management Planning Council to adopt Countywide Planning Policies that support annual ratifications to allocated housing and employment growth targets for cities and the county.**

The following table, “King County Growth Targets Update”, establishes a breakdown by jurisdiction and subarea of the new King County household targets for the Urban Growth Area. The targets in this table reflect annexations and incorporations that have occurred since the adoption of this plan in 1994, up through annexations in 2010 and 2011. The table further provides guidance, in the PAA columns, for transfer of portions of growth targets into cities when annexation takes place in the future. Although they may be refined through future planning with affected communities and adjacent cities, these ranges are intended to be used as a guide for future planning of land uses and decisions on services and infrastructure.

King County Growth Targets Update (2006-2031)*

Regional Geography City / Subarea	Housing Target	PAA Housing Target	Employment Target	PAA Emp. Target
	Net New Units	Net New Units	Net New Jobs	Net New Jobs
	2006-2031	2006-2031	2006-2031	2006-2031
Metropolitan Cities				
Bellevue	17,000	290	53,000	
Seattle	86,000		146,700	
Total	**103,000**		**199,700**	
Core Cities				
Auburn	9,620		19,350	-
Bothell	3,000	810	4,800	200
Burien	3,900		4,600	
Federal Way	8,100	2,390	12,300	290
Kent	7,800	1,560	13,200	290
Kirkland	7,200	1,370	20,200	650
Redmond	10,200	640	23,000	
Renton	14,835	3,895	29,000	470
SeaTac	5,800		25,300	
Tukwila	4,800	50	15,500	2,050
Total	**75,255**		**167,250**	
Larger Cities				
Des Moines	3,000		5,000	
Issaquah	5,750	290	20,000	
Kenmore	3,500		3,000	
Maple Valley**	1,800	1,060	2,000	
Mercer Island	2,000		1,000	
Sammamish	4,000	350	1,800	
Shoreline	5,000		5,000	
Woodinville	3,000		5,000	
Total	**28,050**		**42,800**	
Small Cities				
Algona	190		210	
Beaux Arts	3		3	
Black Diamond	1,900		1,050	
Carnation	330		370	
Clyde Hill	10		-	
Covington	1,470		1,320	
Duvall	1,140		840	
Enumclaw	1,425		735	
Hunts Point	1		-	
Lake Forest Park	475		210	
Medina	19		-	
Milton	50	90	160	
Newcastle	1,200		735	
Normandy Park	120		65	
North Bend	665		1,050	
Pacific	285	135	370	
Skykomish	10		-	
Snoqualmie	1,615		1,050	
Yarrow Point	14		-	
Total	**10,922**		**8,168**	
Urban Unincorporated				
Potential Annexation Areas	12,930		3,950	
North Highline	1,360		2,530	
Bear Creek UrbanPlannedDev	910		3,580	
Unclaimed Urban Unincorp.	650		90	
Total	**15,850**		**10,150**	
King County UGA Total	**233,077**		**428,068**	

*Growth Management Planning Council adopted Oct 2009 and ratified by cities in 2010.
Targets base year is 2006. PAA / city targets have been adjusted to reflect annexations through 2008.

** Target for Maple Valley PAA is contingent on approval of city-county joint plan for Summit Place.

Residential Land Use

Housing is the major use of urban land in King County, occupying well over half of the county's developed land area. This plan supports the creation of a full range of housing choices for county residents.

U-118 **New residential development in the Urban Growth Area should occur where facilities and services can be provided at the lowest public cost and in a timely fashion. The Urban Growth Area should have a variety of housing types and prices, including mobile home parks, multifamily development, townhouses and small-lot, single-family development.**

1. Residential Densities

The density of eight homes per acre expressed below is a long-term goal and would be an average density of single-family and multifamily developments. Single-family homes will continue to account for most of the land area used for new development in the county. This plan proposes ways to develop single-family homes and densities so that urban land is used more efficiently, homes are more affordable, more housing choices are available and densities are adequate to support effective and efficient transit services. Housing at higher densities can promote public health by creating urban communities that support public transportation and nearby services and thereby increase opportunities for walking or biking.

U-119 **King County shall seek to achieve through future planning efforts over the next twenty years, an average zoning density of at least eight homes per acre in the Urban Growth Area through a mix of densities and housing types. A lower density zone may be used to recognize existing subdivisions with little or no opportunity for infill or redevelopment.**

U-120 **King County should limit the application of the urban residential, low land use designation to protect: floodplains, critical aquifer recharge areas, high function wetlands and unstable slopes from degradation, and the link these environmental features have to a network of open space, fish and wildlife habitat and urban separators. The residential density for land so designated should be maintained at one unit per acre, and lands that are sending sites under the Transfer of Development Rights Program may transfer density at a rate of at least four units per acre.**

U-121 **Multifamily housing in the Urban Growth Area should be sited as follows:**

- **a. In or next to unincorporated activity centers or next to community or neighborhood business centers;**
- **b. In mixed-use developments in centers and activity areas; and**
- **c. On small, scattered parcels integrated into existing urban residential areas. New multifamily housing should be built to the scale and design of the existing community or neighborhood, while contributing to an area-wide density and development pattern that supports transit and allows for a range of housing choices. Over time, zoning should encourage a larger proportion of multifamily housing to be located on small scattered sites rather than on larger sites.**

U-122 **Land zoned for multifamily uses should be converted to nonresidential zone categories only after new multifamily sites are identified and rezoned to replace the multifamily housing capacity lost due to the conversion.**

2. Minimum Density

In accordance with Countywide Planning Policy, King County has included a minimum density requirement in its zoning regulations for all new urban residential development with a zoned density of four or more homes per acre.

U-123 **King County should apply minimum density requirements to all urban residential zones of four or more homes per acre, except under limited circumstances such as the:**

- **a. Presence of significant physical constraints, or**
- **b. Implementation of standards applied to a property through a property-specific development condition, special district overlay, or subarea plan.**

3. Increases of Zoning Density

While King County supports higher densities in the urban areas, increased densities that would be incompatible with existing neighborhoods or cause significant impacts on roads, services and the environment are discouraged. The following policies will guide decisions on application of densities and proposed rezones.

U-124 **Requests for increases in density of urban residential property zoned for one dwelling unit per acre shall be considered unless the property meets the criteria low land use designation in set forth in Policy U-120.**

U-125 **King County should support proposed zoning changes to increase density within the Urban Area when consistent with the King County Comprehensive Plan Land Use Map and when the following conditions are present:**

a. **The development will be compatible with the character and scale of the surrounding neighborhood;**

b. **Urban public facilities and services are adequate, consistent with adopted levels of service and meet GMA concurrency requirements, including King County transportation concurrency standards;**

c. **The proposed density change will not increase unmitigated adverse impacts on environmentally critical areas, either on site or in the vicinity of the proposed development;**

d. **The proposed density increase will be consistent with or contribute to achieving the goals and policies of this comprehensive plan, and subarea plan, if applicable; or**

e. **The development is within walking distance of transit corridors or transit activity centers, retail and commercial activities, and is accessible to parks and other recreation opportunities.**

U-126 **King County, when evaluating rezone requests for increases in density, shall work with the city whose PAA includes the property under review to ensure compatibility with the city's pre-annexation zoning for the area. King County shall also notify special purpose districts and local providers of urban utility services and should work with these service providers on issues raised by the proposal.**

As part of its voluntary program with the Federal Aviation Administration (FAA) to reduce aircraft noise inside single-family residences surrounding the King County International Airport, the County completed a study of noise levels resulting from airport use. As part of that study, noise contours were developed and plotted as part of a Noise Mitigation Boundary. Over the course of several years and with available FAA funding, the County will oversee a program to sound-insulate homes within the various identified contours, with the homes located in the highest noise contour first.

U-127 **King County shall not support requests for residential density increases or conversion of non-residential property to residential uses on lands located within the outer boundaries of the Federal Aviation Administration approved**

Noise Mitigation Boundary as identified by Seattle-Tacoma International Airport and King County International Airport.

Development in the Urban Growth Area at a greater density than permitted by the minimum zoning density, but equal to or less than the maximum zoning density, will be allowed in exchange for public amenities such as low-income housing, preservation of designated historic features or extra energy conservation measures, or through the transfer of development rights from other parts of the county.

U-128 **Density incentives should encourage private developers to: provide innovative affordable housing, significant open space, trails and parks; use the Transfer of Development Rights Program; locate development close to transit; participate in historic preservation; and include energy conservation measures exceeding state requirements.**

4. Mixed-Used Development

Mixed-use development combines higher density residential units with retail or office uses in the same building or within an integrated development on the same lot. Quality mixed-use developments can provide convenient shopping and services to both residents of the development and those who live nearby. They can help to build a sense of community, as neighboring merchants and residents get to know each other. Mixed-use is traditional in older downtowns and commercial areas, where offices and retail typically occupy the first floor and residences are upstairs. Mixed-use developments can promote public health and help provide mitigation for climate change by providing opportunities for people to walk or bicycle to retail shopping, such as grocery stores with fresh fruits and vegetables and locally produced value-added food products, such as cheese, meats, and preserves, and public services. If people can replace some of their driving trips with walking, biking or transit, then vehicle miles traveled will decrease. Further, by placing shopping and services close to where people live, even if some of the trips are made by auto they will be shorter than if the uses had been separated.

U-129 **King County supports mixed-use developments in community and neighborhood business centers, the White Center Unincorporated Activity Center, and in areas designated commercial outside of centers.**

U-130 **Design features of mixed-use developments should include the following:**

- **a. Integration of the retail and/or office uses and residential units within the same building or on the same parcel;**
- **b. Ground level spaces built to accommodate retail and office uses;**

c. Off-street parking behind or to the side of the buildings, or enclosed within buildings; and

d. Opportunities to have safe, accessible pedestrian connections and bicycle facilities within the development and to adjacent residential developments.

U-131 In a mixed-use development where residential and nonresidential uses are proposed in separate structures and the residential uses are proposed to be constructed prior to the nonresidential uses, the initial review of the development should be through a process that ensures an integrated design.

U-132 In a mixed-use development, incentives such as increases in residential density or floor area ratio should be used to encourage the inclusion of public gathering spaces in the site design.

5. Urban Residential Neighborhood Design and Infill/Redevelopment

King County residents can enjoy their urban neighborhoods both for their unique character and for the amenities they provide. Outdoor spaces need to be usable, attractive, comfortable, and enjoyable. The design of urban streets, including features such as parking strips, street trees, alleys and off-street parking all contribute to the character of urban neighborhoods. Careful site planning can incorporate neighborhood features, contribute to aesthetic value, minimize site disturbance, conserve energy and, in some cases, reduce development costs. Neighborhood shopping, grocery stores with fresh fruits and vegetables, libraries, larger parks, high schools and public golf courses are examples of uses that provide amenities for nearby residents. Small retail establishments integrated into residential development (e.g., a laundromat) can provide convenient services and help residents reduce automobile trips. Urban areas that are interesting and safe for pedestrians and bicyclists, and that provide many necessary services close to residential developments, can promote public health by increasing opportunities for physical activity during a normal day's activities.

U-133 King County encourages innovative, quality infill development and redevelopment in existing urban areas. A variety of regulatory, incentive and program strategies could be considered, including:

a. Special development standards for infill sites;

b. Assembly and resale of sites to providers of affordable and healthy housing;

c. Impact mitigation fee structures that favor infill developments;

d. Greater regulatory flexibility in allowing standards to be met using innovative techniques; and

e. Joint public/private loan guarantee pools.

U-134 Single-family detached homes, townhomes, duplexes and apartments shall be allowed in all urban residential zones, provided that:

a. Apartments shall not be allowed in the R-1 zone unless fifty percent or more of the site is environmentally constrained; and

b. Apartments in R-1, R-4, R-6 and R-8 shall not be developed at densities in excess of 18 units per acre in the net buildable area.

U-135 Urban residential neighborhood design should preserve historic and natural characteristics and neighborhood identity, while providing privacy, community space, and safety and mobility for pedestrians and bicyclists.

U-136 Site planning tools, such as clustering, shall be permitted in order to allow preservation or utilization of unique natural features within a development.

U-137 New urban residential developments should provide recreational space, community facilities and neighborhood circulation for pedestrians and bicyclists to increase opportunities for physical activity.

U-138 Residential developments should provide a variety of housing types and lot patterns through lot clustering, flexible setback requirements and mixed attached and detached housing.

U-139 Nonresidential uses, such as schools, religious facilities, libraries and small-scale retail and personal services, should be integrated into urban residential neighborhoods to create viable neighborhoods with reduced dependence on the automobile. These uses should be sited, designed and scaled to be compatible with existing residential character and should provide convenient and safe walking and bicycling connections to neighboring residences.

Multifamily residential development is important to King County's housing supply because it uses land and energy efficiently and provides opportunities for affordable rental and ownership housing. Multifamily development is defined as one building that contains two or more separate dwelling units. Multifamily developments can be apartments, duplexes, or townhouses.

U-140 **Multifamily residential development should provide common and private open space; variation in facades and other building design features that may include varying window treatments, building colors and materials; and light fixtures that will give a residential scale and identity to multifamily development.**

Generally, larger parcels of buildable vacant land in the Urban Growth Area have been preferred for development. Development of these large parcels, especially for attached units at higher densities, often provoked concerns about compatibility due to their scale and design.

As larger vacant lots become increasingly scarce, attention will turn more and more towards smaller vacant lots often located within built neighborhoods (i.e., infill) and to redevelopment. Residential development proposals on small lots and redevelopment often can be an unobtrusive and desirable means of increasing density within existing neighborhoods. Infill development and redevelopment are necessary to achieve growth management objectives such as maximizing the efficient use of land and increasing the variety of housing choices and prices.

U-141 **King County should support infill and redevelopment proposals that serve to improve the overall character of existing communities or neighborhoods.**

6. Residential Site Improvement Standards and Public Services

The following policies govern King County land use regulations and functional plans that contain improvement standards for the review of proposed rezones, residential subdivisions, short subdivisions, multifamily buildings and construction permits.

U-142 **Residential developments within the Urban Growth Area, including mobile home parks, shall provide the following improvements:**

- **a. Paved streets (and alleys if appropriate), curbs and sidewalks, and internal walkways when appropriate;**
- **b. Adequate parking and consideration of access to transit activity centers and transit corridors;**
- **c. Street lighting and street trees;**
- **d. Stormwater treatment and control;**
- **e. Public water supply;**
- **f. Public sewers; and**
- **g. Landscaping around the perimeter and parking areas of multifamily developments.**

U-143 **Common facilities such as recreation space, internal walkways that provide convenient and safe inter- and intra-connectivity, roads, parking, and solid waste and recycling areas should be included in multifamily developments.**

Neighborhood recreation space and parks are important amenities for residents. The higher the density, the more essential such amenities become to a desirable living environment. If the site of a proposed development is large enough, a park site dedication or private park site can be required as a condition of a rezone, subdivision or site plan approval.

U-144 **Recreation space based on the size of the developments shall be provided on site, except that in limited cases, fee payments for local level park and outdoor recreation needs may be accepted by King County.**

U-145 **Recreation spaces located within a residential development, except those for elderly or other special needs populations, shall include a child's play area.**

U-146 **Recreation spaces located in residential developments in the Urban Area should include amenities such as play equipment, open grassy areas, barbecues, benches, trails and picnic tables.**

Commercial Land Use

The Countywide Planning Policies call for a significant share of new jobs and housing to occur within cities and in urban centers, which are areas of concentrated employment and housing. The designated urban centers are to accommodate 15,000 jobs within a one-half-mile radius of a major transit stop, an average employment density of 50 jobs per gross acre and an average of 15 housing units per gross acre. All of the urban centers are in cities.

In addition to the urban centers, cities and unincorporated urban King County have existing intensive industrial, commercial and residential areas that will continue to grow and provide employment, services, shopping and housing opportunities, but not at the same level as urban centers. Three categories of centers are established for urban unincorporated areas of King County. Higher density, more-concentrated developed industrial and commercial areas are classified as unincorporated activity centers. Midrange centers are called community business centers and smaller, local centers are called neighborhood business centers. The locations of these centers are shown on the Urban Centers map at the end of this chapter. This plan also recognizes existing commercial and industrial development that is

outside of unincorporated activity centers, community business centers and neighborhood business centers.

U-147 **Business/office park developments should be located in or adjacent to an unincorporated activity center. They may serve as a transition between office/retail areas and residential areas. They should be designed to take advantage of on-site or nearby structured parking and/or bus service and passenger facilities should be compatible with the objective of higher employment densities.**

U-148 **New commercial and office development shall locate in designated unincorporated activity centers, community and neighborhood business centers, and in areas designated commercial outside of centers.**

Warehouse-style retail businesses, large retail complexes, stadiums, large churches and colleges are examples of land uses that serve as destinations from throughout the region. Such uses require a full range of urban services including transit, substantial parking, and access to arterials and freeways, and therefore should locate in the urban area where these services are available. In addition, these land uses have traffic and impervious surface impacts that are inappropriate for the Rural Area.

U-149 **New facilities and businesses that draw from throughout the region, such as large retail uses, large public assembly facilities and institutions of higher education should locate in the Urban Area.**

1. Unincorporated Activity Centers

Unincorporated activity centers are the primary locations for commercial and industrial development in urban unincorporated King County. Currently, White Center is the only designated unincorporated activity center, as other such centers are now parts of cities. The *White Center Community Action Plan* establishes the size and mix of uses allowed in the White Center Unincorporated Activity Center.

U-150 **Unincorporated activity centers in urban areas should provide employment, housing, shopping, services and leisure-time amenities to meet the needs of the regional economy. The mix of uses may include:**

- **a. Health, human service and public safety facilities;**
- **b. Retail stores and services;**
- **c. Professional offices;**
- **d. Business/office parks;**

e. Multifamily housing and mixed-use developments;

f. Heavy commercial and industrial uses, when there is direct freeway or rail access;

g. Light manufacturing;

h. Parks and open space; and

i. Farmers' Markets.

U-151 **Within unincorporated activity centers, the following zoning is appropriate: Urban Residential, with a density of twelve to forty-eight dwelling units per acre; Community Business; Neighborhood Business; Office and Industrial.**

U-152 **King County may designate new unincorporated activity centers or expand existing unincorporated activity centers only through a subarea planning process that should address:**

a. The relationship of the entire center to its surrounding uses;

b. Availability of supporting public services;

c. The function of the center to other centers in the sub-region;

d. The need for additional commercial and industrial development;

e. The size and boundaries of the center; and

f. Zoning.

U-153 **The size, uses and boundaries of unincorporated activity centers should be consistent with the following criteria:**

a. More than forty acres in size, excluding land needed for surface water management or protection of environmentally critical areas;

b. Retail space based on the amount of residential development planned for the surrounding area to provide for community and regional shopping needs; and

c. Retail space should not exceed sixty acres and 600,000 square feet unless it is served by direct freeway access by a principal or minor arterial and is well served by transit.

U-154 **Design features of unincorporated activity centers should include the following:**

a. Safe and attractive walkways and bicycle lanes with access to each major destination including schools, community centers and commercial areas;

b. Buildings close to sidewalks to promote walking and access to transit;

c. Compact design with close grouping of compatible uses;

d. Off-street parking in multistory structures located to the side or rear of buildings or underground;

e. Public art;

f. Public spaces, such as plazas and building atriums;

g. Retention of attractive natural features, historic buildings and established character;

h. Aesthetic design and compatibility with adjacent uses through setbacks, building orientation, landscaping and traffic control;

i. Screening of unsightly views, such as heavy machinery, outdoor storage areas, loading docks and parking areas from the view of adjacent uses and from arterials; and

j. Signs should be regulated to reduce glare and other adverse visual impacts on nearby residences, without limiting their potential contribution to the color and character of the center.

U-155 **Development within the designated White Center Unincorporated Activity Center, as shown on the Comprehensive Plan Land Use Map, shall be in accordance with the White Center Community Action Plan.**

U-156 **The White Center Community Action Plan establishes the following zoning as appropriate within the White Center Unincorporated Activity Center: Urban Residential, with a density of twelve to forty-eight dwelling units per acre, Neighborhood Business, Community Business, Office and Industrial.**

U-157 **In the White Center Unincorporated Activity Center, existing Industrial uses should be zoned and regulated to preserve their use into the future. Conversion of industrial properties to other uses shall be strictly limited.**

White Center was selected as one of three case study areas for further study as part of the King County Land Use Transportation Air Quality and Health project, now known as HealthScape. Information from the study showed the types of changes in the urban form of the area and in the transportation system that can lead to an increase in public health. These results have been used to guide development in the White Center area and to prioritize capital expenditures such as the construction of the 98th Street Connector, which is a pedestrian walkway between Greenbridge and the commercial area of White Center.

U-158 **In the White Center Unincorporated Activity Center, new major residential developments should include low-impact design features and should promote public health by increasing opportunities for physical activity in daily life. The development should include: safe walkways and bicycle facilities with access to commercial areas, schools, and community facilities; trails; and pocket parks.**

2. Community Business Centers

Community business centers are primarily retail developments designed to serve a nearby market area of 15,000 to 40,000 people. Community business centers should be sited so they do not adversely affect other centers and are easily accessible by motor vehicles or public transportation, walking or bicycling. Community business centers should be designed to be compatible with adjacent residential uses, and should promote pedestrian and bicycle access.

U-159 **Community business centers in the urban areas should provide primarily shopping and personal services for nearby residents. Offices and multifamily housing are also encouraged. Industrial and heavy commercial uses should be excluded. Community business centers should include the following mix of uses:**

- **a. Retail stores and services;**
- **b. Professional offices;**
- **c. Community and human services;**
- **d. Multifamily housing as part of a mixed-use development, with residential densities of at least 12 units per acre when well served by transit; and**
- **e. Stands or small outlets that offer fresh fruit and produce and locally produced value-added food products.**

U-160 **Designated community business centers are shown on the Comprehensive Plan Land Use Map. Expansion of existing or designation of new community business centers shall be permitted only through a subarea planning process. Redevelopment of existing community business centers is encouraged.**

U-161 **Within community business centers, the following zoning is appropriate: Neighborhood Business, Community Business and Office.**

U-162 **The specific size and boundaries of community business centers should be consistent with the criteria listed below.**

a. More than ten acres and up to 40 acres in size, excluding land needed for surface water management or protection of environmentally critical areas;

b. Designed to provide shopping and services for a market population of 15,000 to 40,000 people;

c. Located one to three miles from an unincorporated activity center or from another community business center. May be located less than two miles from a neighborhood business center when it is demonstrated the neighborhood business center will not be adversely affected; and

d. Must be located at the intersection of two principal or minor arterials.

U-163 **Design features of community business centers should include the following:**

a. Safe and attractive walkways and bicycle lanes;

b. Close grouping of stores;

c. Off-street parking behind or to the side of buildings, or enclosed within buildings;

d. Public art;

e. Retention of attractive natural features, historic buildings and established character;

f. Landscaping, which may include planters and street trees;

g. Appropriate signage;

h. Public seating areas; and

i. Architectural features that provide variation between buildings or contiguous storefronts.

3. Neighborhood Business Centers

Neighborhood business centers are shopping areas offering convenience goods and services to local residents. Neighborhood business centers are intended to be small and compatible with adjacent residential areas and often are used on the way to another destination (for example, a fuel stop before or after commuting). Sometimes they consist of only one use or business. Neighborhood business centers should be designed to promote pedestrian and bicycle access.

U-164 **Neighborhood business centers in urban areas should include primarily retail stores and offices designed to provide convenient shopping and other services for nearby residents. Industrial and heavy commercial uses should be excluded. Neighborhood business centers should include the following mix of uses:**

a. Retail stores and services;

b. Professional offices;

c. Multifamily housing as part of a mixed-use development with residential densities up to 12 units per acre when convenient to a minor arterial. Higher densities are appropriate when the center is a walkable community, convenient to a principal arterial or well-served by transit; and

d. Farmers' Markets.

U-165 **Designated neighborhood business centers are shown on the Comprehensive Plan Land Use Map. Expansion of existing or the designation of new neighborhood business centers shall only be permitted through a subarea planning process. Redevelopment of existing neighborhood business centers is encouraged.**

U-166 **Within neighborhood business centers, the following zoning is appropriate: Neighborhood Business and Office.**

U-167 **The specific size and boundaries of neighborhood business centers should be consistent with the criteria listed below.**

a. Ten acres or less in size, excluding land needed for surface water management or protection of environmentally sensitive features;

b. Designed to provide convenience shopping for a market population of 8,000 to 15,000 people;

c. Located within walking distance of transit corridors or transit activity centers; and

d. Located one to three miles from another neighborhood business center.

U-168 **Design features of neighborhood business centers should include the following:**

a. Safe and attractive walkways and bicycle facilities;

b. Close grouping of stores;

c. Off-street parking behind or to the side of buildings, or enclosed within buildings;

d. Public art;

e. Retention of attractive natural features, historic buildings or established character;

f. Landscaping, which may include planters and street trees;

g. Appropriate signage;

h. Public seating areas; and

i. Architectural features that provide variation between buildings or contiguous storefronts.

4. Commercial Development Outside of Centers

The Commercial Outside of Center (CO) Land Use designation recognizes commercial uses predating the adoption of the county's first GMA-mandated comprehensive plan. These isolated areas were and remain located outside a designated urban center (unincorporated activity center, community business center or neighborhood business center). The CO designation is also appropriate as a transitional designation within certain potential annexation areas. In these areas, the county will utilize the memorandum of understanding and applicable comprehensive plan policies to determine the appropriate zoning to implement this transitional designation.

U-169 **Stand-alone commercial developments legally established outside designated centers in the Urban Growth Area may be recognized with the CO designation and appropriate commercial zoning, including any identified potential zoning classification. An action to implement a potential zoning classification shall not require a detailed subarea plan, if the current CO designation is to remain unchanged. When more detailed subarea plans are prepared, these developments may be designated as centers and allowed to grow if appropriate, or may be encouraged to redevelop consistent with the residential density and design policies of the comprehensive plan.**

U-170 **The CO designation may be applied as a transitional designation in Potential Annexation Areas identified in a signed memorandum of understanding between a city and the county for areas with a mix of urban uses and zoning in order to facilitate the joint planning effort directed by the memorandum of understanding. Zoning to implement this transitional designation should recognize the mix of existing and planned uses. No zone changes to these properties to allow other nonresidential uses, or zone changes to allow expansion of existing nonresidential uses onto other properties, should occur unless or until a subarea planning process with the city is completed.**

5. Commercial Site Improvement Standards and Public Services

The following policy governs King County land use regulations and functional plans that contain improvement standards for the review of proposed rezones and commercial construction permits.

U-171 **Commercial, retail and industrial developments should foster community, create enjoyable outdoor areas and balance needs of automobile movement with pedestrian and bicycle mobility and safety. Commercial and industrial developments shall provide the following improvements:**

- **a. Paved streets;**
- **b. Sidewalks and bicycle lanes in commercial and retail areas;**
- **c. Adequate parking for employees and business users;**
- **d. Landscaping along or within streets, sidewalks and parking areas to provide an attractive appearance;**
- **e. Adequate stormwater control, including curbs, gutters and stormwater retention facilities;**
- **f. Public water supply;**
- **g. Public sewers; and**
- **h. Controlled traffic access to arterials and intersections.**

6. Industrial Development

Maintaining a strong industrial land supply is an important factor in maintaining the county's economic base and providing family-wage jobs. The following policies assure that industrial development is compatible with adjacent land uses while providing appropriate services for employees. In addition, King County is committed to helping return contaminated sites to productive use.

U-172 **Within the UGA, but outside unincorporated activity centers, properties with existing industrial uses shall be protected. The county may use tools such as special district overlays to identify them for property owners and residents of surrounding neighborhoods.**

U-173 **Industrial development should have direct access from arterials or freeways. Access points should be combined and limited in number to allow smooth traffic flow on arterials. Access through residential areas should be avoided.**

U-174 **Small amounts of retail and service uses in industrial areas may be allowed for convenience to employees and users.**

U-175 **King County, in collaboration with cities and the development community, should create and fund a process to clean up and reclaim polluted industrial areas in order to expand the land available for industrial development.**

Urban Planned Developments and Fully Contained Communities

Within the designated UGA, development of large land ownerships may offer the public and the property owner opportunities to realize mutual benefits when such development is coordinated through the review process as an Urban Planned Development (UPD). Possible public benefits include greater preservation of public open space, proponent contributions to major capital improvement needs, diversity in housing types and affordability, and the establishment of the specific range and intensity of uses for the entire Urban Planned Development. A property owner and the public could benefit from the efficiency of combined hearings and land use decision making, as well as the establishment of comprehensive and consistently applied project-wide mitigations guiding the review of subsequent land use approvals.

U-176 **Sites for potential Urban Planned Developments (UPDs) may be designated within the established Urban Growth Area to realize mutual benefits for the public and the property owner. Two UPD areas have been designated by the county: the Bear Creek UPD area, comprised of the Redmond Ridge (formerly known as Northridge) UPD, the Trilogy at Redmond Ridge (formerly known as Blakely Ridge) UPD, and the proposed Redmond Ridge East UPD; and Cougar Mountain Village UPD. Future UPD sites in the Urban Growth Area shall be designated through a subarea planning process, or through a comprehensive plan amendment initiated by the property owner.**

U-177 **The creation of Urban Planned Developments is intended to serve as a model for achieving a mix of uses, appropriate development patterns, and high quality design, as well as providing for public benefits that shall include:**

- **a. Open space and critical areas protection;**
- **b. Diversity in housing types and affordability;**
- **c. Quality site design; and**
- **d. Transit and nonmotorized transportation opportunities.**

The Bear Creek UPD area was first designated for urban development in 1989 in the Bear Creek Community Plan. The urban designation of this area under the GMA was established in the Countywide Planning Policies in 1992 and affirmed in 1994. The Bear Creek UPD area was included in the Urban Growth Area designated in the 1994 King County Comprehensive Plan. Since the adoption of the 1994

Comprehensive Plan, both Redmond Ridge and Trilogy have been approved as Urban Planned Developments and King County has entered into development agreements governing the development of these sites. The legality of these development approvals was challenged and these legal challenges have been rejected. Therefore, these sites will be, and are being, developed at urban densities.

Through the adoption of the King County Comprehensive Plan 2000 Update, King County reaffirmed its urban designation of the Bear Creek UPD area. In addition to the reasons that led the county (and the region) to originally include this area within the county's UGA, when the county adopted the 2000 update, it noted that: two sites within this area had been approved for urban development after the adoption of the original GMA comprehensive plan; significant infrastructure improvements had been made at these sites; and the ultimate development of these sites was proceeding in accordance with issued permit approvals. The existence of these urban improvements further supported a conclusion that this area is characterized by urban growth within the meaning of the GMA and was therefore appropriately included within the county's UGA.

Since the county considered and adopted the 2000 update, significant development within the Bear Creek UPD area has taken place. The UPD permits approved by the county required the construction of infrastructure needed to support urban development of the Bear Creek UPD area. Those infrastructure improvements have now been completed or are under construction. This includes sanitary sewer trunk lines and pump stations; water trunk lines, pump stations, and storage facilities; stormwater collection, detention, treatment and discharge facilities; other utilities; a park and open space system linked by trails; and required road improvements. In addition, King County has granted final plat approval for lots for more than 2,100 of the dwelling units approved by the Redmond Ridge and Trilogy UPD permits and more than 1,600 of those dwelling units have been built, are under construction, or have been permitted. Furthermore, major community facilities and services such as the 18-hole golf course and clubhouse, the Redmond Ridge Community Center, and the retail center and grocery store have been completed or are under construction. All of these developments support the conclusion that the Redmond Ridge and Trilogy UPD sites are now fully characterized by and irrevocably committed to urban growth, and the county therefore reaffirms its urban designation of the Bear Creek UPD area.

The urban designation of the Bear Creek area includes one portion of the original urban area that has not yet been approved for development. However, this area, now referred to as Redmond Ridge East, is the subject of pending applications for approval of a UPD permit and an FCC permit. Those permits would authorize the urban development of Redmond Ridge East. Redmond Ridge East would be served by the urban infrastructure that has already been constructed to serve the Redmond Ridge and Trilogy UPD sites. The county reaffirms its urban designation of the Redmond Ridge East for the following reasons: this site has always been treated by King County as part of the Bear Creek UPD urban area; this site is

adjacent to the urban development that has already occurred and that will continue to occur at Trilogy and Redmond Ridge; this site is located in relationship to the rest of the Bear Creek UPD area so as to be appropriate for urban growth; and this site is an area that will be served by existing urban public facilities and services that have been provided in accordance with Trilogy and Redmond Ridge UPD permit requirements.

The Growth Management Act allows counties to establish a process, as part of the UGA designation, for reviewing proposals to authorize new Fully Contained Communities (FCC). Criteria for approval of FCCs are contained in RCW 36.70A.350. If a county establishes in its comprehensive plan a process for authorizing FCCs, it must adopt procedures for approving FCCs in its development regulations. King County has established a new FCC consisting of the Bear Creek UPD area.

U-178 **King County has established a Fully Contained Community. This one area is designated through this plan and is shown on the Land Use Map as the urban planned community of the Bear Creek UPD area comprised of Trilogy at Redmond Ridge, Redmond Ridge, and Redmond Ridge East Urban Planned Development sites. Nothing in these policies shall affect the continued validity of the approved Urban Planned Development permits for these sites. This FCC designation may be implemented by separate or coordinated FCC permits.**

U-179 **The population, household, and employment growth targets and allocations for the county's UGA in this plan include the Bear Creek UPD area. Accordingly, the requirements in RCW 36.70A.350(2) that the county reserve a portion of the 20-year population projection for allocation to new Fully Contained Communities has been satisfied.**

U-180 **The review and approval process for a Fully Contained Community (FCC) permit shall be the same as that for an Urban Planned Development (UPD) permit, except the following additional criteria shall be met, pursuant to the provisions of RCW 36.70A.350:**

- **a. New infrastructure (including transportation and utilities infrastructure) is provided for and impact fees are established and imposed on the FCC consistent with the requirements of RCW 82.02.050;**
- **b. Transit-oriented site planning and traffic demand management programs are implemented in the FCC. Pedestrian, bicycle, and high occupancy vehicle facilities are given high priority in design and management of the FCC;**

c. Buffers are provided between the FCC and adjacent non-FCC areas. Perimeter buffers located within the perimeter boundaries of the FCC delineated boundaries, consisting of either landscaped areas with native vegetation or natural areas, shall be provided and maintained to reduce impacts on adjacent lands;

d. A mix of uses is provided to offer jobs, housing, and services to the residents of the new FCC. No particular percentage formula for the mix of uses should be required. Instead, the mix of uses for a FCC should be evaluated on a case-by-case basis, in light of the geography, market demand area, demographics, transportation patterns, and other relevant factors affecting the proposed FCC. Service uses in the FCC may also serve residents outside the FCC, where appropriate;

e. Affordable housing is provided within the new FCC for a broad range of income levels, including housing affordable by households with income levels below and near the median income for King County;

f. Environmental protection has been addressed and provided for in the new FCC, at levels at least equivalent to those imposed by adopted King County environmental regulations;

g. Development regulations are established to ensure urban growth will not occur in adjacent nonurban areas. Such regulations shall include but are not limited to: rural zoning of adjacent Rural Areas; FCC permit conditions requiring sizing of FCC water and sewer systems so as to ensure urban growth will not occur in adjacent nonurban areas; and/or FCC permit conditions prohibiting connection by property owners in the adjacent Rural Area (except public school sites) to the FCC sewer and water mains or lines;

h. Provision is made to mitigate impacts of the FCC on designated agricultural lands, forest lands, and mineral resource lands; and

i. The plan for the new FCC is consistent with the development regulations established for the protection of critical areas by King County pursuant to RCW 36.70A.170.

For purposes of evaluating a FCC permit the following direction is provided: The term "fully contained" is not intended to prohibit all interaction between a FCC and adjacent lands but to limit impacts on adjacent lands and contain them within the development site as much as possible. "Fully contained" should be achieved through the

imposition of development conditions that limit impacts on adjacent and nearby lands and do not increase pressures on adjacent lands for urban development. "Fully contained" is not intended to mandate that all utilities and public services needed by an urban population both start and end within the property (since sewer, water, power, and roads, are of such a nature that the origin and/or outfall cannot reasonably exist within the property boundaries), but that the costs and provisions for those utilities and public services that are generated primarily by the FCC (schools, police, parks, employment, retail needs) be reasonably accommodated within its boundaries and not increase pressure for more urban development on adjacent properties.

U-181 **Except for existing Fully Contained Community designations, no new Fully Contained Communities shall be approved in King County.**

Urban Separators and the Four-to-One Program

The Countywide Planning Policies call for the county and cities to implement urban separators. Different from the Rural Area and Resource Lands, these are low-density areas within the Urban Growth Area that create open space corridors, provide a visual contrast to continuous development and reinforce the unique identities of communities. Urban separators can play a significant role in preserving environmentally critical areas and in providing habitat for fish and wildlife. They also provide recreational benefits, such as parks and trails, and meet the Growth Management Act's requirement for greenbelts and open space in the Urban Growth Area. Urban Separators are mapped on the Land Use 2008 map in Chapter 1.

U-182 **Urban separators are corridors of land that define community or municipal identities and boundaries, provide visual breaks in the urban landscape, and link parks and open space within and outside the Urban Growth Area. These urban corridors should include and link parks and other lands that contain significant environmentally sensitive features, provide wildlife habitat or critical resource protection, contain defining physical features, or contain historic resources. The residential density for land so designated should be maintained at one unit per acre, and lands that are sending sites under the Transfer of Development Rights Program may transfer density at a rate of at least four units per acre.**

U-183 **King County should actively pursue designating urban separators in the unincorporated area and work with the cities to establish permanent urban separators within the unincorporated area that link with and enhance King County's urban separator corridors.**

U-184 **Designated urban separators should be preserved through park, trail and open space acquisitions; incentive programs such as the Transfer of Development Rights program; the Public Benefit Rating System program; and regulatory measures.**

While urban separators complement the regional open space system by helping to define urban communities, the King County Four-to-One Program provides an opportunity to add land to the regional open space system through the dedication of permanent open space. The purpose of the program is to create a contiguous band of open space, running north and south along the main Urban Growth Area Boundary. Changes to the UGA through this program are processed as Land Use Amendments to the King County Comprehensive Plan, subject to the provisions in K.C.C. chapter 20.18.

U-185 **Through the Four-to-One Program, King County shall actively pursue dedication of open space along the original Urban Growth Area line adopted in the 1994 King County Comprehensive Plan. Through this program, one acre of Rural Area land may be added to the Urban Growth Area in exchange for a dedication to King County of four acres of permanent open space. Land added to the Urban Growth Area for naturally appearing drainage facilities in support of its development does not require dedication of permanent open space.**

U-186 **King County shall evaluate Four-to-One proposals for both quality of open space and feasibility of urban development. The highest-quality proposals shall be recommended for adoption as amendments to the Urban Growth Area. Lands preserved as open space shall retain their Rural Area designations and should generally be configured in such a way as to connect with open space on adjacent properties.**

U-187 **King County shall use the following criteria for evaluating open space in Four-to-One proposals:**

a. Quality of fish and wildlife habitat areas;

b. Connections to regional open space systems;

c. Protection of wetlands, stream corridors, ground water and water bodies;

d. Unique natural, biological, cultural, historical, or archeological features;

e. Size of proposed open space dedication and connection to other open space dedications along the Urban Growth Area line; and

f. The land proposed as open space shall remain undeveloped, except for those uses allowed in U-188.

U-188 **King County shall preserve the open space acquired through this program primarily as natural areas, passive recreation sites or resource lands for farming or forestry. King County may allow the following additional uses only if located on a small portion of the open space, provided that these uses are found to be compatible with the site's natural open space values and functions such as those listed in the preceding policy:**

a. Trails;

b. Compensatory mitigation of wetland losses on the urban designated portion of the project, consistent with the King County Comprehensive Plan and the Critical Area Ordinance; and

c. Active recreation uses not to exceed five percent of the total open space area. Support services and facilities for the active recreation uses may locate within the active recreation area only, and shall not exceed five percent of the active recreation area. An active recreation area shall not be used to satisfy the active recreation requirements for the urban designated portion of the project as required by K.C.C. Title 21A.

U-189 **Land added to the Urban Growth Area under the Four-to-One Program shall have a minimum density of four dwellings per acre and shall be physically contiguous to the original Urban Growth Area, unless there are limitations due to the presence of critical areas, and shall be able to be served by sewers and other efficient urban services and facilities; provided that such sewer and other urban services and facilities shall be provided directly from the urban area and shall not cross the open space or rural area. Drainage facilities to support the urban development shall be located within the urban portion of the development. In some cases, lands must meet affordable housing requirements under this program. The total area added to the Urban Growth Area as a result of this policy shall not exceed 4,000 acres.**

U-190 **King County shall amend the Urban Growth Area to add rural lands to the UGA consistent with Policy U-185 during the annual comprehensive plan amendment process. Open space dedication shall occur at final formal plat recording. If the applicant decides not to pursue urban development or fails to record the final plat prior to expiration of preliminary plat approval, the urban properties shall be restored to a rural designation during the next annual review of the King County Comprehensive Plan.**

II. Potential Annexation Areas

The annexation of urban unincorporated areas is good public policy. The State Growth Management Act and the regionally adopted Countywide Planning Policies stipulate that counties are the appropriate providers of regional services and of local services to the Rural Area. For their part, cities are the appropriate providers of local urban services to all areas within the designated urban growth boundary. This logical split of government services is in part a reflection of the greater taxing authority afforded to cities by the state Legislature. County taxing authority remains similar to what was historically adopted in the state constitution. Annexation is a means to achieve the desired governmental service and land use vision set forth in regional policy and state law.

Although it is the policy of the county to support and promote annexation, its formal ability to do so is extremely limited. State laws provide the cities, county residents and property owners with the authority to initiate the annexation process. A successful annexation initiative depends on establishing a collaborative and ongoing dialogue between the three affected interest groups: residents, the county, and the affected city. However, King County has a successful history of engaging in annexation discussions with urban unincorporated area residents. Most recently, from 2008 to 2011, there have been five major annexations:

- Lea Hill and Auburn West Hill into Auburn;
- Benson Hill into Renton;
- North Highline Area X into Burien;
- Panther Lake into Kent; and
- Juanita-Finn Hill-Kingsgate into Kirkland.

As a result of these and some smaller annexations, in 2011 King County's urban unincorporated population dropped by over 100,000 persons from its 2007 level, to an estimated population of 129,900 (comparable to the population of Bellevue, the fifth largest city in the state).

The land base remaining in the county's unincorporated urban areas is primarily residential, with limited amounts of commercial and retail development. Much of the urban unincorporated area is made up of geographically isolated islands surrounded by cities or adjacent to the urban growth boundary. Because these areas are scattered across the county, the provision of local services is costly. The lack of a substantive urban unincorporated area tax base exacerbates these difficulties and covering the cost of serving these areas reduces the amount of revenue available for regional services and for local services in the Rural Area. Therefore, King County has a strong fiscal interest in seeing the remaining urban unincorporated areas annexed to cities within the next several years.

The policies in this section are intended to guide the county's decision making on annexation-related issues to ensure the needs of citizens in the urban unincorporated area are considered, and that a smooth transition from county to city government occurs.

U-201 **In order to meet the Growth Management Act and the regionally adopted Countywide Planning Policies goal of becoming a regional service provider for all county residents and a local service provider in the Rural Area, King County shall encourage annexation of the remaining urban unincorporated area. The county may also act as a contract service provider where mutually beneficial.**

U-202 **To help create an environment that is supportive of annexations, King County shall work with cities and with Unincorporated Area Councils, neighborhood groups, local business organizations, public service providers and other stakeholders on annexation-related activities. King County will also seek changes at the state level that would facilitate annexation of urban unincorporated areas.**

U-203 **The Potential Annexation Areas Map adopted by the Growth Management Planning Council illustrates city-designated potential annexation areas (PAAs), contested areas (where more than one city claims a PAA), and those few areas that are unclaimed by any city. For contested areas, the county should attempt to help resolve the matter, or to enter into an interlocal agreement with each city for the purpose of bringing the question of annexation before voters. For unclaimed areas, King County should work with adjacent cities and service providers to develop a mutually agreeable strategy and time frame for annexation.**

U-204 **King County shall support annexation proposals that are consistent with the Countywide Planning Policies and the Washington State Growth Management Act, when the area proposed for annexation is wholly within the annexing city's officially adopted PAA, and when the area is not part of a contested area.**

U-205 **King County shall not support annexation proposals that would:**

- **a. Result in illogical service areas;**
- **b. Create unincorporated islands, unless the annexation is preceded by an interlocal agreement in which the city agrees to pursue annexation of the remaining island area in a timely manner;**

c. Focus solely on areas that would provide a distinct economic gain for the annexing city at the exclusion of other proximate areas that should logically be included;

d. Move designated Agricultural and/or Forest Production District lands into the Urban Growth Area; or

e. Apply zoning to maintain or create permanent, low-density residential areas, unless such areas are part of an urban separator or are environmentally constrained, rendering higher densities inappropriate.

U-206 **King County shall favor annexation over incorporation as the preferred method of governance transition. King County will not support incorporations when the proposed incorporation area is financially infeasible.**

U-207 **King County shall work with cities to develop pre-annexation agreements to address the transition of services from the county to the annexing cities. The development of such agreements should include a public outreach process to include but not be limited to residents and property owners in the PAAs, as well as residents and property owners in the surrounding areas. Pre-annexation agreements may address a range of considerations, including but not limited to:**

a. Establishing a financing partnership between the county, city and other service providers to address needed infrastructure;

b. Providing reciprocal notification of development proposals in PAAs, and opportunities to identify and/or provide mitigation associated with such development;

c. Supporting the city's desire, to the extent possible, to be the designated sewer or water service provider within the PAA, where this can be done without harm to the integrity of existing systems and without significantly increasing rates;

d. Assessing the feasibility and/or desirability of reverse contracting in order for the city to provide local services on the county's behalf prior to annexation, as well as the feasibility and/or desirability of the county continuing to provide some local services on a contract basis after annexation;

e. Exploring the feasibility of modifying development, concurrency and infrastructure design standards prior to annexation, when a specific and aggressive annexation timeline is being pursued;

f. Assessing which county-owned properties and facilities should be transferred to city control, and the conditions under which such transfers should take place;

g. Transitioning county employees to city employment where appropriate;

h. Ensuring that land use plans for the annexation area are consistent with the Countywide Planning Policies with respect to planning for urban densities and efficient land use patterns; provision of urban services, affordable housing, and transportation; the protection of critical areas; and the long-term protection of urban separators;

i. Continuing equivalent protection of cultural resources, and county landmarks and historic resources listed on the King County Historic Resource Inventory;

j. Maintaining existing equestrian facilities and establishing equestrian linkages; and

k. Establishing a timeline for service transitions and for the annexation.

As part of its annexation initiative, King County will explore new options for revenue generation to make the provision of services to urban unincorporated areas financially sustainable. If annexation is not occurring at a pace consistent with the intent of these policies, the county may consider utilizing its land use authority to encourage new development that will generate higher tax revenues.

U-208 **King County shall consider initiating new subarea planning processes for the urban unincorporated areas to assess the feasibility of allowing additional commercial, industrial and high-density residential development through the application of new zoning.**

III. Housing

A. Housing Choice and Opportunity Throughout King County

Establishment of vibrant, thriving, and sustainable communities is a key goal of King County's Strategic Plan. Offering adequate choices and opportunities to fully address the spectrum of housing needs for all King County residents is an essential step toward meeting this goal. The County's Strategic Plan aligns with the Washington State Growth Management Act (GMA), VISION 2040, and the King County Countywide Planning Policies (CPPs) to encourage affordable housing. The CPPs provide a framework within which all jurisdictions are called upon to plan for a range of affordable housing choices within diverse, healthy, sustainable communities that include opportunities for employment, recreation, social interaction, and education. The King County Comprehensive Plan strengthens this connection by promoting affordable housing for all county residents through support for adequate funding, zoning, and regional cooperation to create new and diverse housing choices in communities throughout the county.

Most housing is financed by and developed in the private sector. The ability of the private sector to develop affordable housing is affected by a wide range of market forces. However, local government actions such as land-use policies, development regulations and infrastructure finance also have a significant impact on housing affordability. Public funding and incentive programs are essential to addressing the housing needs of lower-income county residents, people with special needs, elderly people, people with disabilities, people who are homeless, and growing segments of the population such as immigrant and refugee communities.

The most recent demographic data[1] indicate that there has been an increase in both the number and percentage of the population who are poor. The percent of persons in poverty has increased from 8.4% of the population in 2000 to 9.7% of the population in 2010. In King County outside Seattle, the poverty rate is slightly lower at 9.3%. A total of 24% of all households earn less than 50% of median income compared to 21% in 2000, and a full 40% of households earn less than 80% of median income. There has been a "thinning of the middle" in income distribution since 1990. Moderate and middle income groups (50 – 180% of median income) have decreased as a percentage of the population, while the proportion of households earning less than 50% of median income and more than 180% of median income has increased. While the population of King County has grown by more than 11% since 2000,

[1] The 2010 U.S. Census and the 2005 – 2009 American Community Survey data are the sources for the demographic data cited here, unless otherwise specified. More details on demographics and housing needs can be found in the Housing Technical Appendix.

jobs have declined by 4.5% during this past decade, leaving many workers unemployed or underemployed.

The percentage of persons of color in King County has increased more than three-fold in two decades: from 16% of the population in 1990 to 35.2% of the population in 2010, according to the 2010 Census. In King County outside Seattle, the increase in diversity is even more pronounced. In 2010, 35.9% of the population was persons of color compared to 23.9% in 2000. Asians were nearly 15% of the population outside Seattle, and Hispanic/Latinos constituted 10% of the population of King County outside Seattle.

Of the population under the age of 18, 47% are youth of color. In most of South Urban King County, more than 50% of all youth are persons of color. Nearly 30% of King County's population lives in households that speak a language other than English at home. The growth in immigrant families and households speaking languages other than English at home calls for a sensitivity to the particular cultural norms that may influence housing needs and choice.

The population over 65 years of age will grow by about 200,000 persons by 2025, nearly doubling the current number of seniors. From 2005 to 2009, more than 61% of seniors earned 80% of median income or less, and 22% earned 30% of median income or less. Many seniors enter retirement with limited income and financial resources that may diminish in value over time. Of the population over five years of age, approximately 13% has some kind of physical, sensory, or mental disability.

An examination of the rental housing supply in 2009 indicated that even when publicly-subsidized housing was included, there was a deficit of approximately 40,000 units for the 93,000 renters earning 40% of median income or below. Those earning 40 – 60% of median income often must compete with higher income renters for the limited quantity of rental units affordable to them, particularly in certain regions of the county.

Homeowners have seen a decline in the value of their homes in the period from 2007 through 2010, resulting in many of them owing more on their mortgage than their home is worth. Partly due to this housing finance crisis, the rate of homeownership in King County has declined from 61% in 2000 to 59% in 2010. Outside Seattle, the homeownership rate is higher, at 65%, than it is inside the city, where the rate is 48%.

Throughout King County, two-thirds of all households are made up of just one or two-persons. Seattle has a much higher rate of single-person households. Outside of Seattle 44% of all households have three or more persons.

The median price of both single family and condominium homes in King County declined from approximately $390,000 in 2008 to about $363,500 in 2009. Despite the downturn in housing prices, the median-priced home in King County is generally out of reach of moderate and middle income households. To afford a home that costs $363,500 requires an annual income of approximately $85,000, or about 120% of King County's median household income.[2] The median single-family house (excluding condos) cost about $425,000, requiring an income of $98,000 or roughly140% of King County's median income.

The policies in this chapter address affordable housing development, preservation and assistance programs needed to ensure safe, healthy, and adequate housing for lower-income and special needs residents.

Interjurisdictional cooperation and public/private partnerships are needed to address the full range of critical housing needs.

U-301 **King County shall work with cities, the private sector, other public agencies such as the Housing Authorities, and the non-profit sector, to encourage a wide range of housing within the Urban Growth Area that:**

- **a. Provides housing choices for people of all income levels located in areas with existing or planned transportation networks including those that make it safe and convenient to walk, bicycle, and take public transportation to work and other key destinations;**
- **b. Meets the needs of our diverse population;**
- **c. Supports economic growth; and**
- **d, Ensures an equitable and rational distribution of low-income and affordable housing throughout the county.**

U-302 **Through subarea and regional planning with cities, incentive programs and funding initiatives, King County shall plan for housing to meet the needs of all economic segments of the population throughout the Urban Growth Area and within Rural Towns. King County shall plan for construction, rehabilitation, or preservation of housing units affordable to households as follows:**

- **a. 13% of housing stock should be affordable to households below 30% of the King County median income, including homeless individuals and families who may face significant barriers to finding permanent housing;**

[2] Median household income in King County as reported by ACS 2005 – 2009 was just under $68,000. Median income as determined by HUD for the typical household of two to three persons was $72,000.

b. 11% of housing stock should be affordable to households between 30% and 50% of the King County median income;

c. 16% of housing stock should be affordable to households between 50% and 80% of the King County median income;

d. 20% of housing stock should be affordable to households between 80% and 120% of the King County median income; and

e. 40% of housing stock should be affordable to households above 120% of the King County median income.

U-303 King County should promote the preservation, rehabilitation, and development of affordable rental housing opportunities for households earning up to 80% of the King County median income by providing a range of incentives to private sector developers, as well as incentives and subsidies to non-profit developers.

U-304 King County should promote the preservation, rehabilitation, and development of affordable ownership housing opportunities for households earning up to 120% of the King County median income by providing a range of incentives to private sector developers, as well as incentives and subsidies to non-profit developers.

B. Housing and Land Use Regulation

Meeting these objectives will entail providing sufficient land for a variety of affordable housing, such as higher-density single-family homes, multifamily properties, manufactured housing, accessory dwelling units and mixed-use developments.

U-305 King County, in partnership with other jurisdictions, shall evaluate achievement of countywide and local goals for housing for all economic sectors of the population by analyzing housing indicators, adopted land use regulations, actions that encourage development, and the effect of market factors on housing development. The results of this evaluation shall be used to develop new or revised policies, programs, regulations, and incentives to better meet the Countywide Planning Policies' housing goals. These may include adopting appropriate land use regulations and other actions that encourage development, rehabilitation and preservation of low- and moderate-income housing.

U-306 King County shall assure that there is sufficient land in the unincorporated urban areas zoned to accommodate King County's share of affordable housing and provide

a range of affordable housing types, including higher-density single-family homes, multifamily properties, manufactured housing, cottage housing, accessory dwelling units and mixed-use developments. King County should work with cities to increase opportunities for affordable housing development by assuring there is sufficient land capable of being developed for this range of housing types that are more likely to be affordable to low-, moderate- and middle-income households.

U-307 **King County shall provide opportunities for attached and detached accessory dwelling units in urban residential areas and shall encourage all jurisdictions within King County to adopt provisions to allow accessory dwelling units in their communities.**

U-308 **King County shall promote development of attached accessory dwelling units in all urban residential zones. King County shall allow detached accessory dwelling units in all urban residential zones on lots greater than 5,000 square feet in size subject to compliance with supplemental parking, safety and setback requirements that may be required of the detached accessory dwelling unit.**

U-309 **King County should encourage land use and investment strategies to stimulate mixed-use and mixed-income developments as a way to integrate neighborhoods and increase housing and transportation choices.**

Rising development costs are sometimes associated with land acquisition, construction, financing, permit processes, roads and utilities and market demand. Although some of these cost increases fall outside the control of local governments, others are directly affected by public policy decisions. Public policies should be evaluated for implications related to the cost of housing development. Cost-saving approaches should be studied. Strategies for increasing favorable zoning, regulations and infrastructure can significantly cut housing development costs. These will help curtail rising housing costs and increase the amount of new, affordable housing units.

U-310 **King County should pursue land use policies and regulations that result in lower development costs without loss of adequate public review, environmental quality or public safety and do not reduce design quality, inhibit infrastructure financing strategies, or increase maintenance costs for public facilities.**

U-311 **King County shall continue to improve development standards to allow higher densities and flexibility of housing types in all residential zones, in order to best**

accommodate the environmental conditions on the site and the surrounding neighborhood when planning housing developments.

U-312 **King County shall work with other jurisdictions to eliminate barriers for affordable and special needs housing development.**

U-313 **King County shall work with other jurisdictions to encourage the use of universal design in the development of affordable housing.**

U-314 **King County shall seek to minimize the time necessary to process development permits to meet affordable housing and environmental goals and community and aesthetic concerns.**

U-315 **King County should encourage the formation of common development codes and standards with cities, sewer and water districts and other permitting agencies to increase predictability and reduce development costs.**

U-316 **King County should develop new partnerships with public and private lending institutions to find solutions that reduce housing financing costs for both builders and consumers.**

In accordance with the CPPs, VISION 2040 and federal priorities, King County intends to strengthen the linkage of affordable housing to jobs and public transportation through transit-oriented development and along transit corridors. As the population of the Puget Sound region grows, King County is expected to remain the major employment center of the region. As job growth occurs, the workers for these jobs must be accommodated with adequate opportunities for housing. The workforce of King County includes households earning a wide variety of incomes, from individuals earning minimum wage at a less than full-time job to dual- or triple-income households earning well above the County's median income. If a balance of job growth, improved public transportation, and affordable housing availability is not achieved, workers at the lower end of the income scale face particular pressures when forced to live longer distances away from their jobs. This increases pressures on transportation systems, contributes to higher energy use and greenhouse gas emissions, and reduces the time workers have for family, recreation, volunteer work, or continuing education.

U-317 **King County shall support affordable housing development that is compatible with surrounding uses by:**

a. Providing information on potential development sites;

b. Promoting land use patterns that provide convenient connections for pedestrian and bicycle travel as well as for transit and other motorized transportation;

c. Funding services, amenities, infrastructure and access improvements within the urban area; and

d. Developing public financing techniques that give housing development and redevelopment in designated areas a market advantage.

U-318 **King County should support transit-oriented development that expands housing opportunities at locations near frequent transit service by engaging private and non-profit entities in an investment/development partnership. Public transit funds should be used only when it is shown that the public transit benefit of such investment is equal to or greater than the cost. King County should support efforts to incorporate affordable housing in transit-oriented development.**

U-319 **King County shall work with the Growth Management Planning Council or its successor and the private sector to support development of an adequate supply of housing commensurate with job growth within the county and its cities. To attain this goal, King County shall:**

a. Support job and household growth targets and policies established in the Countywide Planning Policies;

b. Establish performance measures to gauge how jurisdictions are accommodating growth;

c. Participate in buildable lands inventories, market analyses and other studies to evaluate if sufficient land capacity is available for residential development; and

d. Work with cities to ensure additional actions are taken throughout the county to accommodate and promote residential development when job growth causes great demand for housing and severe shortages in the availability of housing for new workers in the county.

U-320 **King County should work with local employers to develop affordable employer-assisted housing opportunities located within commuting distance of the employment site.**

U-321 **King County should encourage affordable housing through redevelopment of nonresidential buildings, such as schools and commercial buildings, in locations suitable for housing and in ways that preserve significant historic features where appropriate.**

U-322 **King County should continue to expedite plan reviews for affordable housing projects in coordination with other incentive or subsidy programs.**

U-323 **King County should encourage the development, rehabilitation, and preservation of residential buildings that have shared facilities, such as single-room occupancy hotels and boarding homes, to provide opportunities for lower rents.**

U-324 **King County shall provide opportunities and encourage other jurisdictions to provide opportunities for housing types that provide lower-cost ownership opportunities, including manufactured housing, condominiums, townhouses and cottage-style housing.**

U-325 **Housing developments in the urban unincorporated areas, consisting of not less than 100 acres, shall provide a mix of housing types and densities, including housing that is affordable to low-, moderate-, and middle-income households. This mix should include housing opportunities for households with special needs, the elderly, and persons with disabilities.**

U-326 **King County should promote the incorporation of the principles of healthy communities and housing, sustainability, and greenhouse gas emissions mitigation in affordable housing development.**

U-327 **King County should support the development of affordable housing that protects residents from exposure to harmful substances and environments, reduces the risk of injury, is well-maintained, and is adaptable to all ages and abilities.**

U-328 **King County should support the integration of affordable housing into healthy communities.**

C. New Housing Models

The characteristics of people seeking housing continue to change. Today, there are more single adults living alone or in shared housing than ever before. More than two-thirds of King County households are one- or two-person households. More families are single-parent households. Many households have two parents working full-time. As the population ages, more seniors will need housing. The population of King County is increasingly comprised of diverse racial, ethnic, and language backgrounds. While these realities may not have had a direct impact on housing needs, cultural norms can affect the type, size, and location of acceptable housing, as well as the ability of households to understand and navigate the rental market and the housing finance system.

King County can assist in the development of housing types that meet the needs of these individuals and families by funding affordable housing, supporting first-time homebuyer education, revising development standards and/or expediting permit processing. Demonstration projects can provide needed housing for low-income households and test new models for housing simultaneously.

U-329 **King County should assist in development of innovative, affordable demonstration projects by exploring alternative land development, flexible development standards, and construction techniques.**

U-330 **King County shall encourage new housing models by supporting projects such as owner-built housing, land trusts for rental and ownership housing, and other innovative developments.**

U-331 **Within the Urban Growth Area, King County shall promote the development and expansion of land trusts that provide affordable ownership opportunities.**

U-332 **King County should explore the feasibility of allowing five-story wood frame construction as a technique that will increase the availability of multifamily housing while lowering development costs and maintaining fire safety.**

U-333 **King County should promote cottage-style housing development that clusters a limited number of small-scale detached units around a common green space at a density level that is up to twice that allowed by base density. The general character and size of cottage-style development should be controlled in the same manner that creates compatibility with a single-family neighborhood.**

U-334 **King County should encourage development of residential communities that achieve lower prices and rents through shared common houses, open spaces and community facilities.**

D. Affordable Housing Development

In King County today, a substantial need exists for low-income rental housing and for moderately priced homes that can be purchased by first-time homebuyers. In the past decade, a significant number of homeowners have lost their homes due to foreclosure and have become renters again. In the short term, those households may need affordable rents, while in the longer term they may again seek to own a moderately-priced home.

While King County has seen a growth in the percentage of smaller (one- and two-person) households, there are also some large households that need affordable housing with three or more bedrooms. Existing units will provide some of the affordable housing needed for low-income households in the future. However, with the projected growth in the number of low- to moderate-income households, prospect of increasing numbers of family and senior households with limited income, and the short supply of lower-cost housing available today, new construction must include affordable housing. Efforts to provide sufficient land and infrastructure and reduced development costs will help make new units affordable. In addition, a combination of incentive programs and funding will help keep rents affordable and expand opportunities for first-time homebuyers.

The King County Consortium is a partnership that represents unincorporated areas and most cities outside of Seattle in obtaining, administering and distributing federal, state and local funds to address housing, homeless and community development needs. The King County Consortium prepares a Consolidated Housing and Community Development Plan that outlines the needs, resources available and housing and community development goals to be achieved. An Annual Action Plan details specific housing and community development project objectives.

In the economic climate of 2007- 2010, King County has faced considerable funding challenges for developing affordable housing because of cutbacks in levels of state and federal housing funds, and the elimination or reduction of some local funding sources as well. It will require concerted effort on the part of county, city, and state representatives to develop new funding sources on the local and state levels, and to re-establish or expand federal funding levels. A variety of non-fiscal incentives are currently available to support affordable housing in King County. Other innovative tools that encourage the most efficient use of scarce funding resources should be explored.

335 **King County should initiate and actively participate in regional solutions to critical affordable housing needs. Cities, community and housing representatives should be invited to identify and implement solutions.**

336 **King County shall work with cities and community representatives to establish new, countywide funding sources for housing development, rehabilitation, preservation, and related services, such that each city and King County contribute on an equitable basis.**

U-337 **King County shall work with other jurisdictions, housing developers, and service providers throughout the state to urge federal and state government to expand both capital and operating funding for low-income housing, including low-income housing for people with special needs.**

U-338 **King County should encourage and support efforts by non-profit housing developers, housing agencies, and service providers to develop long-term nongovernmental funding sources, such as planned giving, endowments, and related economic development ventures.**

Incentives that will help developers provide low- and moderate-income housing include reduction in development costs or an expansion of the development potential on the property.

U-339 **Density bonuses and other incentives shall be available to both single-family and multifamily developments to promote development of affordable rental or ownership.**

U-340 **King County shall exempt payment of impact fees to promote development of affordable rental or ownership housing.**

U-341 **King County shall explore coordination of incentive programs with cities to develop common program guidelines and reduce administrative costs.**

U-342 **King County should provide expedited building permit review for all affordable housing projects that utilize affordable housing incentive programs, subsidies, tax abatement or tax credits.**

U-343 **King County should encourage affordable housing projects that utilize affordable housing incentive programs, subsidies, tax abatement or tax credits.**

Federal, state and local housing programs provide vital assistance to low-income households. King County has used federal funds for housing for more than two decades, but they are not adequate to meet all local needs. During the past five years, King County also has used local funds for development and preservation of affordable housing. As a result, residents have more housing choices. Residents who need emergency housing can stay in the community of their choice and their children can continue to attend schools. Local housing funds have also leveraged significant private and non-profit investment as well as other public funding resources.

Housing for very low-income households is usually developed by private non-profit agencies or by public housing authorities. By using federal subsidy programs administered at the state or local level, private for-profit developers and lenders also are active in low-income housing development.

U-344 **King County shall give priority in its housing funding programs to developments that serve low-income individuals and households, secure appropriate housing options for people with special needs, prevent displacement of low-income people, or provide low-income and special needs housing along with social services.**

U-345 **King County should explore increasing affordable housing opportunities, especially in areas with an existing or forecast shortage of affordable housing, through new programs, development incentives, and changes to funding program guidelines to facilitate new construction, rehabilitation, and acquisition to preserve affordable housing.**

U-346 **King County should seek opportunities to fund programs and projects where county funds are matched by additional public and private loans and contributions, increasing the amount of housing that can be developed.**

U-347 **King County should expand its use of surplus county-owned property and air rights over county-owned property for affordable housing and should explore its use for other public benefits, such as human services, and consider conveyance of properties to public or non-profit housing developers and agencies at below-market cost. Surplus county property shall be prioritized for housing**

development that will be consistent with the King County Consortium Consolidated Plan and the Ten-Year Plan to End Homelessness.

U-348 **King County should support the efforts of non-profit developers and housing agencies to increase the supply of housing for low-income households, through technical assistance and funding for capacity building, training, and predevelopment activities.**

U-349 **King County should support programs that provide apprenticeship and employment training in the building trades through affordable housing development. King County should explore ways to partner with non-profit housing developers in offering pre-apprenticeship, apprenticeship and employment training opportunities.**

U-350 **When awarding subsidies for affordable housing developments to non-profit developers and housing agencies, King County shall include in its criteria whether the proposals implement healthy housing and sustainable development principles, including universal design features.**

This plan calls for more residential growth by preserving existing housing stock and developing new units on vacant parcels within established neighborhoods. These locations can offer affordable housing that is close to jobs, transportation and services. Housing development can also provide welcome improvements to communities suffering from a lack of investment. However, new development in established communities may result in the loss of existing low-cost housing. For example, when existing affordable housing stock is demolished or upgraded to create market-rate units, neighborhoods lose housing for their low-income residents. Low-cost housing is a community resource we should strive to preserve.

Redevelopment policies must be balanced with the need to preserve existing low-cost housing and neighborhoods. Retention of affordable housing can be encouraged through appropriate zoning and development regulations, financial incentives, rehabilitation programs, historic preservation, and acquisition strategies.

Additionally, preservation of affordable housing minimizes health and safety risks and provides residential stability. Historic features to existing buildings are also preserved. In combination, these efforts increase livability and help establish the character of existing neighborhoods.

U-351 **King County should develop and expand incentives and subsidy programs to preserve affordable housing threatened by market forces and expiring federal subsidies. Relocation assistance and replacement housing should be developed, where feasible, to help low-income households when displacement is unavoidable.**

U-352 **King County should explore land use and financial incentives to preserve and improve existing housing in redeveloping areas through the use of programs such as transfer of development rights, tax credits and tax abatements for low-income housing and tax abatements and restoration loans for housing designated as a historic landmark.**

U-353 **King County should assist owners of rental properties serving low- and moderate-income residents to acquire financing for building health and safety improvements in exchange for long-term agreements to maintain affordable rents.**

U-354 **King County should work with financial institutions and other housing agencies to expand resources for housing rehabilitation through techniques such as reverse mortgage programs and loan pools.**

U-355 **King County should coordinate preservation of existing affordable housing with city and county historic preservation programs and incentives, and should promote preservation and restoration of significant historic features in the rehabilitation of existing buildings and sites for housing.**

U-356 **King County shall support ongoing efforts to maintain and preserve existing mobile home parks, at an appropriate level of safety and habitability, as a source of affordable housing for low-income homeowners through zoning or funding for acquisition and rehabilitation of parks and homes.**

U-357 **King County should consider the constraints of rehabilitation, legalization of accessory dwelling units, and historic preservation, so usable structures are rehabilitated to an appropriate level of safety and habitability.**

U-358 **Development standards should promote lower-cost infill development, such as accessory dwelling units, in a manner that allows existing housing to be retained**

through measures such as an innovative or flexible building envelope, access and infrastructure standards.

E. Access to Housing

An important goal of addressing affordable housing needs is equal access to housing and freedom from discrimination in housing for residents of King County. A related goal is the successful integration of housing for low-income households into all communities, providing access to good transportation choices, improved economic and educational opportunities, and a healthy, safe and vibrant community.

Public funding for affordable housing and other policies included in this chapter that incentivize or require a portion of affordable housing in market-rate developments contribute to increasing equal access to housing for lower-income and special needs residents through new construction of affordable housing or through acquisition and rehabilitation of existing housing that will be preserved as affordable housing.

Local, state and federal fair housing laws, including the King County Fair Housing Ordinance, have set the stage for public policy that favors community-based, integrated housing and independent living for persons with special needs, rather than institutional settings. Service-enriched housing is also best integrated into community-based settings in apartments or single family homes rehabilitated to meet the needs of the residents.

Opportunity is a situation or condition that places individuals in a position to be more likely to excel or succeed. Opportunity mapping assesses the conditions present in neighborhoods across a region (by looking at indicators of opportunity in education, economy, transportation, housing, environment, and health). This mapping provides a comprehensive analytical framework to measure opportunity in the region and to determine who has access to opportunity-rich areas. Analysis of opportunity mapping can provide valuable information about where more affordable housing needs to be located, and what needs to be remedied in areas where these types of opportunities are currently very limited**.**

U-359 **King County shall promote opportunities for publicly funded housing, including housing for low-income people with special needs, by:**

a. Adopting land use policies and regulations that treat publicly funded housing and other low-income housing the same as housing of a similar size and density;

b. Adopting funding and program policies that encourage integration of assisted housing within communities and a fair distribution of publicly funded housing throughout the county. Mandatory dispersion requirements

that limit where publicly funded housing may locate should not be applied; and

c. Encouraging developers and owners of publicly funded housing units to undertake activities to establish and maintain positive relationships with neighbors.

U-360 **King County shall flexibly apply its rules, policies, practices and services when necessary to afford persons with disabilities equal opportunity to use or enjoy a dwelling, including the promotion of public funding and other incentives to create new affordable housing opportunities for persons with disabilities.**

U-361 **King County should develop and adopt standards for publicly funded housing that will:**

a. Increase the ability of people with special needs to visit or have physical access to housing units regardless of their residency status;

b. Allow household members to age in place through the inclusion of universal design principles that increase housing opportunities that are accessible and usable by all persons; and

c. Support the ability of all people, especially the elderly and persons with disabilities and special needs, to find housing opportunities that allow them to live as independently as possible in the housing and community of their choice.

U-362 **King County shall prohibit special requirements through land use regulations, restrictive covenants and conditional or special use permits that limit the ability of persons from protected classes (as defined in the King County Fair Housing Ordinance) to live in residences of their choice.**

U-363 **King County shall permit group living situations, including those where residents receive such supportive services as counseling, foster care or medical supervision, within a single-family house or apartment.**

U-364 **King County should work with housing industry representatives to identify and remove barriers (such as real estate marketing, finance or insurance practices) that restrict housing choices and opportunities for low- and moderate-income people and people with special needs.**

U-365 **King County should support programs that help prevent homelessness, such as emergency rental assistance, mortgage default and foreclosure counseling, and improvements to emergency services referral networks.**

U-366 **King County should help in site planning that:**

- **a. Supports the siting of community facilities and assisted publicly funded affordable housing in locations where low- and moderate-income residents and persons with special needs have convenient access to a variety of opportunities and services;**
- **b. Uses opportunity mapping; and**
- **c. Promotes fair housing and diverse communities that are inclusive of residents with a range of abilities, ages, races, incomes and other diverse characteristics of the population of King County.**

F. Direct Assistance to Households

In many cases, the most effective form of housing assistance is direct assistance to low- or moderate-income households. This approach is commonly used for first-time homebuyer programs, which provide reduced-rate mortgages or assistance with closing costs. These forms of assistance increase options for homebuyers and enable them to find housing they prefer. Federal programs also provide direct rental assistance to low-income households to help pay rent in public and privately owned rental housing. In the event of a moderate to major disaster in the King County region, special measures will be needed to assist households with home repair resources, help them find interim housing once shelters have closed, and connect them to resources such as short-term rental or move-in assistance.

U-367 **King County should work with local lenders to expand assistance for first-time homebuyers, including homebuyer education and counseling, mortgage default and foreclosure counseling, low-cost financing and assistance with down payments and closing costs.**

U-368 **King County should provide financial assistance for housing rehabilitation to low-income home owners, including owners of mobile homes residing in parks, and through community-based repair programs, such as tool banks or painting programs.**

U-369 **King County shall participate in the Ten-Year Plan to End Homelessness to sustain and support a coordinated, regional response to homelessness that**

includes access to homelessness prevention services, emergency shelter, transitional housing, permanent affordable housing, and appropriate support services for homeless families, single adults, and youth.

U-370 **King County should work with jurisdictions and housing providers across the state to urge state and federal governments to expand funding for direct assistance services such as rental assistance and emergency services. In addition to rental assistance, King County should support programs that help prevent homelessness and that improve emergency services referral networks, including the development of a coordinated intake system for homeless families and individuals, and low-income households that are seeking permanent housing.**

U-371 **King County should support programs that assist low-income renters to remain in or to gain access to private market housing, such as revolving loan funds that cover utility and damage deposits, and rental assistance programs.**

U-372 **King County should support programs that provide landlord-tenant counseling, workshops and mediation in landlord-tenant disputes, as well as legislation that protects the rights of tenants and landlords, such as fair rental contracts.**

Potential Annexation Areas 2012 Executive Recommendation

City of Seattle PAA

North Highline

West Hill

South West King County

UPD

Fairwood/ Soos Creek

Eastgate/ Cougar

East Renton

Shoreline, Lake Forest Park, Kenmore, Bothell, Woodinville, Duvall, Seattle, Kirkland, Redmond, Carnation, Hunts Point, Yarrow Point, Clyde Hill, Medina, Lake Washington, Lake Sammamish, Bellevue, Sammamish, Beaux Arts, Mercer Island, Newcastle, Issaquah, Snoqualmie, North Bend, Renton, Burien, Tukwila, SeaTac, Normandy Park, Des Moines, Kent, Covington, Maple Valley, Black Diamond, Federal Way, Auburn, Algona, Pacific, Milton, Enumclaw, Puget Sound, Muckleshoot Reservation

Urban Areas which are within the designated PAA of two or more cities-- "OVERLAPS"--OR OTHERWISE CONTESTED AREAS

Urban Areas which are not within the designated PAA of any city-- "GAPS"

Green River Agricultural Districts

Potential Annexation Area Recognized by City-County Interlocal Agreement

Interim Potential Annexation Areas

Cities

Parks

Urban Growth Area Boundary

N

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Date: February 14, 2012
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King County
Department of Development and Environmental Services

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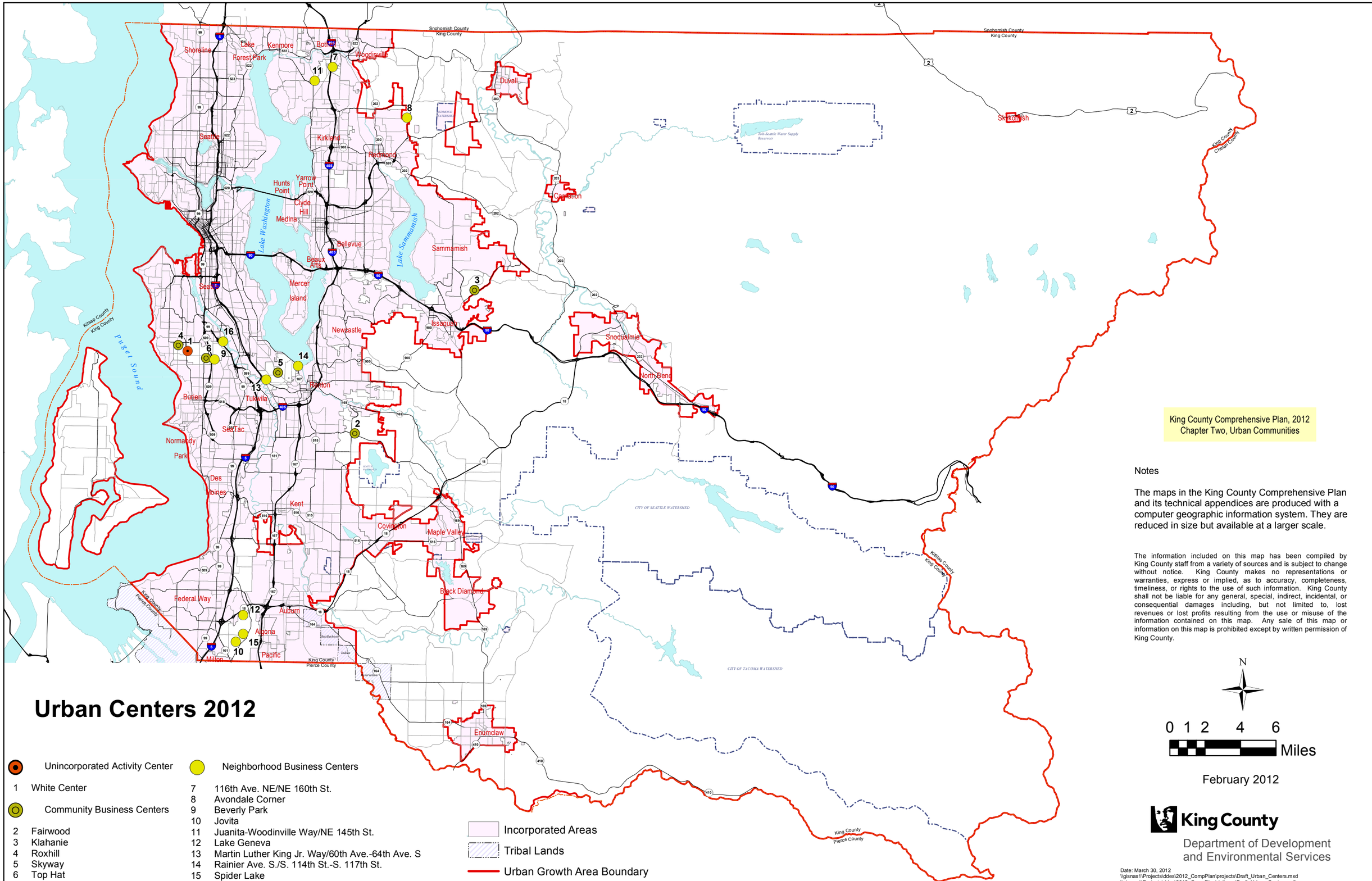

King County Comprehensive Plan, 2012
Chapter Two, Urban Communities

Urban Centers 2012

Unincorporated Activity Center

1 White Center

Community Business Centers

2 Fairwood
3 Klahanie
4 Roxhill
5 Skyway
6 Top Hat

Neighborhood Business Centers

7 116th Ave. NE/NE 160th St.
8 Avondale Corner
9 Beverly Park
10 Jovita
11 Juanita-Woodinville Way/NE 145th St.
12 Lake Geneva
13 Martin Luther King Jr. Way/60th Ave.-64th Ave. S
14 Rainier Ave. S./S. 114th St.-S. 117th St.
15 Spider Lake
16 Unincorporated South Park

Incorporated Areas
Tribal Lands
Urban Growth Area Boundary
Municipal Watershed Boundary

Source: King County Department of Development and Environmental Services

Notes

The maps in the King County Comprehensive Plan and its technical appendices are produced with a computer geographic information system. They are reduced in size but available at a larger scale.

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February 2012

King County
Department of Development and Environmental Services

Date: March 30, 2012
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CHAPTER 3
RURAL AREA AND NATURAL RESOURCE LANDS

Rural King County is an essential part of the county's rich diversity of communities and lifestyle choices, encompassing landscapes of scenic and great natural beauty. This chapter sets forth the county's intent and policies to ensure the conservation and enhancement of rural communities and resource lands. In addressing these Rural Area needs, this chapter also comprises the land use classifications of Rural Area, Rural Neighborhood Commercial Centers, and Rural Towns. It also addresses the designated Resource Lands, which include lands designated Agriculture, Forest, or Mining on the Land Use Map.

Growth Management Act's Goals, Elements, and Requirements

Sections I through V of this chapter satisfy the Growth Management Act's mandatory rural element by designating rural lands in order to limit development and prevent sprawl, by permitting land uses that are compatible with the rural character established in the King County Countywide Planning Policies (CPPs), and by providing for a variety of rural densities. These sections also satisfy the mandatory land use element by indicating the population densities that are appropriate for the Rural Area land use classification. The policies in these sections also encourage natural resource-based industries and natural resource land uses in the Rural Area as required by the Growth Management Act (GMA).

Section VI of this chapter satisfies GMA Goal 8 to maintain and enhance natural resource-based industries; the RCW 36.70A.170 requirement to designate natural resource lands; and the RCW 36.70A.080 optional conservation element by conserving natural resource lands.

Rural Area and Communities

Understanding and conserving the unique characteristics of the Rural Area and each of the county's distinct rural communities will help King County retain its rural character and its agricultural, forestry, and mining heritage.

King County's Rural Area, including communities such as the Hobart Plateau, Vashon Island, the Snoqualmie Valley, and the Enumclaw Plateau, are characterized by low-density residential development, farms, ranches, forests, watersheds crucial for both fisheries and flood hazard management, mining areas, small cities and towns, historic sites and buildings, archaeological sites, and regionally important recreation areas. These rural uses complement and support the more extensive resource uses in the designated

Resource Lands. The location of the Rural Area between the Urban Growth Area and the designated Resource Lands helps to protect commercial agriculture and timber from incompatible uses.

Designation and conservation of the Rural Area supports and sustains rural communities and rural character as valued parts of King County's diversity. It also provides choices in living environments; maintains a link to King County's heritage; allows farming, livestock uses, and forestry to continue; and helps protect environmental quality and sensitive resources, such as groundwater recharge areas and watersheds crucial for both fisheries and flood hazard management. Rural King County also acts to enhance urban areas by providing a safe and reliable local food source, nearby open space and parks for a variety of recreation and tourism opportunities, and educational opportunities to explore current and historic agricultural and forestry practices.

Within the Rural Area are lands designated as Rural Towns and Rural Neighborhood Commercial Centers. The purpose of these designations is to provide services and limited goods that satisfy rural residents' and local businesses' daily needs.

Resource Lands

The growing, harvest, extraction, processing, and use of products from the land play an important role in King County's economy by providing jobs and products for local use and export. Agricultural and forest lands also provide scenic views, links to King County's cultural heritage, and environmental benefits such as wildlife habitat, improvements in air and water quality, and carbon sequestration. In large measure, King County's quality of life is dependent upon the thoughtful planning and sound management of these lands to ensure their long-term conservation and productive use.

The population growth in the Puget Sound Region since 1945 has resulted in the conversion of agricultural and forest lands to other uses, and the reduction of mining opportunities. The natural resource land base has diminished for many reasons, among them the demand for more land for urban land uses, fragmentation of large acreages into rural residential properties, loss of infrastructure such as local processing facilities for resource-based industries, and the high cost of land. Since 1994, when King County designated its Resource Lands of long term significance under GMA, it has been much more successful in retaining these areas.

Section VI contains King County's strategy for conservation of these valuable resource lands and for encouraging their productive and sustainable management. The strategy consists of policies to guide planning, incentives, education, and regulation. Although Section VI focuses on the designated Resource Lands of long term commercial significance, many of the policies are applicable to farm, forest and mineral lands in the Rural Area as well.

I. Rural Area

Preserving rural King County plays a key role in ensuring a continuing variety of landscapes, maintaining the diverse communities that often portray the rural legacy, and supporting the evolving rural economic opportunities for the county and its residents. The rural landscape is characterized by extensive forests and farm lands, free-flowing rivers and streams that provide high-quality habitat for fish and wildlife, and a mixture of housing types along with small commercial enterprises and business hubs. Rural lands and rural-based economies contribute to the range of choices and enhance the quality of life of all county residents. The Growth Management Act (GMA) and the King County Strategic Plan envision different landscapes, infrastructure, and level of services for urban and rural communities. King County is committed to sustaining traditional rural lifestyles, rural economic clusters, and rural character.

Traditional rural economic activities have evolved over the decades as residents have responded to changing markets and the expansion of urban areas. Large-scale, commercial forestry and mining have been and continue to be the traditional land uses in the eastern half of King County. Farming continues in the prime soils found in the river valleys and on the Enumclaw Plateau. Although historic activities such as hop farming have disappeared, and the number of dairy farms has declined, today's farmers are exploring new crops, value-added products, and creative direct marketing. County residents raise livestock such as poultry, cattle, sheep, llamas, alpacas, and buffalo. Equestrian activities, including breeding, training, boarding and recreation, have become a more significant part of the rural economy. The types of businesses now locating in the Rural Towns and Rural Neighborhood Commercial Centers and being developed as home-based businesses have also responded to these changes in the county, and in the commercial market place.

The glacial soils and terrain that give King County its natural beauty also create significant environmentally critical areas, such as steep, erodible slopes, wetlands and groundwater recharge areas. Maintenance of tree cover, natural vegetation and wetlands are critical to the continued functioning of the ecosystem and preservation of rural character. The interplay of forest cover, soils and water are essential to watershed health, ensuring adequate unpolluted groundwater recharge, surface water runoff and pollution reduction, carbon sequestration and habitat functions.

Conserving rural and natural resource lands in King County is integral to providing diversity in lifestyle choices; sustaining farming, livestock, and forestry economies; protecting environmental quality and wildlife habitat; and maintaining a link to the county's resource-based heritage.

A. Rural Legacy and Communities

King County's rural legacy is found in the rich history of our rural communities and continues today in the preservation of the county's historic, cultural, ecological, and archaeological sites, and to its rich and varied forestry, agricultural, and mining heritage. The railroad played a significant role in the historic growth and development of the county; its legacy is still seen in tourism opportunities in the Rural Cities of Skykomish and Snoqualmie. Historic barns are found throughout the agricultural areas of the county. Lumber mills influenced the development of communities, such as the Rural Commercial Neighborhood Center of Preston, where the mill site is still in existence and historic photos adorn the walls of the community center. Chapter 6 of this plan provides the direction and policies for preserving the county's rural heritage. The policies that relate to conserving the farms and forests in King County are discussed in sections II and VI of this chapter.

R-101 **King County will continue to preserve and sustain its rural legacy and communities through programs and partnerships that support, preserve, and sustain its historic, cultural, ecological, agricultural, forestry, and mining heritage through collaboration with local and regional preservation and heritage programs, and other interested stakeholders.**

B. Rural Character

The GMA requires the protection of traditional rural activities and rural character. King County is committed to protecting rural character and recognizes that each of its rural communities has distinct and unique characteristics. These communities vary depending on settlement and economic history, geography, and distance from the urbanizing areas of the region. For example, residents of Vashon Island, accessible only by ferry, enjoy an island's leisurely and scenic lifestyle. Residents of the hilly gorge region around Black Diamond enjoy numerous recreational opportunities. There are small communities throughout rural King County, such as Hobart and Cumberland, each with its own unique history and lifestyle. Other communities with rich rural heritages, such as Old Maple Valley, are in transition as development of land in and adjacent to the areas is occurring. In the Snoqualmie Valley, farming is still the mainstay, while further east, the Town of Skykomish has a significant railroad and forestry history.

Population growth in Puget Sound communities affects rural character everywhere in the region. King County was once firmly rooted in agriculture, forestry and mining. However, with regional growth both the rural economy and the rural population are changing, as are the expectations of some rural residents for county services. Some residents are more accustomed to independent lifestyles focused around resource uses such as farming, dairying, keeping of livestock, or forestry. Other residents and visitors can be

surprised by the sights, sounds, and smells associated with rural living; and can be accustomed to higher levels of service and facilities than are traditionally provided in the Rural Area.

One of the challenges facing the county is to provide for a diversity of lifestyle choices while providing public services at rural levels. As the county recognizes a profound difference between the nature and character of unincorporated rural King County as compared to the urban areas, it is the intent of the county to continue to provide services at established rural levels that support and help maintain rural character.

C. Public Engagement

Several years ago, numerous rural residents realized both a need to protect their diverse communities and to represent their common interests to the county. Thus, the Unincorporated Area Councils (UACs) were created to represent the interests of rural residents and business owners, within a specific area.

However, the rural UACs do not cover a substantial portion of the Rural Area, thus leaving many rural constituencies without a voice on county policies and programs directed at sustaining and enhancing the character of rural and resource lands, Rural Neighborhood Commercial Centers, and Rural Towns. These rural constituencies include: community groups, such as homeowners associations; interests groups such as Vashon Arts Center and local chambers of commerce; and individual rural residents and business owners.

In order to implement its goals, objectives, and strategies for broader public engagement, King County has created several Community Service Areas (CSAs) that encompass all of unincorporated King County, including areas without representation by any UAC. The CSAs will provide a conduit for greater participation by all residents in unincorporated King County and increase opportunities for residents to inform county decisions relating to programs and capital projects within each CSA.

R-102 **King County will continue to support the diversity and richness of its rural communities and their distinct character by working with its rural constituencies and the unincorporated area councils and through its Community Service Areas program to sustain and enhance the rural character of rural and resource lands, Rural Neighborhood Commercial Centers, and Rural Towns.**

II. Rural Designation

A. Rural Area Designation Criteria

The Rural Area designation in King County represents the multi-use nature of rural lands, including working farms and forests, livestock uses, home-based businesses and housing. The term Rural Area includes the Rural, Rural Commercial Neighborhood Centers, and Rural Towns designations on the Land Use Map. The sustainability and enhancement of these areas and their underlying economic health is critical to the range of lifestyle choices available in King County.

The criteria set forth in this section were used to draw the boundaries of the Rural Area designated by this plan.

R-201 **It is a fundamental objective of the King County Comprehensive Plan to maintain the character of its designated Rural Area. The GMA specifies the rural element of comprehensive plans include measures that apply to rural development and protect the rural character of the area (RCW 36.70A.070(5)). The GMA defines rural character as it relates to land use and development patterns (RCW 36.70A.030(15)). This definition can be found in the Glossary of this Plan. Rural development can consist of a variety of uses that are consistent with the preservation of rural character and the requirements of the rural element. In order to implement GMA, it is necessary to define the development patterns that are considered rural, historical or traditional and do not encourage urban growth or create pressure for urban facilities and service. Therefore, King County's land use regulations and development standards shall protect and enhance the following components of the Rural Area:**

- **a. The natural environment, particularly as evidenced by the health of wildlife and fisheries (especially salmon and trout), aquifers used for potable water, surface water bodies including Puget Sound and natural drainage systems and their riparian corridors;**
- **b. Commercial and noncommercial farming, forestry, fisheries, mining and cottage industries;**
- **c. Historic resources, historical character and continuity, including archaeological and cultural sites important to tribes;**
- **d. Community small-town atmosphere, safety, and locally owned small businesses;**

e. Economically and fiscally healthy Rural Towns and Rural Neighborhood Commercial Centers with clearly defined identities compatible with adjacent rural, agricultural, forestry and mining uses;

f. Regionally significant parks, trails and open space;

g. A variety of low-density housing choices compatible with adjacent farming, forestry and mining and not needing urban facilities and services; and

h. Traditional rural land uses of a size and scale that blend with historic rural development.

R-202 The Rural Area designations shown on the King County Comprehensive Plan Land Use Map include areas that are rural in character and meet one or more of the following criteria:

a. Opportunities exist for significant commercial or noncommercial farming and forestry (large-scale farms and forest lands are designated as Resource Lands);

b. The area will help buffer nearby Resource Lands from conflicting urban uses;

c. The area is contiguous to other lands in the Rural Area, Resource Lands or large, predominantly environmentally critical areas;

d. There are major physical barriers to providing urban services at reasonable cost, or such areas will help foster more logical boundaries for urban public services and infrastructure;

e. The area is not needed for the foreseeable future that is well beyond the 20-year forecast period to provide capacity for population or employment growth;

f. The area has outstanding scenic, historic, environmental, resource or aesthetic values that can best be protected by a Rural Area designation; or

g. Significant environmental constraints make the area generally unsuitable for intensive urban development.

The Rural Area includes all lands in King County outside of the designated Urban Growth Area (UGA), not including the designated Forest and Agricultural Production Districts. The Rural Area is generally located east of the UGA, with the exception of the entirety of Vashon-Maury Islands. Within the Rural Area, three land use categories are applied: Rural, allowing low-density residential development, forestry, farming,

livestock uses, and a range of traditional rural uses; Rural Town, recognizing historical settlement patterns and allowing commercial uses to serve rural residents; and Rural Neighborhood Commercial Centers, allowing small-scale convenience services for nearby rural residents.

While the GMA, the Countywide Planning Policies and King County's policies and regulations call for protecting the Rural Area by limiting housing densities, there are many other features besides density that characterize the Rural Area. Some of the most important features include integration of housing with traditional rural uses such as forestry, farming and keeping of livestock; protection of streams, wetlands and wildlife habitat; preservation of open vistas, wooded areas and scenic roadways; and availability of and reliance on minimal public services. King County is committed to maintaining these features as well, and the policies in this chapter call for continuing and expanding upon these efforts.

R-203 **King County's Rural Area is considered to be permanent and shall not be redesignated to an Urban Growth Area until reviewed pursuant to the Growth Management Act (RCW 36.70A.130(3)) and the Countywide Planning Policies.**

B. Forestry and Agriculture in Rural King County

The Rural designation includes working farms and forests. These contribute to rural character; the diversity and self-sufficiency of local economies; and open space, wildlife habitat, flood hazard management, and environmental quality. However, Rural Area land in farm and forest use has diminished since 1985, mostly through the conversion of these lands to residential uses. Pressures to convert from resource use include the high land value for alternative uses and the encroachment of residential and other development that conflicts with the resource use.

Although most of King County's agriculture and timber lands are within designated Agricultural and Forest Production Districts, there is a significant land base for agriculture and forestry in the Rural Area. King County has studied this land base, has mapped agricultural use, and has identified rural forest areas where forestry will be enhanced and protected. Efforts to conserve the forest, farm, and livestock uses are important and include technical assistance and incentive programs like the Transfer of Development Rights program (as presented in Section III).

R-204 **Farming and forestry are vital to the preservation of rural King County and should be encouraged throughout the Rural Area. King County should encourage the retention of existing and establishment of new rural resource-based uses, with appropriate site management that protects habitat resources.**

King County's regulation of farming, keeping of livestock, and forestry in the Rural Area should be consistent with these guiding principles:

a. Homeowner covenants for new subdivisions and short subdivisions in the Rural Area should not restrict farming and forestry;

b. Development regulations for resource-based activities should be tailored to support the resource use and its level of impact;

c. Agricultural and silvicultural management practices should not be construed as public nuisances when carried on in compliance with applicable regulations, even though they may impact nearby residences; and

d. County environmental standards for forestry and agriculture should protect environmental quality, especially in relation to water and fisheries resources, while encouraging forestry and farming.

R-205 **Uses related to and appropriate for the Rural Area include those relating to agriculture, forestry, mineral extraction, and fisheries, such as the raising of livestock, growing of crops, creating value-added products, and sale of agricultural products; small-scale cottage industries; and recreational and small-scale tourism uses that rely on a rural location.**

Most of the policies related to agriculture and forestry are found in the Resource Lands section (Section VI) of this chapter. Many of these policies are relevant to agriculture and forestry in the Rural Area as well as in the designated Agricultural and Forest Production districts.

The importance of farming and forestry to the Rural Area was first emphasized in the 1994 Comprehensive Plan. Subsequently, the county took steps to encourage the continuation of farm and forestry practices in the Rural Area, including developing a Farm and Forest Report in 1996. The report recommended a series of actions to protect the rural farm and forest land base as well as the practices of farming and forestry, including the provision of technical assistance to aid property owners in land management, outreach to owners of properties vulnerable to development, creating opportunities for property owners to sell their development rights, and seeking funding for public acquisition of rural resource lands. The report also recommended the continuation of the King County Agriculture Commission and the appointment of a Rural Forest Commission to review the impact of proposed regulations on rural forestry and recommend incentive programs.

1. Forestry

Since 1996, King County has been actively implementing the recommendations of the Farm and Forest Report through the Forestry Program. Throughout the Rural Area, King County encourages small-scale forestry and land stewardship through a variety of land owner incentive and community-based programs that:

a. Promote forest stewardship through education and technical assistance programs, such as the Washington State University Extension Forest Stewardship Programs;
b. Provide technical assistance and information to landowner groups and community associations seeking to implement land/water stewardship, habitat restoration and management plans;
c. Create opportunities and incentives for voluntary, cooperative management of woodlots and open space currently in separate ownership;
d. Offer technical assistance and information to landowners who are interested in managing their forest for non-timber specialty forest products;
e. Explore opportunities for providing relief from special levies and assessments; and
f. Provide education and assistance in the control of noxious and invasive weeds.

The county encourages forest stewardship planning and active forest management as a means of reducing conversion of forestland to other uses, improving forest health, increasing rural economic prosperity and reducing risks from wildfire. Hundreds of landowners have written forest stewardship plans and have enrolled in current use taxation programs, demonstrating a commitment to forest management.

The county has worked with the Rural Forest Commission to identify and propose changes to the code to remove impediments to the implementation of forest stewardship plans. However, the small size of rural forest properties presents another obstacle to implementation of forest plans. Because the volume of timber harvested at any one time is usually small, it is difficult for landowners to find forestry services or log buyers. Many contractors do not consider small sites to be forestland with potential management opportunities, and they have not developed the tools and skills to work with small sites. There is untapped potential for work to be done by the private sector on small private forestlands. Outreach to forestry consultants and labor contractors concerning the potential small lot forest market is needed. Continuing forestry technical assistance and cost share to landowners, who otherwise are unlikely to pursue management activities, will encourage active forest stewardship and rural economic development.

King County continues to explore ways to facilitate the harvest, utilization and marketing of wood products grown in the Rural Area.

R-206 **The conservation of forest land and forestry throughout the Rural Area shall remain a priority for King County. Landowner property tax incentives, technical**

assistance, permit assistance, regulatory actions and community-based education shall be used throughout the Rural Area to sustain the forest land base and forestry activities. King County should ensure that its regulations, permitting processes and incentive programs facilitate and encourage active forest management and implementation of forest stewardship plans.

The Forestry Program will continue to evaluate additional ways to conserve rural forest lands and encourage forestry. In addition, King County has identified properties for acquisition, and has worked in partnership with other jurisdictions and citizen groups to match high priority sites with funding sources for permanent conservation. King County owns and manages approximately 20,000 acres of forestland. Of this, 3,300 acres are designated as working forests: Taylor Mountain Forest, Ring Hill, Sugarloaf, Island Center, Dockton, and Mitchell Hill forests. The county has extended its forest stewardship program to implement active management for forest health on other forested open space properties. The county has also conserved several forest properties that have remained in private ownership by purchasing the development rights.

Although economic incentive programs and technical assistance are available to all property owners in the Rural Area interested in pursuing small-scale forestry, special efforts to maintain forest cover and the practice of sustainable forestry are warranted where there are opportunities to sustain large, contiguous blocks of rural forest. The Agricultural and Forest Lands map identifies such areas as Rural Forest Focus Areas and notes the locations and boundaries of each focus area.

R-207 **Rural Forest Focus Areas are identified geographic areas where special efforts are necessary and feasible to maintain forest cover and the practice of sustainable forestry. King County shall target funding, when available, new economic incentive programs, regulatory actions, and additional technical assistance to the Rural Forest Focus Areas. Strategies specific to each Rural Forest Focus Area shall be developed, employing the combination of incentive and technical assistance programs best suited to each focus area.**

R-208 **The Rural Forest Focus Areas should be maintained in parcels of 20 acres or more in order to retain large, contiguous blocks of rural forest. Regulations or incentives should seek to achieve a maximum density of one home per 20 acres.**

2. Farming

The 1996 Farm and Forest Report provided a series of strategies for conserving farmland and sustaining farming both within the designated Agricultural Production District (APD) where the prime agricultural soils are found and outside the APD, where there continues to be a significant amount of farming. A 2003 survey identified 25,000 acres in the Rural Area in active agriculture, much of it in livestock production.

R-209 **The county should develop incentives to encourage agricultural activities in the remaining prime farmlands located outside the Agricultural Production District. These incentives could include tax credits, expedited permit review, reduced permit fees, permit exemptions for activities complying with best management practices, assistance with agricultural waste management or similar programs.**

The raising and management of livestock and the production of associated products are components of the county's agricultural economy. Livestock raised in the county includes, but is not limited to, cattle, buffalo, sheep, hogs, llamas, alpacas, goats, and poultry.

R-210 **King County supports the raising and management of livestock and the production of related value-added products. The management of livestock and the lands and structures supporting the raising of livestock, should be consistent with industry best management practices and must comply with county, state, and federal regulations related to the specific industry.**

C. Equestrian Activities

King County recognizes the contributions of equestrian livestock husbandry, training, competition, and recreation activities to the overall rural quality of life and economic base in King County. Equestrian activities provide a lifestyle value to numerous county residents and visitors and a source of revenue for rural residents and business owners. There are numerous organizations that support the equestrian industry by providing education and promoting equine husbandry, including the King County Agriculture Program, King County Extension Service, Future Farmers of America, 4H, the King County Executive Horse Council, Backcounty Horsemen, the Enumclaw Forested Foothills Recreation Association, and numerous other special interest equestrian-related groups.

In recent years the diversity of equestrian uses has expanded throughout the rural portions of the county, going well beyond the traditional uses of a child and his or her favorite horse, a 4-H horse show, or a trail ride through the woods. Today's equestrian uses include raising and training a variety of horse breeds, an

increase in the number of riding arenas, and the construction of a state-of-the-art horse rehabilitation facility. This diversity of equestrian uses should be sustained and encouraged where compatible with the existing character of the area in which equestrian facilities are proposed to be built or expanded.

Several constraints may limit the development or expansion of equestrian activities. Even though the GMA limits growth in the rural area, some growth continues to occur throughout the rural areas of the county, impacting open land to sustain livestock, equestrian activities, and existing or potential trail segments that may be lost to uncoordinated land developments.

R-211 **King County should continue to support and sustain equestrian activities and ensure that regulations support those activities compatible with the area in which they are located. The county should encourage subdivision layouts that preserve opportunities for livestock and equestrian activities.**

Trail riding throughout rural King County is a popular equestrian use enjoyed by both urban and rural residents. Although llama and alpaca treks are becoming increasingly popular, most of the trail riding in King County is on horses and mules. Several constraints may limit the continuation, development, or expansion of equestrian trails or trail segments including uncoordinated land development. Additionally, as ownership of private and/or public land with existing trails is transferred, these trails may be lost when easements are not in place to protect the trails at the time of the transaction or if the new owner is not aware that a trail runs across the parcel.

The following policies address the need to continue to support trails for equestrian, multi-use, and existing trail linkage purposes.

R-212 **King County should support equestrian use trails throughout the Rural Area and in the Agricultural and Forest Production Districts, as appropriate, by:**

- **a. Working with local communities to identify and protect multiple-use trails and key linkages that support equestrian travel;**
- **b. Maintaining equestrian links, including multiple-use trails, where appropriate;**
- **c. Ensuring parking areas serving multiple use trails are designed and constructed, whenever possible to handle parking for horse trailers; and**
- **d. Constructing and maintaining equestrian trails under County ownership or management consistent with King County Backcountry Trail or Regional Trail Standards whenever possible.**

R-213 **Soft-surface multiple-use trails in corridors separate from road rights-of-way are the preferred option for equestrian travel for safety reasons and to avoid conflicts with residential activities associated with the street. Existing off-road trails should be preserved during site development, with relocation as appropriate to accommodate development while maintaining trail connections. The King County Road Design and Construction Standards will accommodate safe equestrian travel within road rights-of-way. Where appropriate, capital improvement programs for transportation and park facilities shall also enable the use of new facilities by equestrians. Construction standards for multiple-use nonmotorized trails to be established in road rights-of-way within the Rural Area should assure a minimum eight-foot-wide gravel shoulder on arterial roads and 4.5 foot gravel shoulder on local access roads, or provide a trail separated from the driving lanes by a ditch or other barrier. Construction standards for soft-surface multiple-use nonmotorized trails in corridors separate from road rights-of-way shall be consistent with current trail construction and maintenance practices as promulgated by the U.S. Forest Service.**

R-214 **King County's land use regulations should protect rural equestrian community trails by supporting preservation of equestrian trail links in the Rural Area and within the Agricultural and Forest Production District. Representatives of the equestrian community should be given the opportunity to review and monitor regulatory and policy actions by King County, such as rural area development regulations, that have the potential to affect equestrian trails.**

R-215 **Property owners in the Agricultural and Forest Production Districts are encouraged to voluntarily allow continued equestrian access to existing trails or alternative access if the existing trail impedes future use of their property.**

R-216 **Equestrian trails should be a category in the county's Public Benefit Rating System, so that a landowner who provides trail access may qualify for a tax reduction under the program.**

R-217 **County departments negotiating trades or sales of county land shall determine whether any historically established trails exist on the property, and, when economically feasible, ensure that those trails are retained or replaced and are not lost as a condition of the trade or sale. Trails that provide key linkages, for**

either multi-use or equestrian trails, shall be considered to have strategic value to the county's trail network and shall be retained or replaced whenever possible.

III. Rural Densities and Development

A. Rural Growth Forecast

The GMA requires new growth to be substantially accommodated in Urban Growth Areas (UGA), yet growth may be permitted outside the UGA provided it is not urban in character.

The Rural Area is restricted from accommodating large amounts of growth, but low-density residential development and other traditional rural uses is allowed. The GMA requires that rural development be contained and controlled to ensure the protection of rural character, assure the visual compatibility of rural development with the surrounding rural area, protect environmentally critical areas and habitat, and protect against conflicts with natural resource uses, such as farming, forestry, and mining.

In 2009, the Growth Management Planning Council adopted urban area targets to accommodate the most recent countywide population projections supplied by the state. These urban targets assumed rural area forecast of fewer than 6,000 additional housing units during the period 2006 to 2031. No attempt has been made to allocate this rural forecast to subareas of rural King County.

Since adoption of King County's initial comprehensive plan under GMA in 1994, annual building permit activity in the Rural Area has continued to drop to an average of under 400 new building permits per year since 2007. Between 2000 and 2010, Rural and Resource areas grew by about 4,000 housing units to a total of 49,000. However, the population of these areas actually declined slightly during the decade, and now stands at less than 124,000. Application of new zoning measures and other regulatory tools have helped to reduce subdivision activity, but if the current rate of 400 new homes per year continues, the Rural Area could be built out to its full capacity within 25 years of the date of this plan.

The application of lower-density zoning or more restrictive standards could reduce the creation of new lots, but there are limited opportunities to address development of existing legal lots. One measure that would slow the growth rate on existing lots would be the establishment of an annual limit on the number of building permits to be issued in the Rural Area. This alternative would be more palatable if it were linked to a transfer of development rights program or a development rights purchase program.

R-301 **A low growth rate is desirable for the Rural Area, including Rural Towns, to comply with the State Growth Management Act, continue preventing sprawl and the overburdening of rural services, reduce the need for capital expenditures for rural roads, maintain rural character, protect the environment and reduce transportation-related greenhouse gas emissions. All possible tools may be used to limit growth in the Rural Area. Appropriate tools include land use designations, development regulations, level of service standards and incentives.**

B. Residential Densities

The low-density residential living choices available in the Rural Area provide an important part of the variety of housing options for King County residents. The residential land use policies in this section, together with their implementing regulations, strike a balance between making rural housing available to those who desire a rural way of life and keeping densities and the number of housing units low enough so they can be supported by a rural level of public facilities and services, be compatible with nearby commercial and noncommercial farming and forestry, and prevent or significantly reduce adverse impacts of development on the natural environment. These policies and implementing regulations could allow 14,000 to 24,000 more housing units at ultimate buildout in addition to the roughly 58,000 residences existing in the designated Rural Area in 2000. The Transfer of Development Rights Program will help reduce development capacity in the Rural Area, and King County should continue to seek other programs that provide economic incentives for property owners to voluntarily limit residential development of their land.

R-302 **Residential development in the Rural Area should occur as follows:**

a. **In Rural Towns at a variety of densities and housing types, compatible with maintenance of historic resources and community character; and**

b. **Outside Rural Towns at low densities compatible with traditional rural character and uses, farming, forestry, mining and rural service levels.**

The use of land and the density of development (measured as the number of homes or other structures per acre or per square mile of land) are key determinants and contributors to the character of the Rural Area, as described above in Section A. Although human settlement of King County's Rural Area has a wide variety of uses and densities, both the historical and desirable range of uses and densities defined here are necessarily narrower and less intense than that found in the Urban Area. Residential development at very low densities (including the land for accessory uses, on-site sewage disposal and local water supply) consumes or will consume most of the land in the Rural Area. Residential density may be the single, most important factor in protecting or destroying rural character that can be influenced by government policies and regulations.

Low overall densities in the Rural Area will be achieved through very large minimum lot sizes or limited clustering at the same average densities when facilities and services permit (for example, soil conditions allow on-site sewage disposal on smaller lots). The Rural Area cannot be a significant source of affordable housing for King County residents, but it will contain diverse housing opportunities through a mix of large lots, clustering, existing smaller lots and higher densities in cities in the rural area and Rural Towns, as services permit.

R-303 **The Rural Area should have low residential densities that can be sustained by minimal infrastructure improvements such as septic systems and rural roads, cause minimal environmental degradation and impacts to significant historic resources, and that will not cumulatively create the future necessity or expectation of urban levels of services.**

R-304 **Rural area residential densities shall be applied in accordance with R-305 – R-309. Individual zone reclassifications are discouraged and should not be allowed in the Rural Area. Property owners seeking individual zone reclassifications should demonstrate compliance with R-305 – R-309.**

Although King County designated Resource Lands and zoned extensive portions of its territory as Agricultural Production Districts or Forest Production Districts, very low residential densities adjacent to Resource Lands are essential to minimize land use conflicts. In addition, a significant part of the Rural Area land base is still used for farming or forestry uses. Therefore, suitability of lands for continuing resource uses and proximity to designated natural Resource Lands will be important considerations in applying the lower rural densities.

R-305 **A residential density of one home per 20 acres or 10 acres shall be achieved through regulatory and incentive programs on lands in the Rural Area that are managed for forestry or farming respectively, and are found to qualify for a Rural Forest Focus Area designation in accordance with R-207.**

R-306 **A residential density of one home per 10 acres shall be applied in the Rural Area where:**

a. **The lands are adjacent to or within one-quarter mile of designated Agricultural Production Districts, the Forest Production District or legally approved long-term mineral resource extraction sites; or**

b. **The lands contain significant environmentally constrained areas as defined by county ordinance, policy or federal or state law, or regionally**

significant resource areas or substantial critical habitat as determined by legislatively approved basin plans or Watershed Resource Inventory Area Plans; and

c. The predominant lot size is greater than or equal to 10 acres in size.

R-307 **For Vashon-Maury Island, a residential density of one home per 10 acres:**

a. Shall be maintained on areas zoned RA-10 as of 1994 to help protect community character and reduce adverse impacts on the island's infrastructure; and

b. Shall be applied to areas with a predominant lot size of 10 acres or greater and mapped as category I Critical Aquifer Recharge Areas.

R-308 **A residential density of one home per 5 acres shall be applied in the Rural Area where:**

a. The land is physically suitable for development with minimal environmentally sensitive features or critical habitat as determined by legislatively adopted watershed based plans;

b. Development can be supported by rural services;

c. The land does not meet the criteria in this plan for lower density designations; and

d. The predominant lot size is less than 10 acres.

Although King County intends to retain low residential densities in the Rural Area, residential development has occurred in the past on a wide variety of lot sizes. Both existing homes on small lots and rural infill on vacant, small lots contribute to the variety of housing choices in the Rural Area. In some cases, however, rural-level facilities and services (e.g. on-site sewage disposal, individual water supply systems) may not permit development of the smallest vacant lots. Policy R-309 recognizes that some of the Rural Area has already been subdivided at a density greater than one lot per five acres (for example, parts of the shoreline of Vashon Island). Zoning to implement policies R-306 through R-309 has been applied through subarea and local plans and area zoning maps.

R-309 **The RA-2.5 zone has generally been applied to rural areas with an existing pattern of lots below five acres in size that were created prior to the adoption of the 1994 Comprehensive Plan. These smaller lots may still be developed individually or combined, provided that applicable standards for sewage disposal, environmental protection, water supply, roads and rural fire protection can be met. A subdivision at a density of one home per 2.5 acres shall only be**

permitted through the transfer of development rights from property in the designated Rural Forest Focus Areas. The site receiving the density must be approved as a Transfer of Development Rights receiving site in accordance with the King County Code. Properties on Vashon-Maury Islands shall not be eligible as receiving sites.

Accessory dwelling units provide opportunities for affordable housing, on-site housing for workers and caretakers, housing for extended family members, and rental income for landowners. However, detached accessory dwelling units function similarly to separate homes on separate lots and should be treated as such. When a subdivision is proposed for a property that already has a house and a detached accessory dwelling unit, the house and accessory dwelling unit shall count as two units. For example, on an RA-5 zoned 20 acre parcel, which could be subdivided into four lots, the existing primary dwelling and the accessory unit in a separate building shall count as two of the four units allowed on the site.

R-310 **Accessory dwelling units in structures detached from the primary dwelling shall be counted as a separate dwelling unit for the purpose of lot calculations under the zoning in place at the time of a proposed subdivision.**

R-311 **The King County Residential Density Incentive Program shall not be available for development in the Rural zones.**

C. Transfer of Development Rights Program

The GMA encourages the use of innovative techniques for land use management. King County has a long tradition of using such techniques, including programs promoting transfers of development rights, to achieve its land management goals.

To that end, King County promotes the transfer of development rights from land valuable to the public as undeveloped ("sending sites"), to land better able to accommodate growth ("receiving sites"). The Transfer of Development Rights (TDR) Program is a voluntary program that allows sending site landowners to achieve an economic return on their property while maintaining it in forestry, farming, habitat, parks, or open space in perpetuity. It also increases housing opportunities in Urban Area receiving sites where urban services and infrastructure can accommodate additional growth.

Sending site landowners choose to sever the right to develop their land from the land itself and sell their development rights to receiving site landowners who are permitted to build additional development capacity above the base density, but at or below the allowed maximum density under current zoning, with

the purchase of transferable development rights. When transferable development rights are allocated to sending site property owners, the land is protected from future development in perpetuity through a conservation easement. In so doing, the TDR program: (1) benefits Rural and Resource land property owners by providing them financial compensation to not develop their land, (2) directs future Rural and Resource land development growth into urban areas, saving the County the cost of providing services to rural development and yielding climate change benefits through reduced household transportation-related greenhouse gas emissions, and (3) permanently preserves land through private market transactions.

R-312 **As an innovative means to permanently preserve private lands with countywide public benefit, to encourage higher densities in urban areas and reduce residential development capacity in Rural Area and Resource Lands, King County shall continue to operate an effective TDR Program.**

R-313 **The purpose of the TDR Program is to reduce development potential in the Rural Area and designated Resource Lands, and its priority is to encourage the transfer of development rights from private rural lands into the Urban Growth Area.**

R-314 **King County supports and shall work actively to facilitate the transfer of Rural Area and Resource Lands development rights to:**

- **a. Preserve the rural environment, encourage retention of resource-based uses and reduce service demands;**
- **b. Provide permanent protection to significant natural resources;**
- **c. Increase the regional open space system;**
- **d. Maintain low density development in the Rural Area and Resource Lands;**
- **e. Steer development growth inside the Urban Growth Area in ways that promote quality urban neighborhoods where residents want to work and live; and**
- **f. Provide mitigation for the impacts of urban development on global climate change by simultaneously reducing transportation-related greenhouse gas emissions and sequestering carbon through retention of forest cover.**

R-315 **To promote transfers of development rights, King County shall:**

a. Facilitate transfers from private property owners with sending sites to property owners with receiving sites;

b. Operate the King County TDR Bank to facilitate the TDR market and bridge the time gap between willing sellers and buyers of TDRs through buying, holding, and selling transferable development rights;

c. Work with cities to develop interlocal agreements that encourage transfers of development rights from Rural and Resource lands into cities;

d. Work with cities regarding annexation areas where TDRs are likely to be used;

e. Work with communities and seek funding and other means to provide public amenities to enhance the livability of incorporated and unincorporated area neighborhoods accepting increased densities through TDR; and

f. Work with the Washington State Department of Commerce, PSRC, and King County cities to implement Washington State Regional TDR legislation.

1. Sending and Receiving Sites

R-316 **Eligible sending sites shall be lands designated on the King County Comprehensive Plan land use map as Rural Area (RA), Agriculture (A), Forestry (F), and Urban Separator, and shall provide permanent land protection to create a significant public benefit. Priority sending sites are:**

a. Lands in Rural Forest Focus Areas;

b. Lands adjacent to the Urban Growth Area boundary;

c. Lands contributing to the protection of endangered and threatened species;

d. Lands that are suitable for inclusion in and provide important links to the regional open space system;

e. Agricultural and Forest Production District lands;

f. Intact shorelines of Puget Sound; or

g. Lands identified as important according to the Washington State Department of Ecology's Watershed Characterization analyses.

R-317 **For transfer of development rights purposes only, qualified sending sites are allocated development rights as follows:**

a. Sending sites with Rural Area or Agricultural zoning shall be allocated one TDR for every five acres of gross land area;

b. Sending sites with Forest zoning shall be allocated one TDR for every eighty acres of gross land area;

c. Sending sites with Urban Separator land use designation shall be allocated four TDRs for every one acre of gross land area;

d. If a sending site has an existing dwelling or retains one or more development rights for future use, the gross acreage shall be reduced in accordance with the site's zoning base density for the purposes of TDR allocation; and

e. King County shall provide bonus TDRs to sending sites in the Rural Area as follows:

1. The sending site is a vacant RA zoned property and is no larger than one-half the size requirement of the base density for the zone; and

2. The sending site is a RA zoned property and is located on a shoreline of the state and has a shoreline designation of conservancy or natural.

R-318 **Prior to the county's allocation of transferable development rights to a sending site landowner, the landowner shall record and place on title of sending site parcel a conservation easement documenting the development restrictions. If development rights are being retained for future development, the subsequent development must be clustered, and the tract preserved with a permanent conservation easement shall be larger than the developed portion. In the case of lands within the Rural Forest Focus Areas, no more than one dwelling unit per 20 acres shall be retained, and the tract preserved with a conservation easement shall be at least 15 acres in size.**

R-319 **TDRs may be used on receiving sites in the following order of preference as follows:**

a. Incorporated Cities. Transfers into incorporated areas shall be detailed in an interlocal agreement between the city receiving the development rights and the county;

b. Unincorporated urban commercial centers;

c. Other unincorporated urban areas; and

d. Rural Areas zoned RA-2.5, unless they are on Vashon Island, may receive transfers of development rights, but only from the Rural Forest Focus Areas.

R-320 **King County should seek other public funding and private-public partnerships for incorporated and unincorporated urban area amenities to strengthen the TDR program and facilitate the transfer of development rights from Rural and Resource Areas into the King County Urban Growth Area to preserve the rural environment, encourage retention of rural and resource-based uses, and avoid urban service demands in the Rural Area.**

R-321 **King County should pursue public funding and public-private partnerships, and bond or levy proposals, for additional TDR Bank funding to target threatened private rural or resource lands. Development rights purchased through such a program should be sold into any appropriate urban location.**

2. Rural and Resource Land Preservation TDR Program

Rural and Resource Lands face increasing development pressure, yet the county must simultaneously plan for, and allow, future development growth. This tension makes it incumbent on the county to strengthen its TDR efforts. For this reason, King County seeks to increase the number of development right transfers and adopt an expanded Rural and Resource Land Preservation TDR program to reduce and redirect rural development potential into the urban areas.

R-322 **The goals of the Rural and Resource Land Preservation TDR Program are to: (1) reduce the development potential in rural and resource lands by 25%; (2) increase activity in the TDR market; (3) bolster demand for TDRs; (4) offer rural and resource property owners access to incentive programs; (5) protect low-density rural areas from encroaching urban development; and (6) reduce greenhouse gas emissions by decreasing vehicle miles traveled from the rural and resource areas and by sequestering carbon.**

R-323 **The Rural and Resource Land Preservation TDR Program shall include, but is not limited to, the following:**

a. In addition to the density that is allowed on a receiving site in the urban growth area from the purchase of TDRs, the county shall evaluate the climate change benefits achieved by reducing transportation related greenhouse gas emissions that result from the transfer of development rights from the sending site, provided that such consideration is not precluded by administrative rules promulgated by the state;

b. In order to satisfy transportation concurrency requirements in the Rural Area in a transportation concurrency travel shed that is non-concurrent, a development proposal for a short subdivision creating up to four lots may purchase TDRs from other Rural Area properties in the same travel shed, or from the TDR Bank from credits from Rural Area properties in the same travel shed. The transfer shall not result in an increase in allowable density on the receiving site. A short subdivision creating two lots where the property has been owned by the applicant for five or more years and where the property has not been subdivided in the last ten years shall satisfy the transportation concurrency requirements without having to purchase TDRs;

c. King County shall provide an added density bonus of up to a 100% increase above the base density allowed in K.C. Code 21A.12.030, when TDRs are used for projects within any designated commercial center or activity center within the Urban Growth Area that provides enhanced walkability design and incorporates transit oriented development;

d. King County may allow accessory dwelling units in the Rural Area that are greater than one thousand square feet, but less than 1,500 square feet, if the property owner purchases one TDR from the Rural Area; and

e. King County may allow a detached accessory dwelling unit on a RA-5 zoned lot that is two and one-half acres or greater and less than three and three-quarters acres if the property owner purchases one TDR from the Rural Area.

D. Nonresidential Uses

Although low-density residential development, farming and forestry are the primary uses in the Rural Area, some compatible public and private uses are appropriate and contribute to rural character. Compatible uses might include small, neighborhood churches, feed and grain stores, produce stands, forest product sales and home occupations such as woodcrafters, small day care facilities or veterinary services. In

addition, it may be necessary to locate some public facilities in the Rural Area, such as utility installations that serve rural homes. Any allowed nonresidential uses should be designed to blend with rural residential development and resource uses.

R-324 **Nonresidential uses in the Rural Area shall be limited to those that:**

a. Provide convenient local products and services for nearby residents;

b. Require location in a Rural Area;

c. Support natural resource-based industries;

d. Provide adaptive reuse of significant historic resources; or

e. Provide recreational opportunities that are compatible with the surrounding Rural Area.

These uses shall be sited, sized and landscaped to complement rural character as defined in policy R-101, prevent impacts to the environment and function with rural services including on-site wastewater disposal.

R-325 **Golf facilities shall be permitted when located outside of Rural Forest Focus Areas, Regionally Significant Resource Areas and Locally Significant Resource Areas, as a conditional use, in the RA-2.5 and RA-5 zones.**

In 2011, a School Siting Task Force was convened at the request of the Growth Management Planning Council to examine the issue of siting schools in rural areas, including whether they may be served by sewers. The Task Force examined undeveloped rural properties owned by school districts and made recommendations as to their use or disposition. In its final report, the Task Force recommended that all future school siting be consistent with the policies in VISION 2040. Placing schools in cities in the rural area or in Rural Towns reduces transportation and environmental impacts, protects rural character, and allows schools to be served with urban-level utilities and fire protection and used efficiently for other community activities.

R-326 **Except as provided in R-327:**

a. New schools and institutions primarily serving rural residents shall be located in neighboring cities and rural towns;

b. New schools, institutions, and other community facilities primarily serving urban residents shall be located within the UGA; and

c. New community facilities and services that primarily serve rural residents shall be located in neighboring cities and rural towns, with limited

exceptions when their use is dependent on a rural location and their size and scale supports rural character.

R-327 **Consistent with the recommendations of the School Siting Task Force, included as Appendix Q, in the Rural Area:**

a. **Except as otherwise provided in subsections d. and e. of this policy, an existing elementary, middle, or junior high school may be modified or expanded but shall not be converted to a high school;**

b. **An existing high school may be modified or expanded or converted to an elementary, middle, or junior high school;**

c. **Snoqualmie Valley 1: parcel number 1823099046, as shown on the King County Department of Assessments map as of March 31, 2012, may develop as a new school;**

d. **Lake Washington 4: parcel numbers 0825069008 and 0825069056, as shown on the King County Department of Assessments map as of March 31, 2012, may develop as a new school and convert an existing school on the site to a high school use;**

e. **Tahoma 1: parcel number 2622069047, as shown on the King County Department of Assessments map as of March 31, 2012, may develop as a new school and convert an existing school on the site to a high school use only if no feasible alternative site can be located within the UGA;**

f. **Lake Washington 2: parcel numbers 3326069010 and 3326069009, as shown on the King County Department of Assessments map as of March 31, 2012, may develop as a new school only if no feasible alternative site can be located within the UGA, in which case it may be incorporated into the UGA; and**

g. **Enumclaw A and D: the rural portions of parcel numbers 2321069064, 2321069063, and 2321069062, as shown on the King County Department of Assessments map as of March 31, 2012, may develop as ballfields or recreational playfields only, for a school located on the urban portions of the parcels.**

R-328 **Small airfields beyond those already established in the Rural Area should not be permitted, due to their cumulative impacts on air traffic and nearby uses.**

R-329 **Library services for the Rural Area should be provided by bookmobiles, or by libraries in Rural Towns or cities in the rural area.**

E. Character/Development Standards

The aesthetic qualities and character of the Rural Area depend on a combination of factors, including low densities; a high ratio of undeveloped or undisturbed soil and natural or crop vegetation to development, such as roads and structures; historic buildings and landscapes; and minimal development standards, public facilities and services beyond those needed for environmental protection and basic public health and safety.

R-330 **New subdivisions in the Rural Area should strive to maintain the size and scale of traditional development patterns and rural character.**

R-331 **New subdivisions in the Rural Area should be designed and developed to maximize conservation of existing forest cover and native vegetation, and to minimize impervious surfaces within individual lots and in the subdivision as a whole. King County shall develop additional site design standards for new subdivisions that further reduce the impacts of new homes in the Rural Area on the natural environment, resource uses and other adjacent land uses.**

R-332 **Site design standards for new subdivisions in the Rural Area should include: minimization of paved surfaces; limitations on entrance signage; preservation of natural contours, existing meadows and opportunities for keeping of horses; and other standards to limit features typical of urban or suburban development.**

R-333 **Rural residential development adjacent to Agricultural and Forest Production Districts shall be sited to minimize interference with activities related to resource uses. Residences next to the Forest Production District shall be built with greater setbacks from the Forest Production District boundaries for safety and to reduce nuisance complaints.**

R-334 **To maintain traditional rural development patterns and assure continued opportunities for resource activities in the Rural Area, large lot development is preferred in the Rural Area. Clustering of lots is permitted when:**

a. The development provides equal or greater protection of the natural environment, natural resource lands, historic resources or archaeological sites;

b. Clusters are limited in size to be compatible with surrounding large lots or nearby agricultural and forestry uses;

c. The clustered development is offset with a permanent resource land tract preserved for forestry or agriculture, as designated by the owner at time of subdivision or short subdivision, or a permanent open space tract. Under no circumstances shall the tract be reserved for future development; and

d. The development can be served by rural facility and service levels (such as on-site sewage disposal and rural fire protection).

Resource and open space tracts often require stewardship over time to prevent or control invasive species encroachment and to restore forest health, species diversity, and wildlife habitat structure.

R-335 **When a resource or open space tract is created as part of a plat, the county should require a stewardship plan to ensure appropriate management of the tract.**

Low-density development in the Rural Area will have different residential street needs from those in the Urban Growth Area. Travel demand is generally lower on rural roads and road maintenance is a proportionately greater per capita cost than in the Urban Growth Area.

Rural streets and roads outside Rural Towns generally will have no more than two travel lanes, no curbs or sidewalks and feature unpaved shoulders and open drainage ditches. Local access streets for residential subdivisions will constitute a significant proportion of the site disturbance and impervious surface associated with new development in the Rural Area and therefore must take the environment into consideration equally with traffic flow and vehicular access.

R-336 **King County shall continue to support the rural development standards that have been established to protect the natural environment by addressing seasonal and maximum clearing limits, impervious surface limits, surface water management standards that emphasize preservation of natural drainage systems and water quality, groundwater protection, and resource-based practices. These standards should be designed to provide appropriate exceptions for lands that are to be developed for kindergarten through twelfth**

grade public schools and school facilities, provided that the school project shall comply at a minimum with the requirements of the King County Surface Water Design Manual.

IV. Rural Public Facilities and Service

The policies below set forth King County's general approach to providing services and setting facility standards for the Rural Area and provide guidance for siting those facilities that require Rural Area locations. See Chapter 7, Transportation, and Chapter 8, Services, Facilities and Utilities, for more detailed policies on specific facilities and services such as roads, on-site sewage treatment and disposal systems and water supply.

In order to focus growth within the Urban Growth Area (UGA), financial resources must be prioritized to develop and maintain sufficient urban infrastructure and services in the UGA to accommodate that growth. Further, the presence of a high level of public infrastructure and services has been demonstrated to create pressure for new growth. To use financial resources efficiently and reduce growth pressure in the Rural Area, King County will not provide an urban level of infrastructure and services to the Rural Area. Chapter 7, Transportation, and Chapter 8, Services, Facilities and Utilities, clarify King County's priorities for transportation and other facility improvements in the rural and natural resource areas.

R-401 **King County shall work with cities and other agencies providing services to the Rural Area to adopt standards for facilities and services in the Rural Area that protect basic public health and safety and the environment, but are financially supportable at rural densities and do not encourage urban development.**

R-402 **Public spending priorities for facilities and services within the Rural Area should be as follows:**

a. **First, to maintain existing facilities and services that protect public health and safety; and**

b. **Second, to upgrade facilities and services when needed to correct level of service deficiencies without unnecessarily creating additional capacity for new growth.**

R-403 **In the Rural Area, standards and plans for utility service should be consistent with long-term, low-density development and resource industries. Utility facilities that serve the Urban Growth Area but must be located in the Rural Area (for example, a pipeline from a municipal watershed) should be designed and scaled to serve primarily the Urban Growth Area. Sewers needed to serve previously established urban "islands," cities in the rural area or Rural Towns,**

or new or existing schools pursuant to R-327 and F-264 shall be tightlined and have access restrictions precluding service to the Rural Area.

V. Rural Commercial Centers

This section addresses Rural Neighborhood Commercial Centers, Rural Towns, cities in the rural area, industrial uses in the Rural Area, and promoting public health in the Rural Area.

The Rural Neighborhood Commercial Centers, Rural Towns, the cities in the rural area, and non-resource industrial uses located in rural King County contribute to the vitality of the rural economy. Additionally, the cities in the rural area and Rural Towns provide variety in development patterns and housing choices and provide employment opportunities, retail shopping, and other services to nearby residents. These cities and towns also contain a significant portion of King County's historic architecture and are the primary locations for nonresidential uses in the Rural Area. The Rural Neighborhood Commercial Centers provide limited, local convenience shopping, restaurants, and services to meet the daily needs of rural residents.

A. Rural Neighborhood Commercial Centers

Rural Neighborhood Commercial Centers are small commercial developments, or in some cases, historic towns or buildings, that are too small to provide more than convenience shopping and services to surrounding residents. They generally do not have infrastructure or services such as water supply or sewage disposal systems any different from those serving the surrounding area. Examples of Rural Neighborhood Commercial Centers include the store at Stillwater on the Carnation-Duvall Road, the town of Cumberland on the Enumclaw Plateau, and Preston. The county is implementing projects and exploring new options to ensure the continuation of the character and businesses in these important rural centers.

R-501 **The Rural Neighborhood Commercial Centers designated on the Comprehensive Plan Land Use Map are small-scale business areas that should provide convenience shopping and services for the surrounding community. No new Rural Neighborhood Commercial Centers are needed to serve the Rural Area. Expansion of the boundaries of the existing Rural Neighborhood Commercial Centers shall not be permitted except through the subarea plan process.**

The designated Rural Neighborhood Commercial Centers shown on the Land Use map are:

Bear Creek:	Cottage Lake and Redmond-Fall City Road/236th NE
East King County:	Greenwater, Baring and Timberlane Village
Enumclaw:	Cumberland, Krain's Corner and Newaukum
Newcastle:	Coalfield and East Renton Plateau
Snoqualmie:	Preston and Stillwater
Tahoma/Raven Heights:	Maple Valley, Hobart, Ravensdale and North Cedar Grove Road
Vashon:	Burton, Dockton, Tahlequah, Portage, Heights Dock, Jack's Corner, Vashon Center, Vashon Service Center, Vashon Heights and Maury Island Service Center

The policies in this section are based on a recognition of the limited size of most Rural Neighborhood Commercial Centers, the limited utilities and other services available to them, and a desire to preserve their existing character and relationship to the surrounding rural community.

R-502 **Rural Neighborhood Commercial Centers should accommodate only small-scale retail, community and human services, and personal service uses that provide convenience shopping and services to nearby Rural Area residents.**

R-503 **King County should adopt commercial development standards for Rural Neighborhood Commercial Centers that facilitate economic reuse of existing structures, minimize increases in impervious surfaces, and encourage retention of historic character and scale. Urban-level parking, landscaping, and street improvement standards are not appropriate for Rural Neighborhood Commercial Centers except as demonstrated as being needed to address the safety of the public.**

B. Rural Towns

Rural Towns are unincorporated towns governed directly by King County, but may provide a focal point for community groups such as chambers of commerce or community councils to participate in public affairs.

The purposes of the Rural Town designation are to recognize existing concentrations of higher density and economic activity in the Rural Area, whether by virtue of historical rural settlements or redesignation of an urban commercial center; provide a physical focus for the historic identity of rural communities; and to

allow for modest growth of residential and economic uses within these designations if supported by the community and adequate utilities and other public services are available. At the present time, the Rural Towns are Fall City, Snoqualmie Pass, and the Town of Vashon and are recognized as such within the Comprehensive Plan. The county supports the economic vitality of these communities and is offering programs and working with the businesses and residents in and near these communities to help ensure their continued economic health.

Although higher-density development in Rural Towns may require public sewers, applying the full range of urban development standards (e.g. for street improvements or landscaping) may not be necessary, and may not be consistent with the historic character of these communities. Although Rural Towns also may in some circumstances develop at densities similar to those in the Urban Growth Area or in cities in the rural area, they are considered part of the Rural Area for purposes of the GMA, do not provide significant growth capacity, and are not subject to the growth targets adopted for the UGA.

R-504 **King County designates the Rural Towns of Fall City, Snoqualmie Pass, and the Town of Vashon as unincorporated Rural Towns. These historical settlements in unincorporated King County should provide services and a range of housing choices for Rural Area residents. The boundaries of the designated Rural Towns are shown on the Comprehensive Plan Land Use Map. Adjustments to these boundaries shall only occur through a subarea planning process, and shall not allow significant increases in development potential or environmental impacts. No new Rural Towns are needed to serve the Rural Area.**

R-505 **Commercial and industrial development that provides employment, shopping, and community and human services that strengthen the fiscal and economic health of rural communities should locate in Rural Towns if utilities and other services permit. Urban-level parking, landscaping, and street improvement standards are not appropriate for Rural Towns. Sidewalks and other pedestrian safety measures should be provided to serve the Rural Town.**

R-506 **Rural Towns may contain higher-density housing than permitted in the surrounding Rural Area, and should provide affordable and resource-worker housing if utilities and other services permit. Development density in Rural Towns may approach that achieved in cities in the rural area.**

The policies in this section apply only to the unincorporated Rural Towns. King County encourages cities in the rural area to adopt land use policies and development standards that protect and enhance their historical character.

R-507 **Rural Towns serve as activity centers for the Rural Area and may be served by a range of utilities and services, and may include several or all of the following land uses, if supported by necessary utilities and other services and if scaled and designed to protect rural character:**

a. Retail, commercial, and industrial uses to serve the surrounding Rural Area population;

b. Residential development, including single-family housing on small lots as well as multifamily housing and mixed-use developments;

c. Other retail, commercial, and industrial uses, such as resource industries, tourism, commercial recreation, and light industry; and

d. Public facilities and services such as community services, churches, schools, and fire stations.

R-508 **Sewers may be allowed in Rural Towns if necessary to solve existing water quality and public health problems which cannot be addressed by other methods, provided that any extension of sewer mains from urban areas to serve a Rural Town shall be tightlined systems designed to not serve any intervening lands. All alternatives shall be exhausted before sewers may be allowed. Rural Towns shall not be enlarged to facilitate provision of sewers.**

Rural and urban residents alike value the historic character of King County's Rural Towns. New development can enhance the character and valuable features of Rural Towns through careful design and location.

R-509 **Rural Towns should be compact, promoting pedestrian and nonmotorized travel while permitting automobile access to most commercial and industrial uses. New development should be designed to strengthen the desirable characteristics and the historic character of the town, be supported by necessary public facilities and services, and be compatible with historic resources and nearby rural or resource uses. New industrial uses should locate where they do not disrupt pedestrian or bicycle traffic in established retail areas of town or conflict with residential uses.**

C. Cities in the Rural Area

The cities in King County's rural area are incorporated areas whose local governments are involved in the region's planning processes on an equal legal basis with the suburban cities, Bellevue and Seattle. The cities are Black Diamond, Carnation, Duvall, Enumclaw, North Bend, Skykomish and Snoqualmie.

The GMA stipulates that cities in the rural area and their Potential Annexation Areas are to be treated as part of the Urban Growth Area (UGA). The Countywide Planning Policies (CPPs) also provide for urban land uses and densities and urban services in those locations. Excessive growth in cities in the rural area and in Rural Towns, however, may create pressure for extending urban services (for example, sewers) across the Rural Area or Resource Lands, may increase conversion pressure on nearby Resource Lands and adversely affect rural character. Therefore, King County views cities in the rural area as qualitatively different from the UGA as a whole, even though they may provide significant opportunities for residential or employment growth within their boundaries.

King County has worked with the cities in the rural area to establish Potential Annexation Areas to accommodate growth. These areas are shown as part of the UGA on the Comprehensive Plan Land Use Map at the end of Chapter 1. Additionally, the county is working with these cities on individual economic development strategies and options, as well as regional economic and tourism opportunities.

R-510 **The cities in the rural area and their Potential Annexation Areas are part of the overall Urban Growth Area for purposes of planning land uses and facility needs. King County should work with cities in the rural area to encourage the provision of affordable housing, to minimize the impacts of new development on the surrounding rural land and to plan for growth consistent with long-term protection of significant historic resources, the surrounding Rural Area and Resource Lands.**

R-511 **Within Potential Annexation Areas of cities in the rural area the following uses shall be permitted until the area annexes to the city:**

- **a. Residential development at a density of 1 home per 5 acres or less with mandatory clustering; and**
- **b. Nonresidential development such as commercial and industrial as determined through previous subarea plans.**

D. Non-Resource Industrial Uses and Development Standards in the Rural Area

There are three existing industrial areas in the Rural Area containing multiple industrial uses on several sites. One is located within the southwest portion of the Town of Vashon. The second is a designated industrial area adjacent to the Rural Neighborhood Commercial Center of Preston. The Preston Industrial Area recognizes an existing concentration of industrial uses that contributes to the economic diversity of the Rural Area, but expansion of this industrial area beyond the identified boundaries is not permitted (see Countywide Planning Policy CP-942). The third industrial area is located along SR-169 on lands that have been and continue to be used as for industrial purposes and have a designation as a King County Historic site.

R-512 **The creation of new Industrial-zoned lands in the Rural Area shall be limited to those that have long been used for industrial purposes, do not have potential for conversion to residential use due to a historic designation and that may be accessed directly from SR-169.**

R-513 **Rural Public Infrastructure Maintenance Facilities, and agriculture and forestry product processing should be allowed in the Rural Area. Other new industrial uses in the Rural Area shall be permitted only in Rural Towns and in the designated industrial area adjacent to the Rural Neighborhood Commercial Center of Preston.**

In order to preserve rural character and protect sensitive natural features, new rural industrial development in the Rural Area needs to be of a scale and nature that is distinct from urban industrial development. The scale and intensity and many of the uses allowed in urban industrial development are not appropriate for rural industrial areas. The following policy applies to all new industrial development in the Rural Area.

R-514 **Development regulations for new industrial development in the Rural Area shall require the following:**

- **a. Greater setbacks, and reduced building height, floor/lot ratios, and maximum impervious surface percentage standards in comparison to standards for urban industrial development;**
- **b. Maximum protection of sensitive natural features, especially salmonid habitat and water quality;**

c. Building and landscape design that respects the aesthetic qualities and character of the Rural Area, and provides substantial buffering from the adjoining uses and scenic vistas;

d. Building colors and materials that are muted, signs that are not internally illuminated, and site and building lighting that is held to the minimum necessary for safety;

e. Heavier industrial uses, new industrial uses producing substantial waste byproducts or wastewater discharge, or new paper, chemical and allied products manufacturing uses in the urban industrial zone shall be prohibited; and

f. Industrial uses requiring substantial investments in infrastructure such as water, sewers or transportation facilities shall be scaled to avoid the need for public funding of the infrastructure.

The intent of this policy is to preclude expansion of the industrial area beyond the identified boundaries and to ensure that new development (not previously constructed or vested) in the industrial area meets rural character standards. Site design, landscaping, design and construction of internal and access roads and building scale should reinforce the set boundaries and rural nature of the industrial area to further discourage future industrial expansion beyond the industrial boundary.

There are also existing, isolated industrial sites in the Rural Area that are recognized, but are not appropriate for new industrial uses. Further expansion of these isolated industrial uses is not encouraged, and therefore they are not zoned Industrial.

R-515 **Existing industrial uses in the Rural Area outside of Rural Towns, the industrial area on the King County-designated historic site along SR-169 or the designated industrial area adjacent to the Rural Neighborhood Commercial Center of Preston shall be zoned rural residential but may continue if they qualify as legal, nonconforming uses.**

E. Promoting Public Health in the Rural Area for All

Planning for and features of the built environment are important in providing healthy, safe places for people regardless of whether the setting is rural or urban. The built environment refers to various physical features, such as buildings, parks, and roadways, and their spatial arrangement in neighborhoods and communities. These features influence public health through the range of choices provided for engaging in various activities. For example, well designed roads can enhance the safety and walkability of

neighborhoods, while having a park or other gathering place to come together with family, friends, or community members can strengthen social and mental health and increase community cohesiveness. People with access to places to play are twice as likely to reach recommended levels of physical activity than those who have little or no access. (See the Introduction and Chapter 2, Urban Communities, for additional information on the linkages between the built environment and various aspects of health.)

Many locations in King County's cities in the rural area, Rural Towns, and Rural Neighborhood Commercial Centers function as important hubs for their respective communities because they provide shops and services. Parks, schools, or other public services within walking distance of these community hubs cannot always be safely or conveniently reached without a car. Opportunities for daily physical activity can be increased by establishing safe walking and bicycling connections to and within these rural hubs.

In addition to physical activity, another major determinant of health is what people eat. Everything from quality and location of food retail outlets and restaurants to food cost to school food choices influence the food choices of rural residents. According to recent USDA figures and research from the American Dietetic Association, almost 80 percent of adults are not eating the recommended levels of fruits and vegetables. There are people in every community for whom hunger is a daily issue. Land use planning can play a role in providing and improving access to healthy foods. Garden plots located in neighborhoods, parks, vacant lots, surplus public rights-of-way, and public utility lands in various communities can be used as places to grow fruits and vegetables, build community, and address hunger. Similar locations in the Rural Area of King County should be explored for this purpose.

R-516 **Within Rural Towns and larger Rural Neighborhood Commercial Centers, non-motorized connectivity, where consistent with rural character, should be encouraged to promote walking and bicycling and to improve public health.**

R-517 **King County should explore ways of creating and supporting community gardens, farmers' markets, produce stands and other similar community based food growing projects to provide and improve access to healthy food for all rural residents.**

VI. Resource Lands

A. Ensuring Conservation and Productive Use of Resource Lands

King County's Natural Resource Lands contribute to the economic prosperity of the region. They are the lands with long-term commercial significance for farming, forestry, and minerals. Businesses that rely on resource lands provide jobs and products, such as food, wood, and gravel. They also are an important part of our cultural heritage. Responsible stewardship of resource lands also produces multiple environmental benefits, such as:

- Stream and salmon protection;
- Clean air and water;
- Wildlife habitat;
- Flood risk reduction;
- Groundwater recharge and protection; and
- Carbon sequestration and reduced greenhouse gas emissions.

King County has taken major steps to conserve and manage agricultural soils and activities, forestry and mining opportunities. Resource Lands and the industries they support are conserved by encouraging development to occur primarily in the Urban Growth Area (UGA) as directed by the GMA. Under this plan, Resource Lands, including designated Agricultural Production Districts, the Forest Production District and sites of long-term commercial significance for resource uses, will have minimal new residential and commercial development. New development that does occur will be designed to be compatible with active resource-based uses.

This chapter contains King County's strategy for conservation of these valuable Resource Lands and for encouraging their productive and sustainable management. The strategy consists of policies to guide planning, incentives, education, regulation and purchase or transfer of development rights.

Forest, farm and mineral lands are not King County's only natural resources. Many other resource-based industries, such as the fisheries industry, are influenced by King County's land use and planning policies. Policies for the protection and enhancement of fisheries, as well as air, water, vegetation, wildlife and other natural resources, can be found in Chapter 4, Environment.

The Rural Forest Commission was established in 1997 to represent the diversity of forest interests in King County. The Commission reviews the development and implementation of strategies, programs, policies and regulations that benefit forestry and advises the county on ways to preserve rural forests and promote rural forestry.

R-601 **The Rural Forest Commission shall advise the King County Executive and Council on the development of innovative programs, policies and regulations that benefit forestry and that encourage the retention of the forest land base in King County. King County shall continue to support the Rural Forest Commission with staff and other resources.**

In 1994, the Agriculture Commission was established as a forum for farmers to take an active role in land use decisions, policies and regulations affecting commercial agriculture. The commission solicits input from agricultural agency technical advisors and others with land use and technical expertise, as well as other affected groups.

R-602 **The Agriculture Commission shall advise the King County Executive and Council on agricultural issues and programs, including, but not limited to:**

a. Existing and proposed legislation and regulations affecting commercial agriculture;

b. Land use issues that affect agriculture; and

c. Ways to maintain, enhance and promote agriculture and agricultural products in the region.

King County shall continue to support the Agriculture Commission with staff and other resources.

As the population in the Puget Sound area continues to grow, the protection of resource lands and the continued success of commercial agriculture and forestry is a regional challenge. Many of the issues facing King County's resource industries are also faced by neighboring counties. Furthermore, some of the infrastructure and support businesses necessary to sustain agriculture and forestry may serve more than a single county. Therefore, King County's efforts to retain healthy resource economies will be more successful if the county collaborates with other agencies and agriculture and forestry interest groups in the region. These efforts may include policy development, training for service providers and outreach that is supportive of commercial agriculture and timber production and encourages the purchase of local food and local wood.

R-603 **King County should work with other jurisdictions, agencies and agriculture and forestry interest groups to help maintain and enhance commercial agriculture and forestry production by addressing challenges common across the region.**

B. Resource Conservation Strategy

In 1985, the King County Comprehensive Plan designated the county's initial Forest Production District and five Agricultural Production Districts. Subsequent planning efforts established minimum lot sizes and uses for these districts and their surrounding areas. These land use regulations are consistent with the requirements of the GMA to designate productive lands and to plan for adjacent and nearby land uses compatible with long-term commercial farming and forestry. GMA requires designation of agricultural and forest lands of long-term commercial significance. Agricultural lands of long-term commercial significance are designated as Agricultural Production Districts and forest lands of long-term commercial significance are designated as the Forest Production District as shown on the Agricultural and Forest Lands Map.

The GMA also requires designation of mineral resource lands that have long-term significance for the extraction of minerals. Such lands are shown as Designated Mineral Resource Sites on the Mineral Resources Map in this chapter. The role of the Forest Production District in the conservation of mineral resources is also explained below.

R-604 **King County shall promote and support forestry, agriculture, mining and other resource-based industries as a part of a diverse, regional and sustainable economy.**

R-605 **Forestry and agriculture best management practices are encouraged because of their multiple benefits, including natural resource preservation and protection.**

R-606 **Farm lands, forest lands and mineral resources shall be conserved for productive use through the use of Designated Agricultural and Forest Production Districts and Designated Mineral Resource Sites where the principal and preferred land uses will be commercial resource management activities, and by the designation of appropriate compatible uses on adjacent rural and urban lands.**

R-607 **Land uses, utilities and transportation facilities adjacent to Designated Agricultural and Forest Production Districts and Designated Mineral Resource Sites, shall be sited and designed to ensure compatibility with resource management.**

R-608 **King County should encourage infrastructure and services that support resource lands management and resource-based businesses. These should be**

sited in close proximity to designated Agricultural and Forest Production Districts and Designated Mineral Resource Sites when adverse impacts and incompatibilities can effectively be mitigated.

King County recognizes that maintaining viable resource-based businesses is challenging. Owners of resource lands make substantial investments in managing their land. Market uncertainties, labor costs, vandalism, taxes and fees can affect the profitability of resource-based industries.

Conflicts with surrounding land uses and environmental problems can arise even with the best of precautions. Resource-based industries need reasonable certainty that policies are in place to help avoid such conflicts and operations can continue if activities are performed in an environmentally sound manner.

The Forest Lands Program (RCW 84.33), and the Open Space Taxation Program, which includes the Timberland and Public Benefit Rating System programs (RCW 84.34) are property tax incentives that encourage continued farm and forest management both within and outside the Forest Production District and Agricultural Production Districts.

R-609 **King County should expand access to property tax incentive programs to encourage landowners to continue practicing farming and forestry and to help ensure retention of the resource land base. These programs should be publicized and marketed.**

R-610 **King County shall employ a variety of innovative programs and incentives to help maintain and enhance resource-based industries.**

Examples of such programs include technical assistance and education for sustainable land management, education for urban and suburban residents, purchases of land or development rights, transfer of development rights (TDR), the purchase of scenic easements and other less-than-fee-ownership interests that conserve resource uses, establishment of buffers and setbacks for adjacent properties, and relief from special levies and local improvement district fees.

When urban development occurs near Resource Lands, conflicts can result. Examples of such conflicts are greater risk of forest fires; vandalism to logging, farm and mining equipment; destruction of young trees; and increased mixing of heavy truck and residential traffic, which presents safety problems. Increased development near resource lands also results in increased encroachment of noxious weeds into

forests and farmland. It is important for neighboring property owners to understand the value of resource industries and what kinds of resource activities are likely to occur.

R-611 **King County should develop and employ effective means to inform affected property owners about nearby resource management activities. This may include, but not be limited to:**

a. Notice on title for properties within five hundred feet of designated agriculture, forestry, and mineral resource lands;

b. Signage; and

c. Community meetings and other public notification tools.

Successful Resource Land conservation requires a regional perspective and intergovernmental cooperation. Although the designated Resource Lands are located in unincorporated King County, they benefit nearby cities and can be affected by activities in those cities. Furthermore, some Resource Lands in King County are owned or managed by city, county, state and federal agencies and tribes. A regional perspective is also important because many resource activities are regulated or supported by state and federal programs.

R-612 **King County shall work cooperatively with cities, tribes, other public agencies, private utilities, resource managers, land owners and citizens to conserve public and private Resource Lands for long-term productivity and environmental protection in a consistent and predictable manner.**

R-613 **Designated Forest and Agricultural Production District lands shall not be annexed by cities.**

R-614 **King County should establish written agreements with agencies, tribes and other affected parties whose close coordination and collaboration are essential to effective implementation of resource management programs. Such agreements should serve to establish consensus and commitment to achieving specific resource management goals and to define the specific roles and responsibilities of each agency.**

R-615 **King County should avoid duplication of federal and state regulations that apply to resource-based industries. However, King County reserves the authority to address issues of local concern with regard to resource-based activities and operations.**

Resource management strategies that protect the environment are necessary to maintain the long-term productivity of the resource. Chapter 4, Environment, describes the value of using an integrated, ecosystem-based approach to natural resource and environmental planning and management. This approach, along with sound operational practices by resource-based industries, may be able to prevent or minimize environmental impacts associated with resource harvesting and extraction.

R-616 **Resource-based industries should use practices that:**

- **a. Protect the long-term integrity of the built environment, adjacent land uses, and cultural resources;**
- **b. Maintain the long-term productivity of the resource base; and**
- **c. Result in maintenance of ecosystem health and habitat.**

R-617 **Habitat protection requirements should not fall disproportionately on land maintained in agriculture or forestry, and the costs of such protection shall not be disproportionately placed on the owners of such land.**

R-618 **King County should be a leader in resource management by demonstrating environmentally sound agriculture and forestry on county-owned land.**

R-619 **King County shall include resource education through its signs on trail systems that are linked with working farms, forests, and mines. Interpretation should:**

- **a. Provide historical perspective;**
- **b. Demonstrate current adaptive resource management practices (forestry, fisheries, wildlife, agriculture); and**
- **c. Explain economics of various resource uses.**

C. Forestry

King County forestlands provide local, regional and national benefits that are basic to our quality of life. In addition to supplying a variety of wood and other products, forests emit oxygen, supply pure water, reduce risks from flooding and soil erosion, enhance groundwater recharge, provide habitat for innumerable plant and animal species, and offer scenic vistas and recreational opportunities. Conservation of the extensive forests in the county saves the region millions of dollars by reducing the need for costly infrastructure for stormwater and flood control, water treatment, and air quality remediation. King County's forests provide employment in forestry, wood, paper, recreation, and tourism industries. In sum, properly managed forests are fundamental to a healthy, diverse economy and environment.

The growth in human population has resulted in the loss of forestlands through conversion to non-forest uses. Increasing demands are being placed upon the remaining forest land base to provide goods, recreational opportunities and ecological functions. Climate change has the potential to put additional stress on forestlands due to changes in seasonal temperature fluctuations, rainfall patterns, and distribution of insect populations. In the next 10 to 20 years, Pacific Northwest forests are expected to face increasing drought mortality, difficulty in getting seedlings established, and severity of forest fires. To address these challenges, forest managers are embracing more broad-based management methods and strategies that encompass ecosystems, landscapes and watersheds, while continually incorporating new scientific information to improve these approaches. Their efforts, together with the collective foresight and dedication of landowners, interest groups, tribes, citizens and agencies, are needed to ensure that King County's forests continue to contribute to a sustainable way of life for present and future generations.

The first step to maintain and enhance commercial forestry is to protect the forest land base. The second step is to encourage an ecosystem approach to forest management that provides for long-term ecosystem health and productivity and addresses cumulative impacts on non-timber resources. The third step is to minimize land use conflicts and offer incentives for the retention of commercial forestry and the forest land base.

1. Protecting Forest Lands

The purpose of the Forest Production District (FPD) is to conserve large blocks of commercially valuable forestland for the long term. The designation and zoning is designed to prevent intrusion of incompatible uses, manage adjacent land uses to minimize land use conflicts, and prevent or discourage conversion from forestry to other uses. A comparison of the area of forestland converted since 1987 inside the FPD with the area converted outside the district indicates that designation and zoning of commercial forest lands help to discourage subdivision and conversion.

Sixty percent of the land area in King County is within the designated FPD. The FPD comprises 1,300 square miles (825,000 acres) of forestland in east King County. Most of this land is held in large blocks of contiguous ownership. At this larger scale, it is easier to manage for multiple purposes such as habitat and long-term forest health.

Although it has declined from its height in the late 1980's, commercial timber harvest remains a significant economic activity in King County. At the same time, forest management strategies have become more diverse and may include objectives for forest health, biodiversity, and fish and wildlife habitat instead of

timber production alone. Likewise, economic activity related to recreation, traditional cultural practices and aesthetics may be included in commercial forestry activities.

R-620 **The FPD shall remain in large blocks of contiguous forest lands where the primary land use is commercial forestry. Other resource industry uses, such as mining and agriculture, should be permitted within the FPD when managed to be compatible with forestry.**

R-621 **The FPD is a long-term designation. Lands may be removed from the FPD only through a subarea planning process, and only to recognize areas with historical retail commercial uses.**

About 70% of the FPD is in public ownership, including parts of the Mt. Baker-Snoqualmie National Forest, including wilderness areas, state and county parks, Washington State Department of Natural Resources (WDNR) lands, and watersheds for the cities of Seattle and Tacoma. Public land management affects the region's economy, recreation, fish and wildlife habitat, forest health, stream flows, water supply, flood control and climate change mitigation capabilities.

For example, in the last two decades, there have been significant changes in how forest lands in the Mt. Baker-Snoqualmie National Forest are managed. In King County, more than 350,000 acres are within the National Forest. Management emphasis has shifted from commodity timber production (in the 1960s, 70s and 80s) to custodial management with an emphasis on public recreation. The Forest Service has struggled to keep pace with the increasing demand for recreation infrastructure and to maintain access roads. Timber harvest levels have declined to less than 5% of those in the 1980s. The supply of forest products from the national forest is important to the regional viability of the forestry industry. There is currently a significant forest health issue on the Mount Baker Snoqualmie National Forest. Many previously harvested areas are overstocked with conifers that block sunlight from reaching the forest floor, resulting in a decline in species diversity and a lack of forage for animals. Forest fire suppression since the early 1900s has resulted in abnormally high fuel levels on the forest floor, which can increase the severity of wildfires.

Much of the 93,000 acres of forestland managed by WDNR in King County are trust lands that raise income from the sale of timber and other resources, and also provide wildlife habitat and recreational opportunities. In January 1997 WDNR made a far-reaching commitment to protect native animal and fish species through a federally approved Habitat Conservation Plan that covers about 1.6 million acres of WDNR-managed trust land forests—mostly in Western Washington. In 2007, WDNR initiated Forest

Stewardship Council certification on state forest land located in the South Puget Sound Region, including part of Tiger Mountain near Issaquah and state-owned forestland near Enumclaw in King County.

R-622 **King County recognizes the many values provided by the public forestland in the county, and encourages continued responsible forest management on these lands. King County should collaborate with other public land managers in planning for the conservation, use, and management of forest resources on public lands.**

The FPD includes approximately 250,000 acres in private ownership, most of which is commercial forestland. County policies are intended to maintain and facilitate commercial forestry in the FPD. The policies in this section allow for very limited residential uses in the designated FPD, consistent with the objective of continuing forestry as the primary land use. For example, residences may be appropriate to permit forest managers to live on their land. King County zoning and subdivision regulations establish a large parcel size to promote efficient forest operations and to reduce incompatible residential development. Although the zoning calls for an 80-acre minimum lot size, many smaller lots were created prior to application of the zoning. Proliferation of residences in the FPD makes commercial forestry less viable.

R-623 **King County is committed to maintaining working forestland in the FPD, and shall continue to work with landowners and other stakeholders to promote forestry, reduce uses and activities that conflict with resource uses and recognize forestland values.**

R-624 **To reduce conflicts with resource uses, a forest management plan shall be required as a condition of development for any residential uses in the FPD. Accessory dwelling units shall not be allowed in the FPD.**

R-625 **Structures within the FPD should be sited to maintain the productivity of the district. Site plan requirements should limit impervious surface, provide for fire control, protect domestic water supply and prevent conflicts with forest management.**

In 2004, King County purchased the development rights on the 90,000 acre Snoqualmie Forest. This purchase conserves the forest land base for the long term while supporting the continuation of commercial forest production. It is important that the county consider its responsibility to protect the long-term commercial significance of the FPD in its efforts to conserve land within the district.

R-626 **King County should conserve working forests and should encourage continued private forestry through the acquisition of development rights in the FPD. Land acquisition proposals that would remove lands from forest management should be evaluated to ensure that the long-term commercial significance of the FPD is not compromised.**

Although there is considerable acreage in commercial forestry in King County, there are no major lumber mills still in operation in the county. There are a few small mills in the county, but they have limited capacity. As a result, small landowners have few options for marketing their logs, and usually have a long haul to the closest mill. The county should work with forest landowners and forestry business to better understand and address the barriers to local wood processing.

R-627 **King County should promote and support production, harvest, utilization, and marketing of wood products grown in the county's rural and forest areas. King County should ensure that regulations applying to rural and forest areas do not discourage the establishment of sawmills and other wood product businesses and services.**

King County can further protect commercial forestlands and prevent conflicts by working with other public agencies and service providers to consolidate lands and to locate infrastructure facilities to prevent or minimize intrusions. Such actions can also improve the owner’s capacity to protect fish and wildlife habitat and other natural resources.

R-628 **In consultation with tribes and other affected agencies and landowners, King County should support land trades that result in consolidated forest ownership and work with forest managers to identify and develop other incentives for continued forestry.**

R-629 **King County opposes the establishment or expansion of special purpose taxing districts and local improvement districts in the FPD, and shall not grant new or expanded franchises for utilities in the FPD, unless demonstrated that they directly benefit forestry or are necessary for transmission of power or water.**

Forest lands have tremendous recreational and aesthetic value. For example, FPD lands are included within the Mountains-to-Sound Greenway along the I-90 corridor. Opportunities for hiking and other forms of outdoor recreation exist within the working forests that are part of the Greenway. Access to Resource

Lands must be carefully managed, however, to prevent conflict with natural resource goals. For example, open gate policies allowing public access may be incompatible with fish and wildlife protection goals and sometimes may interfere with forestry operations by risking such activities as garbage dumping, vandalism and timber theft. In the Mt. Baker-Snoqualmie National Forest, a variety of federal partnerships and volunteer programs help to better connect urban dwellers with the forest while providing ecological benefits.

R-630 **Public and private forest owners are encouraged to provide for recreational, educational and cultural uses when compatible with forest protection.**

Recreational and institutional developments, such as conference centers, ski areas and associated hotels, allow more people to enjoy the aesthetic benefits of forest lands. Such facilities are acceptable if located in areas of existing development, such as Snoqualmie Pass, and if their operation and use are restricted adequately to minimize conflict with resource lands. Major recreational or institutional development sites can adversely affect the FPD because they reduce the forest land base and conflict with other resource management goals.

R-631 **No master planned resorts shall be permitted in the FPD. New or expansion of existing recreational or institutional uses in the FPD may be permitted if compatible with long-term forestry, the interests of tribes and other resource management goals.**

2. Promoting Forest Management

WDNR regulates forestry through the Forest Practices Act. If the forest practice is associated with a conversion from forestry to another use on the property, such as development, the county has jurisdiction, and the county's development regulations must be followed. On rural properties, it is typical that a landowner will combine a long-term forest use on one part of the property with a residence on another part of the property. It is in the interest of the county to ensure that development regulations are followed for the permanent clearing for development, but also to regulate the long-term forest parts of the property with regulations appropriate for forest harvest.

R-632 **King County should continue to work with all affected parties and the WDNR to improve the enforcement of forest practice regulations in the Rural Area, and to ensure that landowners comply with county regulations when they are converting portions of a site to a non-forest use. Harvesting of forest lands for the purpose of converting to non-forest uses shall meet all applicable county**

standards for clearing and critical areas management. Landowners opting to conduct forest management activities under state approved forest practices permits should be restricted from developing those areas for non-resource purposes for six years from the date of forest practice approval. Recognizing that some landowners combine the development of a residence or an agricultural activity on a portion of the property with long-term forestry on the rest, the county should provide flexibility in its regulations to address the residential development and agricultural activity differently from the forest management.

R-633 **King County should ensure that regulations applying to forest practices do not discourage forest management on properties in long-term forestry. Forestry should be regulated consistent with best management practices in the Forest Practices Act. The county should work to simplify its regulatory processes related to forest management.**

R-634 **The county should promote public understanding of the benefits of commercial timber production and encourage the use of local wood.**

King County has worked with state, federal, and private landowners on multiparty resource plans, such as the Middle Fork Snoqualmie Plan, the plan for Rattlesnake Ridge, and numerous watershed planning efforts. There will continue to be opportunities for interagency cross-ownership cooperation, which will result in improved resource management and conservation.

R-635 **Working with public and private forest land managers, King County shall encourage long-term forest productivity and the protection of land and water resources by participating in collaborative, multiownership planning efforts.**

R-636 **King County promotes forest management that achieves long-term forest health; protection of watersheds, critical areas and habitat to support fish and wildlife populations; protection of threatened and endangered species; conservation and economic viability of working forests; carbon sequestration and reduction in green house gas emissions; and adaptation to climate change.**

In 2005, King County worked with the Tolt Triangle community near Carnation, assisting with the formation of Tolt Triangle Fire Council and the development of their comprehensive community wildfire protection

plan. The 500 rural residences on 5,800 acres covered by the plan became the first area in King County to earn the status of “Firewise Community” from the national Firewise® Program. Since 2005, additional communities in forested areas have adopted wildfire protection plans. The county provides training and technical assistance regarding fire planning and best management practices for implementing wildfire protection throughout forested areas of King County with a focus in the foothill areas prone to east winds.

R-637 **King County should encourage community fire planning so that residents are aware of the dangers of forest fires and take steps to make their properties less vulnerable. King County should support neighborhood-based efforts to manage forests to improve forest health and reduce the risk of wildfire.**

R-638 **King County shall encourage the development of private/public partnerships that provide incentives for landowners to practice innovative, fish-friendly forestry and that can help ensure retention of the forest resource land base in perpetuity.**

An example of such a partnership is the Mountains-to-Sound Greenway Biosolids Forestry Program, which includes King County, Washington State Department of Natural Resources, the Greenway Trust, the University of Washington and Hancock Forest Management. One of the elements of this program involves the acquisition of forestlands that are vulnerable to residential and commercial development. Lands are acquired by a combination of county funds and federal Forest Legacy funds and then transferred to the WDNR for management. By deed, these lands stay in forest resource use in perpetuity and are managed according to the state's Habitat Conservation Plan. Seventy-five percent of all revenues generated are returned to King County. The lands that have been acquired help to form the block of public ownership along I-90, providing wildlife corridors, opportunities for trails and recreation, and the water quality protection provided by forest cover.

In addition to landscape-level planning and analysis, resource managers should identify specific areas in their forest ownership that are degraded or negatively impacting aquatic resources. Examples of such areas are logging roads or gravel mines no longer needed and scheduled to be abandoned or riparian zones that are not sufficiently vegetated. Organic soil amendments, when properly used, can greatly enhance vegetative growth and restore productivity to these sites, thus protecting fish and other aquatic resources. The use of recycled organic wastes generated in King County closes the recycling "loop" and helps us sustain the productivity of our resource lands.

R-639 **King County encourages the use of recycled, organic-based soil amendments, such as biosolids, and fertilizers in forest ecosystems, which can help reduce**

erosion and sedimentation into streams, increase water-holding capacity of soils, stimulate the growth of trees and other vegetation and enhance fish and wildlife habitat. King County shall work with the general public and private and public forestland owners to encourage the selective and appropriate use of these materials for ecosystem enhancement and restoration.

One of the most successful efforts is the use of the county's biosolids to fertilize public and private forests. Annually, about 1,400 acres of forestland in east King County are fertilized with biosolids.

Maintaining land in long-term forest use offsets greenhouse gas emissions through sequestration of carbon in growing trees and in forest soils. Efforts to conserve forests and encourage forest management for health and resilience are a major means of implementing King County's climate change policies. Even with these and other efforts to reduce greenhouse gas emissions, forests in the Pacific Northwest face potential impacts from climate change. In the coming decades, mortality of trees and plants is projected to increase due to insects and pathogens, increased temperature, and lack of groundwater in the summer. Climate change also is projected to affect the composition and density of plant and animal species and the severity and frequency of forest fires. All of these potential impacts underscore the need for monitoring of climate-induced changes and active management of forest health.

R-640 **King County should continue to collaborate with the University of Washington, Washington State University including Extension, state and federal agencies, and forest landowners to monitor and evaluate impacts of climate change on forests in King County.**

R-641 **King County should consider climate change impacts and take steps to improve forest health and resilience to climate change impacts through its technical assistance to forest land owners, management of county-owned forest lands, and support of neighborhood-based efforts to reduce risks from wildfires.**

D. Agriculture

Land suitable for farming is an irreplaceable natural resource. Agricultural lands and farming provide many benefits to the citizens of King County including a connection to our cultural heritage, fresh local foods, and a diverse economy. In 2007, farmers in King County produced over $127 million in agricultural sales. Farmlands are an intrinsic component of the varied open space landscape of the region. Farmland provides scenic vistas and low-density separation between rural communities. Many farms in the county include an educational experience through U-Pick operations, harvest tours, and demonstrations of

agricultural practices. Agricultural lands also provide environmental benefits, including habitat for birds and other wildlife, large areas without impervious surfaces, and opportunities for providing riparian vegetation along rivers and streams.

The concern about the loss of farmland in King County came to an apex in the 1970s and resulted in the successful Farmland Preservation Program (FPP) bond issue in 1979, which has funded the purchase of farmland development rights on over 13,000 acres. In 1985, the county first designated its Agricultural Production Districts (APDs), which have remained stable since then at more than 41,000 acres. However, despite the land conservation accomplished through the FPP and the designation of the APDs, not all of this land is farmed. Based on a 2009 survey, approximately 24,000 acres of the APDs are being actively farmed. A 2003 survey of the Rural Area identified an additional 25,000 acres in active agriculture outside the APDs.

This section focuses on the county's efforts to maintain and enhance commercial agriculture for the value of local produce, dairy products, specialty horticultural and energy crops, keeping livestock, and for scenic and historic values. To meet the GMA requirement to maintain and enhance agriculture, a variety of methods and programs continue to be necessary. The policies call for King County to:

- Protect productive farmland by designation and zoning;
- Limit development to appropriately-scaled uses that are necessary to support commercial agriculture;
- Prevent or minimize land use conflicts between farming operations and adjacent land uses;
- Encourage and allow necessary infrastructure and services (markets, water, affordable housing, supply stores, technical services, tax incentives) that support commercial agriculture and contribute to growing, storing, processing, and distributing a local food supply and other horticultural and livestock activities;
- Acknowledge and support the connections between the food system, particularly food production, as it relates to providing King County residents with food choices that would allow them to meet dietary guidelines for fruits, vegetables, milk and milk products, and whole grains;
- Continue to preserve farmland and develop additional mechanisms to maintain the affordability of farmland; and
- Encourage farming practices that conserve soils and protect water quality, fisheries, and wildlife.

1. Protecting Agricultural Lands

In 1979, voters approved a $50 million ballot measure to protect farmland threatened by development. The Farmland Preservation Program (FPP) became the first voter-approved measure in the nation to protect farmland in a metropolitan area. By purchasing the development rights, the FPP keeps farmland open and available through covenants that restrict development and limit the uses of the property to

agriculture and open space. The covenants remain with the land in perpetuity so the land is protected regardless of ownership. Under the FPP, the county holds the development rights in trust while the land remains in private ownership. By law, the county cannot sell or remove its interest in FPP lands, with the exception of conveying public road or utility easements.

In 1995, the county approved an additional $3 million for the purchase of additional development rights under the FPP, and continues to add to the program with a variety of grant funding. To date, the FPP has succeeded in preserving more than 13,200 acres of farmland.

R-642 **King County shall continue to implement the objectives of the Farmland Preservation Program (FPP). Protection of property purchased under the FPP shall be a high priority when balancing conflicting interests such as locating transportation, active recreation or utility facilities. King County shall use the Transfer of Development Rights Program as another tool to preserve farmland.**

Agriculture is most productive in agricultural communities where neighbors support agriculture, where parcels are large enough for commercial agriculture and where labor, supplies and markets for farm products are available. King County's farm soils and most profitable farms are usually found in contiguous blocks with few nonagricultural uses. In 1985, King County established Agriculture Production Districts (APDs) with large lot zoning and agriculture as the preferred use.

The APDs, shown on the Agriculture and Forest Lands Map in this chapter, present the least number of land use conflicts for agriculture, contain agricultural support activities and provide the best environment for farming in King County. The five APDs are Sammamish Valley, Snoqualmie Valley, Lower Green River Valley, Upper Green River Valley and Enumclaw Plateau. Most of the farmlands preserved under the FPP are found in these APDs.

R-643 **Agriculture Production Districts (APDs) are blocks of contiguous farmlands where agriculture is supported through the protection of agricultural soils and related support services and activities. Roads and natural features are appropriate boundaries for APDs to reduce the possibility of conflicts with adjacent land uses.**

R-644 **King County should continue to seek funding and purchase additional development rights to farmland in the APDs.**

Livestock, dairy and large-scale commercial row-crop operations require large parcels of land to allow for production that is profitable and sustainable. Generally, at least 35 acres is needed for full-time wholesale commercial production of such products. Specialty agricultural products, products that are direct-marketed, and part-time farming enterprises generally do not need as much acreage to be profitable.

R-645 **All parcels within the boundaries of an APD should be zoned Agricultural, either A-10 or A-35.**

R-646 **Lands within APDs should remain in parcels large enough for commercial agriculture. A residential density of one home per 35 acres shall be applied where the predominant lot size is 35 acres or larger, and a residential density of one home per 10 acres shall be applied where the predominant lot size is smaller than 35 acres.**

R-647 **Agriculture should be the principal land use in the APDs. Permanent new construction within districts shall be sited to prevent conflicts with commercial farming or other agricultural uses, and nonagricultural uses shall be limited. New development shall not disrupt agriculture operations and shall have a scale compatible with an active farming district.**

R-648 **On-site housing for farm employees shall be allowed where this can be accomplished without unnecessarily removing land from agricultural use or conflicting with other public interests. King County should address the regulatory constraints that make it difficult for farmers to offer housing for farm employees.**

The river valleys in King County are critical locations for agriculture, salmon habitat and natural floodplain processes. In compliance with growth management, portions of several of these valleys were designated as Agriculture Production Districts (APDs) to protect the diminishing farmland for long-term commercial agriculture, thereby preventing their conversion to other uses that are often incompatible with habitat protection or that would require expensive flood risk reduction projects.

Some of the highest quality of salmon habitat in King County is found within the APDs. As a result of federal listing of Chinook salmon as a threatened species, King County is obligated to take actions for protection of Chinook habitat in our watersheds. Such actions include restoration of habitat in portions of each of our rivers and, because many sections of our river systems are in a highly altered state, those reaches within APDs offer some of the most promising opportunities for habitat restoration critical to

salmon recovery. Each of the Water Resources Inventory Area Salmon Conservation Plans has recommended additional protection or restoration of critical habitat within the APDs. At the same time King County is committed to the preservation of productive agricultural soils and local agricultural production and protection of public safety in flood prone areas through the restoration of floodplain processes.

The farmers in the county support fish protection and fish recovery through many regulated and voluntary actions. King County recognizes that fish, flood management, and farm interests must work together in a collaborative manner. It is essential that farmers and other property owners in each watershed be directly included in planning and in the review of integrated, watershed-wide strategies that support the needs of agriculture, fish recovery, and flood risk reduction and floodplain management. Specific habitat protection rules should not jeopardize the agricultural productivity within the APDs.

R-649 **Agriculture must remain the predominant use in any Agriculture Production District (APD) and aquatic habitat or floodplain restoration projects, as well as, King County mitigation reserves program projects shall not reduce the ability to farm in the APD. Therefore, until the county implements the watershed planning process described in R-650, such projects are allowed only when supported by owners of the land where the proposed project is to be sited. Criteria to be considered:**

a. For a project proposed to be sited on lands that are unsuitable for direct agricultural production purposes, such as portions of property that have not historically been farmed due to soil conditions or frequent flooding, and which cannot be returned to productivity by drainage maintenance, or

b. For a project proposed to be sited on lands suitable for direct agricultural production:

(1) there are no unsuitable lands available that meet the technical or locational needs of the proposed project, and

(2) the project is included in, or consistent with, an approved Water Resources Inventory Area Salmon Recovery Plan, Farm Management Plan, Flood Hazard Management Plan or other similar watershed scale plan; or the project would not reduce the baseline agricultural productivity within the APD.

R-650 **Aquatic habitat restoration projects, floodplain restoration projects and projects under King County's mitigation reserves program in an Agricultural Production**

District (APD) shall be evaluated through a collaborative watershed planning process with the goal of maintaining and improving agricultural viability, improving ecological function and habitat quality, and restoring floodplains through integrated, watershed-wide strategies. A watershed planning process shall be established for an agricultural production district because of the number of potential restoration projects and shall:

a. ensure that agricultural viability in the agricultural production district is not reduced as the result of actions taken and that agriculture remains the predominant use in the agricultural production district;

b. evaluate and recommend actions at all scales across the affected watershed to maintain and improve agricultural viability, restore ecological functions and aquatic habitat and restore floodplains, including voluntary actions taken by landowners;

c. be a collaborative effort among affected land owners, interested stakeholders, and King County and shall be updated on a periodic basis; and

d. identify and recommend actions that King County should take or ensure are taken to maintain and improve agricultural viability in the agricultural production district and address any impacts to agriculture from aquatic habitat restoration projects, floodplain restoration projects and projects under King County's mitigation reserves program constructed in the APD.

R-651 **Maintaining the viability of farmlands is a high priority for King County. Within the Agricultural Production Districts, measures to protect threatened or endangered species shall be tailored to ensure working farms can continue to operate.**

Two APDs in or near urban areas, the Lower Green River Valley and Sammamish Valley, were designated in the 1985 Comprehensive Plan, and those designations have been retained. The development rights from many, but not all, of the parcels in these two districts have been purchased through the Farmland Preservation Program (FPP). The Lower Green River APD is completely surrounded by urban designated land and as such, functions as both prime agriculture land and urban separator. The challenges to agriculture from urban development include alterations to hydrology that result in flooded fields, increased traffic that interferes with farm vehicles on roads, increased lighting at night, complaints from urban neighbors about farm operations, and high land prices. The benefits of

being located near urban areas include access to urban markets and consumers and increased recognition and appreciation of locally produced goods.

R-652 **King County commits to preserve APD parcels in or near the Urban Growth Area because of their high production capabilities, their proximity to markets, and their value as open space. King County should work with cities adjacent to or near APDs to minimize the operational and environmental impacts of urban development on farming, and to promote activities and infrastructure, such as farmers' markets and agriculture processing businesses, that benefit both the cities and the farms by improving access to locally grown agricultural products.**

R-653 **The Lower Green River Agricultural Production District (APD) is a regionally designated resource that is to remain in unincorporated King County. The Lower Green River APD functions as an urban separator between the cities of Kent and Auburn. King County may contract with other jurisdictions to provide some local services to this area as appropriate.**

Pastoral vistas make agricultural land a popular destination for recreation. However, creating parks in the APDs is not appropriate because the land should be prioritized for agriculture. In addition, heavy recreational use in or near the APDs could result in trespass and damage to crops, animals and farm equipment.

R-654 **Active recreational facilities should not be located within APDs. When new parks or trails are planned for areas within or adjacent to APDs, King County should work with farmers to minimize impacts to farmland and agricultural operations.**

Public road and utility projects within and through APDs must be designed to prevent disruption to agriculture. Therefore, road and utility district capital facilities and plans, including water, wastewater, reclaimed water, and drainage, need to ensure that services are consistent with preservation of long-term agriculture. (Chapter 8, Services, Facilities and Utilities, contains policies requiring special district plans to be consistent with land use plans.)

R-655 **Public services and utilities within and adjacent to APDs shall be designed to minimize significant adverse impacts on agriculture and to maintain total farmland acreage and the area's historic agricultural character:**

a. Whenever feasible, water lines, sewer lines and other public facilities should avoid crossing APDs. Installation should be timed to minimize negative impacts on seasonal agricultural practices;

b. Road projects planned for the APDs, including additional roads or the widening of roads, should be limited to those that are needed for safety or infrastructure preservation and that benefit agricultural uses. Where possible, arterials should be routed around the APDs. Roads that cross APDs should be aligned, designed, signed and maintained to minimize negative impacts on agriculture, and to support farm traffic; and

c. In cases when public or privately owned facilities meeting regional needs must intrude into APDs, they should be built and located to minimize disruption of agricultural activity.

R-656 Lands can be removed from the APDs only when it can be demonstrated that:

a. Removal of the land will not diminish the productivity of prime agricultural soils or the effectiveness of farming within the local APD boundaries;

b. The land is determined to be no longer suitable for agricultural purposes; and

c. Removal of the land from the APD may occur only if it is mitigated through the addition of agricultural land abutting the same APD that is, at a minimum, comparable in size, soil quality and agricultural value.

2. Sustaining Agriculture and Farming

King County has made a significant investment in preserving farmland for agriculture and, as a result, has also preserved the open space benefits of these lands. The county must ensure that this land continues to be farmed into the future by helping farmers maintain and operate their farms and by promoting local agricultural products through infrastructure and activities that improve access to locally grown agricultural products.

In order to further maintain and enhance commercial farming on small farmland parcels, farmers and prospective farmers must have access to information on marketing and production strategies for small acreages, the potential for specialty crops and sustainable farming techniques.

King County recognizes the value of farmers' markets for their role in community-building, their contribution to farmer success by providing a direct-marketing opportunity, and for making the bounty of King County farms available to city residents.

R-657 **King County shall work with and provide support to Washington State University Extension for its research and education programs that assist small-scale commercial farmers.**

R-658 **King County shall work with other jurisdictions to broaden support for the Puget Sound Fresh Program, which provides marketing assistance to farmers and links consumers to local farms and farmers' markets.**

R-659 **King County should work with other jurisdictions, farm advocacy groups and others to support Farmlink and other programs that help new farmers get started, gain access to farmland and develop successful marketing methods.**

R-660 **King County should work with other jurisdictions to continue to provide support to farmers' markets.**

R-661 **The county should develop incentives to encourage agricultural activities in the remaining prime farmlands located outside the Agriculture Production Districts. These incentives could include tax credits, expedited permit review, reduced permit fees, permit exemptions for activities complying with best management practices or similar programs.**

King County recognizes the importance of adding value to and direct sales of agricultural products as a way to keep agriculture viable in an urban landscape. King County's agriculture program works with farmers to encourage them to add value to their products by processing, packaging, and selling them directly to the consumer.

R-662 **Agricultural processing, packing and direct sales are considered agricultural activities and should be allowed at a size and scale appropriate to the zone in which they are operating. King County shall work with local and state health departments to develop regulations supporting these activities.**

R-663 **King County supports the processing and packaging of farm products from crops and livestock, and will continue to work with farmers, ranchers, cities, neighboring counties, and other interested parties to address infrastructure and regulatory needs that promote sales to consumers, institutions, restaurants, and retail enterprises.**

R-664 **King County supports innovative technologies to process dairy and other livestock waste to reduce nutrients and to create other products such as energy and compost in the Agriculture and Rural zoning classifications.**

King County's APDs have some of the best soil and conditions for growing food in the country. There is an increasing awareness among farmers about the potential for expanding local food production compatible with a variety of sustainability goals. Concerned about multiple threats to future food production, King County farmers are working with others to promote voluntary incentives that will increase the community of those involved in the local production of food.

R-665 **The county should develop incentives that support local food production and processing to increase food security and provide a healthy local food supply, and reduce energy use.**

Agricultural practices modify the natural environment in order to produce food or fiber or maintain livestock for human use. Ideally, practices that maintain the productivity of the lands also protect environmental quality and respect natural processes such as flooding and channel migration. Farmers, technical advisors, floodplain managers, and environmental regulators must work together to understand the relationships between production practices, environmental protection, public safety, and profitability. These practices, referred to as best management practices, are designed to prevent erosion, maintain flood conveyance and flood storage, retain riparian vegetation, avoid stream bank collapse, properly dispose of animal wastes, safely use and dispose of pesticides and prevent excessive surface water runoff.

Climate change has the potential to affect farming in King County, with increased severity of winter flooding, higher summer temperatures, reduced availability of surface and groundwater for irrigation, increased pest risk, and changes in the types of crops suited to this area. At the same time, soil best management practices, including use of cover crops and modified tilling methods, can help to mitigate the impacts of climate change by retaining soil moisture, sequestering carbon, and reducing other greenhouse gas emissions. Consideration and investigation of alternative water supplies, such as reclaimed water, can also help to mitigate the impacts of climate change and help support local and sustainable agriculture.

Development of anaerobic digesters for dairy manure and other agricultural waste products can capture methane gas and convert it to usable energy. Having locally-available produce can help to reduce greenhouse gas emissions from transport.

King County's policies in this chapter to conserve farmland and encourage food production take on a greater significance when considering that climate change may result in food shortages in other parts of the country and world. The Puget Sound region may become even more valuable for food production than it already is if producing food in other parts of the world becomes more difficult.

R-666 **King County shall provide incentives, educational programs and other methods to encourage agricultural practices and technological improvements that maintain water quality, protect public health, protect fish and wildlife habitat, protect historic resources, maintain flood conveyance and storage, reduce greenhouse gas emissions, control noxious weeds, and prevent erosion of valuable agricultural soils while maintaining the functions needed for agricultural production.**

In order to maintain and operate their farms, farmers need assistance in maintaining farm viability in the face of increasing urbanization, increased flooding and water scarcity caused by climate change, and the increased impacts of upslope development.

R-667 **King County shall continue to support agriculture with an expedited review process and reduced fees for structures necessary for farm operations.**

R-668 **The county shall work with federal, state, local, and private agencies to ensure and maintain adequate water for the needs of agriculture. Assessments of future surface and groundwater availability for agriculture should consider projected impacts of climate change.**

R-669 **King County should continue to collaborate with the Washington State University Extension, the University of Washington, and King Conservation District to develop information on the likely impacts of climate change on agriculture in King County, and to develop mitigation and adaptation strategies that are appropriate for King County's soils and farm economy. Research should address soil management, water storage, irrigation, alternative crops, integrated pest management, and nutrient management. The information**

should be made available to farmers through technical assistance programs and farm planning.

R-670 **King County should provide incentives for soil management practices that reduce greenhouse emissions through its Agricultural Best Management Practices Cost-Sharing Program.**

An alluvial fan is a depositional landform along a watercourse where there is an abrupt decrease in gradient and a resulting area of active sediment deposition. Most alluvial fans in King County form where steep tributary streams discharge onto nearly level river floodplains. Since much of the county's farmland is located in valley floors, some agricultural landowners have properties on or containing alluvial fans that are significantly affected by the episodic deposits of upslope sediment and debris that accumulate on their land. These events result in obstructed stream channels, filled wetlands, covered farmland, and disruptions in operations. Water is redirected into unexpected places. Permits, regulations, and the lack of approved management practices make it difficult to remedy the situation to regain operations and farm viability.

R-671 **King County should use pilot or demonstration projects and multi-agency collaboration to develop a new suite of practices that will provide options for landowners whose existing operations are affected by alluvial fan deposits. These should provide timely and cost-effective relief from debris and the associated changes to the watercourse along with protection of intact fish habitat and restoration of degraded fish habitat within these areas.**

Agricultural lands have historically been located in floodplains. Agriculture coexists with flood storage and seasonal inundation; however, there is a growing concern that farmers cannot protect their investments from flooding. The federal, state and local flood hazard management standards are designed to ensure there is no adverse impact to upstream or downstream property owners from activities that are allowed within the floodplain. King County recognizes that most of the agriculture in the county is located in the floodplains because that is where the prime agricultural soils are. This industry requires special consideration because it is tied to these agricultural soils, and can occur almost nowhere else in the county.

R-672 **King County should work with federal, state and local jurisdictions to reduce flood impacts to agricultural operations. The county will investigate the needs of agriculture before, during and after flood events, to determine if and how**

losses can be reduced, and will use this information in designing its floodplain policies and regulations.

The high cost of agricultural land continues to be a barrier for many farmers wishing to locate their farm businesses within King County. The steady rise in agricultural land values continues to hamper the ability of many potential and current farmers to enter or expand their operations.

R-673 **In addition to enhancing the Farmland Preservation Program, the county should develop more innovative solutions and incentives to keep agricultural land affordable and profitable for active farming.**

3. Agriculture and the Food System

King County has a year-round growing season, a strong farming tradition and local farming expertise, and proximity to major markets for local foods and food products. Many of the policies in the previous section are aimed at helping to overcome obstacles to successful farming in King County. With that direction and a focus on production of food, farmlands in King County could be even more instrumental in strengthening the food system for the benefit of all King County residents.

Agricultural lands, farming practices and activities, and farmers are part of the local and regional food system. In addition to the growing of food, the food system includes processing, distribution, food availability, and disposal. As more people move to this region, King County recognizes the importance of planning for our regional food system to further a number of county initiatives and goals:

- Expand opportunities for local farms and enhance the rural economy;
- Promote healthy eating to improve public health;
- Improve access to healthy, safe, and affordable food, to all county residents; especially those with low incomes;
- Reduce energy use and greenhouse gas emissions; and
- Divert food waste from landfills.

With increased global trade, food is traveling more miles from farm to table. Reducing food miles—buying food grown closer to home—is one way to help improve the environment and protect natural resources. There is increasing attention on how our current system of transporting food over thousands of miles is detrimental to the environment and may be a significant factor in global warming. University of Washington researchers have shown that a Skagit Valley apple requires about two-thirds less energy to be grown and shipped to local retailers than an apple from New Zealand.

Studies have shown that 35% of garbage is food. Efforts to recycle food waste and divert edible food to hunger programs could reduce what goes to the landfill, reduce methane generated by landfills, provide food for hungry people and provide soil amendments.

Food and nutrition are major factors in public health. The USDA's *2005 Dietary Guidelines for Americans* call for significant increases in daily consumption of fruit, vegetables, milk products and whole grains. Efforts to increase the availability of these foods to King County residents should include encouraging an increase in food production on King County farms. Although it is not realistic for King County farms and farmers to provide the full complement of recommended foods in public health guidelines, there is the potential to increase food production for local and regional consumption, particularly in the first three categories.

R-674 **King County should work with farmers and ranchers to better understand the constraints to increased food production in the county and develop programs that reduce barriers and create incentives to growing food crops and raising food-producing livestock.**

R-675 **King County should prioritize its programs to help build and support a sustainable, reliable, equitable, and resilient local food system.**

R-676 **King County should consider adopting procurement policies that would encourage purchases of locally grown fresh foods.**

R-677 **King County should promote local food production and processing to reduce the distance that food must travel from farm to table.**

Government funded food programs are increasingly relying on electronic cards for clients to purchase food. For example, food stamps have been replaced with electronic benefits transfer cards. Grocery stores can easily adopt new electronic technology to accept such cards. It is more challenging for farmers' markets to do so as the majority of them are open-air events in parking lots without access to electricity or telephone connections. To improve accessibility of farmers' markets for low income shoppers, a concerted effort needs to be made to develop the ability to easily accept electronic payment. This will help make fresh food more available to low-income shoppers as well as increase the customer base for farmers.

R-678 **King County should collaborate with other organizations to further the development of programs that increase the ability of shoppers to use food**

assistance benefits and the ability of farmers to accept electronic and other forms of payment at farmers' markets and farm stands.

E. Mineral Resources

King County contains many valuable mineral resources, including deposits of coal, sand, rock, gravel, silica, clay, metallic ores and potentially recoverable gas and oil. Mining and processing these deposits is an important part of King County's economy, currently providing hundreds of jobs and producing materials used locally, regionally, and nationally. Mining also has historic significance, in that it provided the impetus for past development in many parts of King County, including Black Diamond and the Newcastle area.

King County is required by the State GMA to designate and conserve mineral lands. In doing so the county must assure that land uses adjacent to mineral lands do not interfere with the continued use of mineral lands in their accustomed manner and in accordance with best management practices. The policies in this section explain the steps taken to designate and conserve mineral resource lands and provide direction on the comprehensive review needed before additional sites are designated for mineral resource extraction.

Four main steps are necessary to maintain and enhance commercial mineral resource industries. First, mineral resource sites should be conserved through designation and zoning. Second, land use conflicts between mining, processing and related operations and adjacent land uses should be prevented or minimized. Third, operational practices should protect environmental quality, fisheries and wildlife, in balance with the needs of the industry. Finally, mining areas need to be reclaimed in a timely and appropriate manner.

The Mineral Resources Map identifies four different types of Mineral Resource Sites. The sites were identified in the 1994 King County Comprehensive Plan or in subsequent annual updates. Following the Mineral Resources Map is a spreadsheet that contains information on each Mineral Resource Site parcel.

The Designated Mineral Resources Sites on the Mineral Resources Map satisfy King County's responsibility to designate and conserve mineral resources consistent with requirements of the GMA. All Designated Mineral Resources Sites have Mineral zoning. The criteria used in the 1994 King County Comprehensive Plan called for designation of properties that at the time were either zoned outright for mining or those operating under an approved Unclassified Use Permit. In addition to the designated Mineral Resources Sites, the Forest Production District (FPD) and Forest (F) zone preserves the opportunity for mineral extraction. Mining is a permitted or conditional use in the F zone. Because forestry does not preclude future mineral extraction, King County considers the FPD as part of its strategy to conserve mineral resources.

The Mineral Resources Map also shows Potential Mineral Resource Sites. These are sites where King County expects some future surface mining to occur or where the owner or operator indicates an interest in future mining. Most of the Potential Mineral Resources Sites shown on the map contain sand and/or gravel; however, a few contain other mineral resources such as quarry rock and coal. Because of the geology of King County, most valuable metallic mineral resources are located in the Forest Production District, and are therefore already protected from urban development. Identification of Potential Mineral Resources Sites satisfies the GMA requirements to not knowingly preclude opportunities for future mining and to inform nearby property owners of the potential for future mining use of these areas in order to prevent or minimize conflicts.

The Mineral Resources Map also shows Non-Conforming Mineral Resources Sites. These are sites on which some mining operations predated King County zoning regulations without appropriate zoning or other land use approval. Mining for these sites has not been authorized through a Land Use Map or zoning designation. These sites are shown for informational purposes only. Mining can occur on an identified site only if mining has been approved as a nonconforming use by the Department of Development and Environmental Services, and mining activities have received all other necessary permit approvals. Because the sites have not undergone formal review to be designated on the Land Use Map or zoned for mining, the sites do not have long-term commercial significance. However, they can continue to serve mineral supply needs.

The Mineral Resources Map also shows Owner Identified Potential Coal Mining Sites that contain subsurface coal resources. These sites could be mined by either underground or surface mining techniques. Because of uncertainties involving the economics of energy and related market conditions, it is not always possible to determine the timing or likelihood of coal resources extraction in potential coal mining areas. Underground and surface coal mining is subject to permitting and enforcement by the Federal Government. King County regulates land use decisions governing surface facilities. Because of the difficulty in precisely locating these facilities prior to an actual proposal, King County determined to not apply Potential M zoning to owner-identified coal resources sites.

R-679 **King County shall identify existing and potential mining sites on the Mineral Resources Map in order to conserve mineral resources, promote compatibility with nearby land uses, protect environmental quality, maintain and enhance mineral resource industries and serve to notify property owners of the potential for mining activities. The county shall identify:**

a. Sites with existing Mineral zoning as Designated Mineral Resource Sites;

b. Sites where the landowner or operator has indicated an interest in mining, sites that as of the date of adoption of the 1994 Comprehensive Plan had potential Quarrying/Mining zoning, or sites that the county determines might support future mining as Potential Mineral Resource Sites;

c. Sites where mining operations predate zoning regulations but without zoning or other land use approvals as Non-Conforming Mineral Resource Sites; and

d. Owner-Identified Potential Sub-Surface Coal Sites.

R-680 **King County shall designate as mining on the Comprehensive Plan Land Use Map those sites that had Potential Mineral (M) zoning prior to the date of adoption of the 1994 Comprehensive Plan and those sites that had Mineral zoning as of the date of the adoption of the King County Comprehensive Plan 2000 Update.**

A mining designation on the Land Use Map shall not create a presumption that Mineral zoning will be approved for sites with Potential Mineral zoning. Potential Mineral zoning shall not be applied to additional sites.

Mining is an intense operation that may continue for many years. Mining operations can significantly change the land being mined and have impacts on the environment and on nearby properties. King County requires comprehensive review, including environmental analysis, prior to approving a Land Use Map and zoning change. Site specific environmental review will also be required for a grading permit or any other permit that is necessary for a mining operation. Therefore, a comprehensive site-specific study is required prior to any such approval.

R-681 **King County may designate additional sites on the Comprehensive Plan Land Use Map as Mining only following a site-specific rezone to Mineral zoning. Upon approval of a rezone to Mineral zoning, the Comprehensive Plan Land Use Map shall be amended to designate the site as mining during the next comprehensive plan amendment cycle. King County should approve applications for site-specific rezones to Mineral zoning and applications for permits that would authorize mineral extraction and processing only following site-specific environmental study, early and continuous public notice and comment opportunities, when:**

a. The proposed site contains rock, sand, gravel, coal, oil, gas or other mineral resources;

b. The proposed site is large enough to confine or mitigate all operational impacts;

c. The proposal will allow operation with limited conflicts with adjacent land uses when mitigating measures are applied;

d. The proposal has been evaluated under the State Environmental Policy Act so that the county may approve, condition or deny applications consistent with the county's substantive SEPA authority, and in order to mitigate significant adverse environmental impacts.

e. Roads or rail facilities serving or proposed to serve the site can safely and adequately handle transport of products and are in close proximity to the site.

If King County denies an application for a site-specific mining rezone it should remove the mining land use designation and the associated Potential Mineral zoning for the site from the county's Land Use maps. If the county denies a permit that would authorize mineral extraction and/or processing on a Designated Mineral Resources Site, the county should consider new information generated during the permit review process to determine whether the site is not properly designated as mineral resource land of long-term commercial significance, the designation for the site on the Mineral Resources Map should be changed from Designated Mineral Resources Site to Potential surface Mineral Resource Site. In addition, the mining land use designation and the Mineral zoning classification for the site should be amended to be compatible with the surrounding properties.

R-682 **King County should remove the Mining land use designation on the Comprehensive Plan Land Use Map and associated Potential Mineral zone or Mineral zoning for any sites that have been denied a rezone to Mineral.**

If a grading or other permit necessary for the extraction of mineral resources is denied on a Designated Mineral Resource Site, the county shall evaluate whether such mineral resource designation is appropriate. The re-evaluation process may occur during the annual comprehensive plan amendment cycle and information produced during the permit review process shall be used to evaluate the appropriateness of changing the existing designation. If the county determines that the site should not be designated as mineral resource land of long-term commercial significance as defined in the Growth

Management Act, the site shall be redesignated to a Potential Surface Mineral Resource Site on the Mineral Resources Map and to a land use designation and zoning classification compatible with the surrounding properties.

R-683 **King County may update the Mineral Resources Map to identify additional Potential Mineral Resource Sites only during the four-year comprehensive plan amendment cycle.**

R-684 **The preferred adjacent land uses to sites designated as Mining on the Land Use Map are mining, industrial, open space or forestry uses. Sites for newly proposed Mineral zones shall not be adjacent to or within Agricultural Production Districts. Agricultural lands and operations should be protected from significant impacts associated with nearby mine operations.**

R-685 **Mining activities are permitted within the Forest Production District, consistent with R-620. However, a conditional use permit shall be required for mining activities in the Forest Production District located within one-quarter mile of established residences or for proposals seeking to use local access streets where abutting lots are developed for residential use.**

R-686 **In order to comprehensively assess the environmental impacts associated with a zoning change, conditional use or operating approval for a mining proposal, the range of environmental impacts, including short-term and long-term effects arising or existing over the lifetime of the proposal, shall be assessed at the earliest possible stage. This should include the potential for future proposals for structures and operations related to mining, such as asphalt and concrete batch plants.**

R-687 **King County should prevent or minimize conflicts with mining when planning land uses adjacent to Designated and Potential Mineral Resource Sites. Subarea plans may indicate areas where mining is an inappropriate land use. Designated and Potential Mineral Resource Sites and nonconforming sites should be shown on Mineral Resources Map and subarea plan maps in order to notify nearby property owners and residents of existing and prospective mining activities.**

R-688 **The periodic review process for mineral extractive and processing operations shall include sufficient public notice and comment opportunities. The purpose of the periodic review process is to provide opportunities for public review and comment on the mineral resource facility's fulfillment of state and county regulations and implementation of industry-standard best management practices, and for King County to modify, add or remove conditions to address new circumstances and/or unanticipated project-generated impacts. The periodic review process is not intended to re-examine the appropriateness of the mineral resource use, or to consider expansion of operations beyond the scope of existing permitted operations since that review would be accomplished through the county's permitting process. The periodic review is intended to be a part of King County's ongoing enforcement and inspections of mineral resource sites, and not to be a part of the county's permitting process.**

R-689 **Conditions and mitigations for significant adverse environmental impacts associated with mining operations and their associated structures or facilities should be required, especially in the following areas:**

a. Air quality;

b. Environmentally sensitive and critical areas, such as surface and groundwater quality and quantity, wetlands, fisheries and wildlife habitats, and aquatic habitats;

c. Noise levels;

d. Vibration;

e. Light and glare;

f. Vehicular access and safety;

g. Land and shoreline uses;

h. Traffic impacts;

i. Visual impacts;

j. Cultural and historic features and resources;

k. Site security; and

l. Others unique to specific sites and proposals.

R-690 **King County should work with the state and federal governments to ensure that proposals for underground mining, oil and gas extraction, and surface coal mining are reviewed with consideration of local land use and environmental requirements.**

R-691 **King County should work with the state Department of Natural Resources to ensure that mining areas are reclaimed in a timely and appropriate manner. Reclamation of mining sites in the Forest Production District should return the land to forestry. Where mining is completed in phases, reclamation also should be completed in phases as the resource is depleted. When reclamation of mining sites located outside of the Forest Production District is completed, the site should be considered for redesignation to a land use designation and zoning classification compatible with the surrounding properties.**

R-692 **King County shall encourage the removal of existing stockpiles of previously mined material in order to promote and achieve reclamation of land to its highest and best use.**

Agriculture and Forest Lands 2012

King County Comprehensive Plan, 2012
Chapter Three, Rural Legacy and Natural Resource Lands

Forest Production District
Agricultural Production District
Incorporated Areas
Tribal Lands
Urban Growth Area Boundary
Wilderness Boundary
Rural Forest Focus Areas

(A) Bear Creek
(B) West Wall Snoqualmie
(C) Lake Joy
(D) East Wall Snoqualmie
(E) Mitchell Hill / Raging River
(F) South Fork Snoqualmie
(G) Issaquah Creek
(H) Cedar River / Ravensdale
(J) West Black Diamond
(K) Green River

Source: U.S. Forest Service, King County Departments of Assessments, Natural Resources and Parks, and Development and Environmental Services

Notes

The maps in the King County Comprehensive Plan and its technical appendices are produced with a computer geographic information system. They are reduced in size but available at a larger scale.

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February 2012

King County
Department of Development and Environmental Services

Date: Februrary 15, 2012
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Mineral Resources 2012

King County Comprehensive Plan, 2012
Chapter Three, Rural Legacy and Natural Resource Lands

Notes
*Sites with Mineral Zoning.
**Sites identified by the landowner or operator prior to Nov. 18, 1994 and sites that as of Nov. 18, 1994 had pending rezone applications for Quarrying/Mining (now Mineral) zoning or had potential Quarrying/Mining (now Mineral) zoning.
***Sites on which mining operations pre-date King County zoning regulations, but without zoning or other land use approvals.
**** Owner-Identified Potential Sub-Surface Coal Sites are not parcel specific.

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December 2012

32 Designated Mineral Resource Sites*
59 Potential Surface Mineral Resource Sites**
109 Non-Conforming Mineral Resource Sites***
△ Owner-Identified Potential Sub-Surface Coal Sites****

Incorporated Areas
Tribal Lands
Urban Growth Area Boundary
Forest Production District Line

Source: U.S. Forest Service,
King County Departments of Assessments and Development and Environmental Services

King County
Department of Development and Environmental Services

Date: Februrary 15, 2012
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Mineral Resources Property Information for the Mineral Resources Map

DESIGNATED MINERAL RESOURCE SITES

Map #	Section-Township-Range	Site Name and/or Owner/Operator	Product*	Total Site Acreage (approx.)
1	25-21-06	Cadman S & G/Flintston S&G	SG	75
2	11-20-07 21-20-07	Plum Creek Timber Company	SG	476
3	21-22-03	Ideal Cement Co/King County	SG	39
4	28-22-03	Maury Island/Lonestar Northwest	SG	250
5	27-22-07	Kangley Pit/Meridian Aggregates Co. (398 acres) and Stoneway Concrete Gravel Pit/Gary Merlino Construction	SG	608
6	28-23-06	Cedar Grove Pit/Queen City Farms	SG	315
7	33-23-06	Lake Francis Pit/Plumb Creek Timber Co.	SG	143
8	33-23-06	Cedar Grove Pit/ANMARCO	SG	35
9	20-23-06	Cedar Mountain Pit/ Rivera & Green	SG	57
10	19-22-06 20-22-06 29-22-06 30-22-06	Black River Quarry	SG	374
11	22-24-06 27-24-06	Gravel Pit/Washington Asphalt Co. and Glacier Ridge PS	SG	320
12	08-26-07 17-26-07	J. Margan	SG	13
13	19-24-08 20-24-08	Snoqualmie/Weyerhaeuser Co. and S. Parsons et. al.	SG	665
14	05-23-06	Sunset Quarry/Meridian Agrregates	RS	120
15	06-23-06	Squak Mountain Quarry/M. Palmer	RS	16
16	22-24-07	Raging River/Cadman	RS	46
17	33-20-07	Highway 410 Quarry/J. Laramie	RS	34

DESIGNATED MINERAL RESOURCE SITES

Map #	Section-Township-Range	Site Name and/or Owner/Operator	Product*	Total Site Acreage (approx.)
18	28-26-11	Meridian Aggregates	R	38
19	11-21-06 12-21-06	John Henry Coal Mine/Palmer Coking Coal	C	375
20	01-21-06 36-22-06	Reserve Silica CorporationPlum Creek Timber Co. and Silica Sand Mine	S	612
21	01-19-07	Weyerhaeuser Co.	S	625
22	34-22-07	Elk Pit/Mutual Materials, Inc.	CL	60
23	32-24-06	State of Washington	CL	21
24	31-24-06	Section 31 pit/King Co.	Sh/Cl	322
25	32-24-06	Interpace Harris Mine/ R.Thompson and Eltra Corp.	SG	60
26	35-22-06	Meridian Minerals Co.	SG	57
27	29-23-06	Pinnacle Exploration	SG	49
28	29-23-06 32-23-06	ANMARCO and G. Newell	SG	115
29	29-23-06	Plum Creek Timber Co.	SG	200
30	27-24-06	Issaquah/King Co.	SG	18
31	05-23-06	King County	SG	383
32	33-23-06	Lake FrancisPlum Creek Timber Co.	SG	233
33	35-22-05	162nd Av SE/James Development Co. and O. Joscelyne	SG	28
34	35-22-05	Washington Asphalt Co.	SG	23

Mineral Resources Property Information for the Mineral Resources Map

POTENTIAL SURFACE MINERAL RESOURCE SITES

Map #	Section-Township-Range	Site Name and/or Owner/Operator	Product	Total Site Acreage (approx.)
35	35-22-05	T. Scarsella		11
36	07-25-06	Cadman/King Co.		24
37	33-23-06	Merlino Property/ANMARCO		32
39	20-23-06	Rivera and Green		21
40	22-26-06	T. Alberg		40
41	31-26-07 36-26-06	T. Alberg		160
42	8-26-07 17-26-07	R. and A. Thompson		11
43	32-23-09	R. and A. Thompson		145
44	11-21-05	B & M Investments		174
45	25-22-02	Doane Family Ltd.		60
46	08-25-06	W. Nelson		86
47	18-21-07	Palmer Coking Coal		79
48	30-21-07	Palmer Coking Coal		275
50	36-21-06	Palmer Coking Coal		116
51	06-23-06	Palmers		39
52	12-23-05	R. and R. Schroeder and Pacific Company Constructors		30
53	02-20-06	State of Washington		36
54	03-91-33	Weyerhaeuser Co.		36
55	02-20-07 12-20-07	Weyerhaueser Co., State of Washington, Metro		634

POTENTIAL SURFACE MINERAL RESOURCE SITES

Map #	Section-Township-Range	Site Name and/or Owner/Operator	Product	Total Site Acreage (approx.)
56	10-20-07	Weyerhaueser Co.		80
57	15-26-07	State of Washington		320
58	16-21-05	State of Washington		38
59	17-23-07 18-23-07 19-23-07 20-23-07	State of Washington		640
60	26-21-06	M & K Company		18
61	27-24-06	State of Washington		40
62	30-20-08	Weyerhaeuser Co.		141
63	30-21-07	State of Washington and Palmer Coking Coal		60
64	30-21-08	State of Washington		168
65	34-24-06	State of Washington		32
66	35-24-06	State of Washington		20
67	36-20-06	State of Washington		79
68	36-20-06	State of Washington		40
69	36-21-06	State of Washington		152
70	36-21-07	State of Washington		640
71	36-23-06	State of Washington		115
72	04-21-07	Weyerhaeuser Co.		173
73	03-25-09 04-25-09 05-25-09 10-25-09 33-25-09 34-26-09	Weyerhaeuser Co.		3079

Mineral Resources Property Information for the Mineral Resources Map

POTENTIAL SURFACE MINERAL RESOURCE SITES

Map #	Section-Township-Range	Site Name and/or Owner/Operator	Product	Total Site Acreage (approx.)
74	11-4-07 22-4-07 32-4-07 26-25-07 27-25-07 34-25-07 35-25-07	Weyerhaeuser Co.		3655
75	01-19-07 (4-8)-19-8 12-19-07 28-20-08 31-20-08 32-20-08 33-20-08 36-20-07	Weyerhaeuser Co., United States, U.S. Corps of Engineers		4214
76	(17-20) of 23-09 and (28-30) of 23-09	Weyerhaeuser Real Estate Co.		1765
77	21-23-09 27-23-09 28-23-09	Weyerhaeuser Co.and State of Washington		705
78	13-24-07; (17-20) of 24-07	Weyerhaeuser Co., Riley, Everett, Hamerly		1926
79	06-21-07 7-21-07	E. Seliger, Weyerhaeuser Co, Bremmeyer, and Palmer Coking Coal		1167
80	08-21-07	Weyerhaeuser Co.		113
81	16-21-07	Metro		599
82	24-21-06	Cadman Black Diamond/Weyerhaeuser Co.		434
83	20-20-07 29-20-07	Weyerhaeuser Co.		925

POTENTIAL SURFACE MINERAL RESOURCE SITES

Map #	Section-Township-Range	Site Name and/or Owner/Operator	Product	Total Site Acreage (approx.)
84	28-20-07 32-20-07 33-20-07	Weyerhaeuser Co.		669
85	04-19-07 05-19-07 32-20-07	Weyerhaeuser Co.		1572
86	34-25-07	L.A. Welcome		24
87	36-21-05	Sparling/King Co.		41
88	21-24-07	Raging River/King Co.		40
89	32-22-07	Lake Retreat/King Co.		82
90	35-22-02	Sprowls/King Co.		40
92	23-26-07	Swan Quarry/King Co.		76
93	31-23-07	Route 18 Fill Project/Plumb Creek Timber Co.	SG	40

LEGAL NON-CONFORMING MINERAL RESOURCE SITES

Mineral Resources Property Information for the Mineral Resources Map

AND EXISTING MINERAL RESOURCE SITES IN THE FPD

Map #	Section-Township-Range	Site Name and/or Owner/Operator	Product	Total Site Acreage (approx.)
94	06-19-07	R. & B. Jensen	SG	13
95	29-20-07	Moulder Pit/Weyerhaeuser Co.	SG	60
96	30-21-07	R. Morris and Palmer Coking Coal	SG	158
97	15-22-06	Maple Valley/R&H Partnership	SG	6
98	07-23-06	PG and RT Schroeder	SG	22
99	23-26-06	Chapman Pit/Alberg	SG	53
100	34-25-07	L.A. Welcome	SG	5
101	29-23-09	PG and RT Schroeder	SG	53
102	26-22-05	Calhoun/King Co.	SG	23
103	34-22-06	Summit/King Co.	SG	176
104	13-20-06	Enumclaw Quarry/Richard Pierotti	RS	14
105	06-20-07	Veasey/Dwight and Doris Garrett	RS	8
106	27-26-11	Miller River QuarryMRGC Timberland	R	11
107	37-79-20	Black River Quarry/Lloyal Newburn	R	5
108	37-79-20	Black River/MaryEllen Hughes	R	9
109	34-22-07	Elk Pit/Mutual Materials Co.	Cl	60
110	31-21-07	Palmer Coking Coal Co.		20
111	16-24-07	Hoover/King Co.		40
112	04-25-07	Redmond Pit/Cadman Gravel Co.	SG	18

***KEY**

SG = Sand & Gravel
RS = Rock & Stone
R = Rock
C = Coal
ShCl = Shale & Clay
Cl = Clay
S = Silica

NOTE: Each map number corresponds to one or more parcel number(s), and in some cases different owners and operators. The acreage listed represents the sum acreage of all the parcels of the site. Please refer to the technical appendix for the parcel-specific version of this table.

CHAPTER 4
ENVIRONMENT

The environment in King County includes a rich and valuable array of natural resources ranging from marine and freshwater environments, to highly urbanized areas, to nearly pristine landscapes in the foothills of the Cascades. The policies in this chapter protect that environment, ensure its effective management, support its restoration where needed, and support the Strategic Plan's goal of environmental sustainability. King County residents depend on sound policies not only to protect public health and safety, but also to preserve quality of life for future generations. King County is committed to pursuing partnerships, cost-effective strategies, and best management practices to optimize the long-term protection and restoration of the environment within available resources. These polices guide King County's environmental development regulations as well as incentives, education, and stewardship programs in unincorporated King County.

One of the central tenets of the Growth Management Act (GMA), the Countywide Planning Policies, and King County's Comprehensive Plan is that new growth be focused within designated urban areas with the aim of protecting resource lands (forestry, agriculture, and mining) and reducing development pressure on the Rural Area. At the same time, GMA requires that critical areas be designated and protected. Critical areas include wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas and geologic hazard areas. Achieving development goals must be integrated with protecting critical area functions and values. Individual solutions can be tailored by following the guidance of comprehensive plan policies that recognize both critical area protection and the need to reduce urban sprawl.

All parts of the county—from densely developed urban areas, to farm and forest land, to the Rural Area—have a role to play and a common interest in environmental protection. Responsibility for environmental protection cannot fall on one geographic area or category of citizens alone. Tools for environmental protection, for all residents whether in the Urban or Rural Area, include buying locally grown produce at a farmers market, taking care to avoid polluted discharges to storm drains, riding the bus, investing in natural resource programs like those offered by the King Conservation District, complying with stormwater standards, controlling invasive plants, and protecting forest cover. For urban residents, environmental protection occurs through different means, including investing in wastewater treatment and stormwater improvements, protecting greenbelts and other remnants of native habitats, and living in densely developed areas. For rural residents, it means protecting aquifers used for drinking water, using development practices that slowly infiltrate stormwater, and using best management practices to protect

water quality. On farm lands, forest lands, and lands in the Rural Area, stewardship and technical assistance provides opportunities for supporting long-term resource use while protecting the environment.

One of the most significant environmental issues facing King County during the past decade was the listing of Chinook salmon and bull trout as threatened under the Endangered Species Act (ESA). Since 2000, the region has seen unprecedented cooperation between local governments, citizens, tribes, conservation districts, non-profit groups, and federal and state fisheries managers to develop watershed-based Water Resource Inventory Area (WRIA) plans for salmon conservation. These plans, known as the Shared Strategy for Puget Sound, form the basis for the federal recovery plan for Chinook salmon. Watershed partners are continuing to work together to implement and monitor these plans through WRIA Forums. King County has taken significant steps to increase protections for Chinook and other salmon species through changes in daily operations (like maintenance of county roads and parks), increased open space protection, tax incentives, and updated development regulations. The lessons learned and relationships developed through cooperative planning in response to the Chinook salmon and bull trout listings should help to inform King County's response to new listings, and bolster efforts to prevent future species listings.

Individual species protections under the ESA continue to play an important role. At the same time, both nationally and internationally, many governments are initiating multi-species approaches aimed at conserving biodiversity. Biodiversity refers not only to plants and animals but also to their habitats and the interactions among species and habitats.

Protection of biodiversity in all its forms and across all landscapes is critical to continued prosperity and quality of life in King County. In fisheries, forestry, and agriculture, the value of biodiversity to sustaining long-term productivity has been demonstrated in region after region. With the impending effects of climate change, maintaining biodiversity will be critical to the resilience of resource-based activities and to many social and ecological systems. The continued increase in King County's population and the projected effects of climate change make conservation a difficult but urgent task. The protection and restoration of biodiversity and of a full range of supporting habitats is important to King County. King County will incorporate these considerations in its operations and practices, ranging from its utility functions (such as wastewater, solid waste and stormwater management) to its regulatory and general government practices.

State and federal agencies are undertaking biodiversity initiatives. The Washington Biodiversity Council was created by the Governor in 2004, in part, with the aim of refocusing state conservation efforts from the species level to the ecosystem level. In 2009, the Washington State Department of Fish and Wildlife (WDFW) released Landscape Planning for Washington's Wildlife: Managing for Biodiversity in Developing

Areas. The goal of this document is to provide information to planners and others that can be used to minimize the impacts of development on fish and wildlife and to conserve biodiversity. The United States Forest Service also integrates biodiversity principles into its land management practices. Internationally, Local Governments for Sustainability's Local Action for Biodiversity Project (LAB) convenes local governments from around the world, including King County, to establish strategies for the conservation of urban biodiversity.

Climate change has the potential for severe and wide-ranging impacts on public health, safety, and welfare; the economy; and the environment. Climate change in the Pacific Northwest is projected to bring more severe weather events including heat events, winter storms and summer droughts, decreased water supplies for people and fish, and changes in habitat and species distribution. King County is a leader in taking steps to reduce greenhouse gas emissions and to adapt to climate change.

New approaches for stormwater management that mimic the natural functions of soil and forest cover in slowing and filtering stormwater runoff, known as Low Impact Development (LID) techniques, are providing additional options for stormwater management. In conjunction with a comprehensive stormwater management program of structural controls and best management practices, LID techniques can result in reduced impacts from stormwater runoff and protection of the ecological functions of the landscape and surface waters. LID techniques work in tandem with structural controls and other best management practices to meet other objectives such as retention of canopy cover, riparian habitat and native soils that help protect biodiversity, improve air quality, and create a better and more sustainable environment and quality of life for King County citizens.

Environmental initiatives during the past decade have underscored the need for monitoring changes in our environment and the effectiveness of our efforts to protect it. Monitoring and performance measurement help local governments to target limited resources on existing and emerging environmental problems, determine whether actions are having their intended effect, promote accountability, and adapt approaches to environmental management. The Department of Natural Resources and Parks assesses environmental conditions with a variety of monitoring programs. The results are presented in the environmental indicator section of KingStat and are used to develop appropriate county responses and provide an opportunity to collaborate and partner with other organizations in making improvements.

The Environment Chapter reflects the overarching goal of the Countywide Planning Policies to protect, restore and enhance the quality of the natural environment in King County for future generations. The Environment Chapter has been updated to integrate county strategies for protection of land, air, and water; to emphasize implementation of salmon recovery plans; to reflect increased emphasis on climate change and biodiversity; and to support monitoring and adaptive management. These polices guide King

County's environmental regulations and incentives, education and stewardship programs in unincorporated King County.

I. Natural Environment and Regulatory Context

A. Integrated Approach

Environmental protection efforts need to be integrated across species, habitats, ecosystems, and landscapes. Efforts to reduce flooding or protect water quality and habitat cannot work successfully in isolation from management of land use across the larger contributing landscape. Efforts to protect one particular species or resource type could be detrimental to another if such efforts are not considered in an ecosystem context.

Likewise, the tools King County uses to protect the environment—incentives, regulations, changes in county operations, planning, capital projects, land acquisition, education, stewardship, and monitoring—also need to be integrated. For example, the regulatory buffers placed around wetlands need to consider changing conditions in the watershed around the wetland. These conditions are influenced by land use, stormwater management, clearing and grading requirements, and protection of forest cover and open space. Incentives, education, and technical assistance programs also must work hand-in-hand so that land owners can access a seamless set of programs that work together to accomplish environmental protection.

As part of the Comprehensive Plan Update in 2004, King County updated its critical areas, stormwater management, and clearing and grading regulations consistent with GMA requirements to include best available science. These regulations are functionally interrelated, with the standards for protection of wetlands, aquatic areas, and wildlife areas also working in tandem with landscape-level standards for stormwater management, water quality, and clearing and grading.

Habitat conditions vary throughout unincorporated King County, with higher quality habitat generally found in less developed areas of the county. However, both urban and rural habitats play a critical role for various species and during different life stages. The environmental protections we use should consider development patterns, habitat conditions, and the roles played by different geographic and ecologic areas. A geographic and watershed-based approach to planning, stewardship, and environmental protection acknowledges that different areas of King County may have different environmental and resource values and face different levels of development pressure. Therefore, methods of protecting critical areas that respect those distinctions must continue to evolve to balance the protection of the environment with the need to reduce urban sprawl and preserve our quality of life.

In 2004, the county strengthened incentives available to land owners through its Public Benefit Rating System, a tax incentive program through which landowners can receive reduced property taxes in exchange for commitments to protect open space and natural resources. However, incentives are not just limited to tax incentives, but can include regulatory flexibility (e.g., alternatives to fixed-width buffers), streamlined permit processing, reduced permit fees, and free or low-cost technical assistance. Additionally, the King County Strategic Plan, released in 2010, has an environmental sustainability goal to "safeguard and enhance King County's natural resources and environment." The first two objectives of this goal, "Protect and restore water quality, biodiversity, open space, and ecosystems" and "Encourage sustainable agricultural and forestry," both rely heavily on incentives as integral strategies.

E-101 **In addition to its regulatory authority, King County should use incentives to protect and restore the natural environment whenever practicable. Incentives should be monitored to determine their effectiveness in terms of protecting natural resources.**

E-102 **King County should take a regional role in promoting and supporting environmental stewardship through direct education, coordinating of educational efforts and establishing partnerships with other entities that share similar environmental concerns and stewardship opportunities.**

King County coordinates many programs with other agencies and governments. The cooperative development of watershed-based salmon recovery plans over the last decade has brought together local governments, federal and state agencies, citizens, and interest groups. Continued collaboration at the watershed level will be necessary to make these habitat-focused plans a reality. Tribes with treaty reserved fishing rights and the WDFW co-manage harvest and hatchery actions. Working closely with these co-managers will be essential to ensure that watershed-based salmon recovery strategies effectively integrate habitat, harvest and hatchery actions.

The Puget Sound Partnership was created by the Washington State Legislature and Governor in July 2007 to achieve the recovery of the Puget Sound ecosystem by the year 2020. The Partnership's goal is to consolidate and significantly strengthen the federal, state, local, and private efforts undertaken to date to protect and restore the health of Puget Sound and its watersheds. Additional discussion of King County's participation in the Puget Sound Partnership is found later in this chapter.

King County also works closely with federal and state agencies, cities, and other counties to try to integrate and streamline compliance with federal mandates like the Clean Water Act, Clean Air Act, and Endangered Species Act. In doing so, multiple benefits can be achieved. For example, in some cases

mandated monitoring for Clean Water Act compliance can provide useful information to support salmon conservation efforts.

E-103 **King County should coordinate with local jurisdictions, universities, federal and state agencies, tribes, citizen interest groups, special districts, businesses, and citizens to implement, monitor, and update Water Resource Inventory Area plans for all areas of King County.**

E-104 **Development of environmental regulations, restoration and mitigation projects, and incentive and stewardship programs should be coordinated with local jurisdictions, federal and state agencies, tribes, special interest groups and citizens when conserving and restoring the natural environment consistent with Urban Growth Area, Rural Area and designated Resource Land goals.**

King County will use existing and updated subarea and functional plans and Salmon Recovery Plans to provide guidance to programs, regulations and incentives to protect and restore environmental quality.

E-105 **Environmental quality and important ecological functions shall be protected and hazards to health and property shall be minimized through development reviews and implementation of land use plans, Water Resource Inventory Area plans, surface water management plans and programs, flood hazard management plans, environmental monitoring programs, and park master plans. These plans shall also encourage stewardship and restoration of critical areas as defined in the Growth Management Act, and include an adaptive management approach.**

E-106 **The protection of lands where development would pose hazards to health, property, important ecological functions or environmental quality shall be achieved through acquisition, enhancement, incentive programs and appropriate regulations. The following critical areas are particularly susceptible and shall be protected:**

- **a. Floodways of 100-year floodplains;**
- **b. Slopes with a grade of 40 percent or more or landslide hazards that cannot be mitigated;**
- **c. Wetlands and their protective buffers;**
- **d. Aquatic areas, including streams, lakes, marine shorelines and their protective buffers;**

e. Channel migration hazard areas;

f. Critical Aquifer Recharge Areas;

g. Fish and Wildlife Habitat Conservation Areas; and

h. Volcanic hazard areas.

The State Environmental Policy Act (SEPA) requires King County to consider the environmental impacts of proposed actions that may have a significant adverse environmental impact. Over the years, King County has adopted development regulations that address many of the impacts that are likely to occur as a result of development. In many cases, King County's regulations adequately address environmental impacts and development proposals do not require additional mitigation under SEPA. However, there may be certain development proposals or unusual circumstances not contemplated by the development regulations that require further mitigation under SEPA. This principle is articulated in King County's SEPA regulations codified in K.C.C. Chapter 20.44. The presence of a species listed as endangered or threatened by the federal government is such an unusual circumstance.

E-107 Regulations to prevent unmitigated significant adverse environmental impacts should be based on the importance and sensitivity of the resource.

E-108 King County may exercise its substantive authority under the State Environmental Policy Act to condition or deny proposed actions in order to mitigate associated individual or cumulative impacts such as significant habitat modification or degradation that may actually kill, injure or harm listed threatened or endangered species by significantly impairing essential behavioral patterns, including breeding, feeding, spawning, rearing, migrating or sheltering.

E-109 King County should promote efficient provision of utilities and public services by exempting minor activities from its critical areas regulations, if the agency has an approved best management practice plan approved by King County, and the plan ensures that proposed projects that may affect habitat of listed species be carried out in a manner that protects the resource or mitigates adverse impacts.

B. Policy and Regulatory Context

1. Endangered Species Act

In March 1998, The National Marine Fisheries Service (NMFS) proposed to list the Puget Sound Chinook salmon as "threatened" under the ESA. This Chinook population was officially listed in March 1999. The listing of Chinook as threatened triggered a requirement for consultations with NMFS on any activity requiring a federal permit, relying on federal funds, or being sponsored by a federal agency.

Since that listing, several other aquatic species present in King County have been listed as threatened, including two additional salmonids: bull trout in November 1999, and steelhead in May 2007. Coho salmon are considered a Species of Concern. Puget Sound's resident Orca, which rely almost solely on salmon as a food source, were also listed under the ESA as endangered in November 2005.

NMFS and the United States Fish and Wildlife Service have issued rules describing regulations deemed necessary to conserve Puget Sound Chinook and other West Coast salmonids. These rules, commonly referred to as "4(d) rules," legally establish the protective measures that are necessary to provide for conservation of a listed species. These rules also make it a violation of the ESA for any person, government, or other entity to "take" a threatened species. Prohibited "take" under the ESA includes harm through significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, spawning, rearing, migrating or sheltering.

The 4(d) rule for Chinook and steelhead also establishes conditions or limits under which certain categories of activities that may result in "take" may be conducted. King County takes actions under the conditions established for two categories of activity: routine road maintenance and habitat restoration projects funded by the State Salmon Recovery Funding Board.

Final ESA Recovery Plans have been developed for Chinook (2007) and bull trout (2004). A final Recovery Plan for Orca whales was published in 2008. These plans describe recovery goals for the species, specific measures to address the factors that are limiting the health of the species, and timeframes and cost estimates for recovery measures. Conservation actions identified in Water Resource Inventory Area plans for King County watersheds are now being implemented subject to available funding and are anticipated to contribute significantly to the achievement of recovery goals for these species and their eventual removal from the Endangered Species list.

2. Clean Water Act

Protecting the quality and beneficial uses of surface waters is a requirement of the federal Clean Water Act (CWA). Two of the major programs to achieve state and local compliance with the CWA are: the National Pollutant Discharge Elimination System (NPDES) permits for municipal discharges (including wastewater and municipal stormwater), and broader pollutant limits known as Total Maximum Daily Loads (TMDLs).

Additionally, in 2008 the US Environmental Protection Agency (EPA) and the US Army Corps of Engineers issued joint guidance on off-site compensatory mitigation for impacts to aquatic resources under the Clean Water Act. These new federal rules change how mitigation shall occur for unavoidable permitted impacts to aquatic resources.

a. National Pollutant Discharge Elimination System

Authority for administering the NPDES Program has been delegated by the EPA to the Washington State Department of Ecology (Ecology). King County must comply with NPDES permit conditions for individually permitted activities, such as construction site activities, classed industrial sites or wastewater discharges, and for discharges from its municipal stormwater system that are regulated under a general municipal stormwater permit. The current Phase I Municipal Stormwater Permit, set to expire August 2012, contains prescriptive requirements for controlling and monitoring pollutants in municipal stormwater. It is anticipated that the next permit will continue to contain prescriptive requirements for controlling municipal stormwater, including new requirements for retrofitting, implementing Low Impact Development techniques, and additional requirements to meet TMDL actions. It is also anticipated that the monitoring requirements will be substantially modified in the next permit to require participation in a regional stormwater monitoring program rather than requiring jurisdiction-run programs.

b. Water Quality Standards and Total Maximum Daily Loads

The Federal Clean Water Act (CWA) and Washington State law require the state to develop standards for surface and groundwater and for sediments collectively known as “Water Quality Standards” (WQS). These standards are intended to ensure that our waters can be beneficially used for purposes we all value, like fishing, swimming, boating, and drinking, as well as industrial and agricultural purposes and fish habitat.

Additionally, the state must prepare a list of surface water bodies that do not meet WQS. This list, known as the Water Quality Assessment (WQA), is prepared for Washington State by Ecology, and must be submitted to the EPA every two years. The water bodies in Category 5 of this list consist of “water quality

limited" or "impaired" estuaries, lakes, rivers and streams, estuaries, and marine waters that fall short of state surface water quality standards.

For water quality impaired waters on the Category 5 list, EPA requires that states establish a Total Maximum Daily Load (TMDL). A TMDL, also called a Water Quality Improvement Project, analyzes how much of a pollutant can be discharged to a water body and still meet state water quality standards. The Water Quality Improvement Project also includes a strategy for controlling pollution and monitoring requirements to test the Project's effectiveness. TMDLs potentially affecting unincorporated King County have been approved by EPA for the Snoqualmie River, Little Bear Creek, Bear-Evans Creek Basin, Issaquah Creek, Cottage Lake, Lake Fenwick, Lake Sawyer, the Duwamish River and Lower Green River. TMDLs under development or pending US EPA approval include Green River and Newaukum Creek, White and Puyallup Rivers, and Soos Creek.

King County may be called upon by Ecology to participate in some TMDLs within incorporated cities within King County (e.g., monitoring in Fauntleroy Cove for the Fauntleroy Creek TMDL).

A complete listing of TMDLs and the Water Quality Assessment list can be found on Ecology's web site at http://www.ecy.wa.gov/programs/wq/links/wq_assessments.html.

Washington State Department of Ecology's recent TMDL analysis of temperature for the Snoqualmie and Green Rivers indicated that in some areas, summer water temperatures exceed water quality standards and can interfere with salmon survival. Maintaining and increasing the shallow groundwater and hyporheic zones associated with rivers contribute to maintaining water temperatures that can support local ecosystems.

E-110 **Surface waters designated by the state as Water Quality Impaired under the Clean Water Act (water bodies included in Category 5 of the Water Quality Assessment) shall be improved through monitoring, source controls, best management practices, enforcement of existing codes, and, where applicable, implementation of Total Maximum Daily Load plans. The water quality of other water bodies shall be protected or improved through these same measures.**

E-111 **King County shall evaluate development proposals subject to drainage review to assess whether the proposed actions are likely to cause, contribute to, or lead to violations of Washington State water quality standards in receiving waters for individual pollutants of concern and identify mitigation or requirements to avoid the impacts when appropriate.**

There are certain actions that can be used to help moderate water quality. Such actions may include maintaining and increasing connections between surface waters and shallow groundwater or hyporheic flow, promoting riparian vegetation and low impact development techniques, and increasing the physical complexity of river channels.

E-112 **When environmental monitoring indicates impaired water quality, such as increased water temperature, fecal contamination, low oxygen, excess nutrients, metals, or other contaminants, King County shall take actions which will help moderate those impairments.**

3. Growth Management Act and Critical Areas Protection

The GMA requires that critical areas be designated and protected. Critical areas include wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas and geologically hazardous areas. This chapter establishes policies for designating and protecting critical areas. King County Code Title 21A provides the regulatory framework for these policies.

The GMA also requires local governments to include the best available science (BAS) in developing policies and development regulations to protect the functions and values of critical areas, and to give special consideration to the conservation or protection measures necessary to preserve or enhance anadromous (fish that spawn in freshwater and spend part of their lifecycle in salt water) fisheries.

4. Shoreline Management Act

The Shoreline Management Act (SMA) requires each city and county with Shorelines of the State to adopt a Shoreline Master Program that complies with state guidelines but that is tailored to the specific needs of the community. The SMA applies to all marine waters, streams with a mean annual flow of 20 cubic feet or more per second, and lakes that are 20 acres or more in size. The SMA also applies to upland areas called “shorelands” within 200 feet of these waters, as well as associated wetlands and floodplains. The program’s goals are set by state law and include protecting natural resources, increasing public access to shorelines and encouraging businesses such as marinas along the waterfront.

Under the SMA, the Shoreline Master Program includes both a Shoreline Master Plan and implementing shoreline land use and development regulations. The GMA requires that a local government’s Comprehensive Plan, Shoreline Master Plan, and development regulations, including both shoreline

regulations and critical area regulations, must be consistent with each other. The Shoreline Master Program is included in its entirety in Chapter 5.

5. Puget Sound Partnership

The Puget Sound Partnership was created by the Washington State Legislature and Governor in July, 2007 to achieve the recovery of the Puget Sound ecosystem by the year 2020. Its goal is to consolidate and significantly strengthen the federal, state, local, and private efforts undertaken to date to protect and restore the health of Puget Sound and its watersheds. The Puget Sound Partnership is the umbrella for salmon recovery efforts in Puget Sound, including implementation of salmon recovery plans prepared for Chinook salmon. King County, through its land use decisions, management of stormwater and wastewater discharges, development of reclaimed water supplies, cooperative habitat protection and restoration projects, and ongoing monitoring is actively involved in the conservation and recovery of Puget Sound. King County has the opportunity, and responsibility, to make significant contributions to protecting and restoring Puget Sound.

E-113 **King County should actively participate in updating and implementing the Puget Sound Partnership's 2020 Action Agenda.**

E-114 **King County should collaborate with other watershed forum partners to ensure that recommendations of watershed-based salmon recovery plans for King County are integrated with the Puget Sound Partnership recommendations.**

The Puget Sound Partnership maintains a Strategic Science Plan and Biennial Science Work Plan which provide an overall framework for development and coordination of specific science activities necessary to support Puget Sound ecosystem protection and restoration under the Partnership's Action Agenda.

E-115 **The county should identify opportunities for coordinating its existing monitoring programs with monitoring and assessment work conducted through the Puget Sound Partnership's Strategic Science Plan and Biennial Science Work Plan.**

II. Climate Change

Arguably the single most pervasive environmental challenge that King County faces now and into the future is global climate change. Impacts from climate change have the potential to dramatically impact ecosystems, agriculture, economy, biodiversity, and public health and safety in myriad and interrelated ways. The effects of climate change will not be felt equally across King County, with some communities facing particular vulnerabilities. Sustaining quality of life and our environment requires a significant commitment on the part of King County to both reducing greenhouse gas emissions, the primary driver of human caused climate change, and adapting to climate change impacts in an ever-changing and increasingly dynamic landscape.

Climate Change Science and Impacts

Human caused sources of greenhouse gas emissions, including carbon dioxide and methane, are causing unprecedented and severe changes in global and local climate systems. This is the consensus view of the world's leading scientists, including the Intergovernmental Panel on Climate Change (IPCC) and the US National Academy of Sciences (NAS).

In King County, decreasing mountain snowpack, increasing flooding, and rising sea levels are evidence that the climate system is changing. While many factors affect the climate system and natural environment, including land use changes, scientists have attributed many changes in significant part to recent increases in atmospheric greenhouse gas concentrations. The County faces significant environmental and economic challenges stemming from climate change, including stressed and rapidly changing ecosystems, costly impacts on public and private property, and new public health risks resulting from worsening air quality, additional heat related impacts, and increased exposure to infectious disease.

The IPCC, NAS, University of Washington Climate Impacts Group and the King County Water and Lands Resource Division have already observed important long term trends in global and local climate systems. Over the last century, changes include:

- An increase in average annual temperatures of about 1.5°F (0.7-0.8°C) in the Pacific Northwest between 1920 and 2003;
- A rise in sea levels, with a worldwide average estimated at about 6.7 in (0.17m) in the 20th century;
- A decrease in mountain snowpack, with April 1 declines of 30-60% at many individual stations in the Pacific Northwest from 1950-2000;
- Global observations that cold days and nights have become less frequent, hot days and nights have become more frequent, and heat waves have increased in number and duration;

- Some evidence that severe storms and floods are occurring more frequently locally, as observed at 8 weather stations and at 10 river gauging stations with minimal upstream flood controls in Snohomish, Pierce, and King County; and
- A significant trend of decreasing summertime water volume in local rivers, especially in the months of August and September, as observed at 10 river gauging stations with minimal upstream water diversions in Snohomish and King County.

According to the Washington State Climate Change Impacts Assessment and the University of Washington Climate Impacts Group, among other leading scientists, predicted impacts to the Pacific Northwest and King County include:

- Increased average annual temperatures, increased temperatures across all seasons, significantly increased summer temperatures, and increased urban “heat island” effects, in which urban air and surface temperatures are higher than in the Rural Area due to storage of heat in pavement and buildings;
- Sea level rise of approximately 1 foot or more by 2100 leading to increased coastal flooding, inundation, saltwater intrusion of coastal aquifers, nearshore habitat loss, and erosion;
- Increased ocean temperatures, decreased ocean pH, and altered hydrology, which will affect the marine ecosystem in numerous ways;
- Changes to the timing and magnitude of streamflows due to snowpack and glacier reduction, increased winter rainfall, decreased winter snowfall, and earlier spring melt;
- Increased stress to regional water supplies due to increased frequency of drought events and increased demand;
- Negative effects on public health including thermal stress, respiratory problems due to increased smog, and increased exposure to certain infectious diseases;
- Increased stress to forests in the foothills, and potentially increased growth in forests at higher elevations that were snow-dominated;
- Increased stress to plant and animal species due to vegetation changes, food web disruption, streamflow changes, and increased freshwater and marine water temperatures;
- Decreased summer hydropower production and increased summer cooling power demands;
- Altered regional distributions of many species, including salmon and orca whales as well as marine and freshwater phytoplankton (and zooplankton, which are the base of aquatic food webs);
- Potentially more extreme weather events, including precipitation, heat, and coastal storms; and
- Potential migration of people to King County from other regions that may be more severely impacted by climate change impacts such as sea level rise and water shortages.

King County Greenhouse Gas Emissions

Human-caused climate change results primarily from greenhouse gas (GHG) emissions such as methane, carbon dioxide and nitrous oxide, which are measured in metric tons of carbon dioxide equivalent (MTCO2e). King County has recognized that it must reduce the GHG emissions of its operations and support broader efforts to reduce countywide emissions.

Government Operations

King County government operations create greenhouse gas emissions. Major government sources are associated with combustion of diesel and gasoline for transit buses and fleet vehicles, methane from landfills, electricity usage in buildings and for wastewater treatment, and emissions from the production, use and disposal of government purchased goods and services.

King County is making progress in reducing greenhouse gas emissions from county operations, with emissions from energy-related non-transit sources decreasing 13.1 percent between 2000 and 2010. During this time emissions directly associated with transit service increased by 10.3 percent as the transit system grew to meet rider demand.

Countywide

Within King County's geography, greenhouse gas emissions are primarily caused by fossil fuel use (gasoline and diesel) for transportation and to a lesser but significant extent to heat buildings (natural gas and heating oil). Additional significant emissions are associated with consumption in King County, but these sources do not necessarily occur within its geographic borders. These emissions are created through the production, transport, sale, use, and disposal of imported goods and services such as food and electronics. Between 2003 and 2008, emissions produced in geographic King County increased 5.5 percent, which reflects a stabilization of per capita greenhouse gas emission. However, sustained focus on reducing emissions will be needed to achieve countywide emissions reduction goals.

King County elected officials, management and staff are taking leadership roles in broader countywide emissions reduction efforts. These roles include spearheading action by convening and partnering with King County cities, businesses, non-profits and community groups to:

- Develop regional emissions targets and track progress toward these goals;
- Share local success stories and challenges;
- Pursue and share grants, resources and group funding sources;
- Provide coordinated outreach and messaging on climate change solutions;
- Raise the profile of climate efforts of King County cities and the county itself; and
- Coordinate efforts through workshops, presentations and conferences.

In addition to leading by example in reducing operational sources of emissions and organizing action at the countywide scale, King County is also playing important roles in reducing greenhouse gas emissions through sustainable land use policies, transportation investments, recycling infrastructure and policy, and through the advocacy and provision of critical services such as waste prevention, recycling and transit.

Preparing for Climate Change Impacts

Even if all greenhouse gas emissions ceased today, global and regional temperatures would continue to increase. Therefore, King County must be proactive in adapting to local climate change impacts. For King County, adaptation includes preparing for more frequent and severe flooding and droughts, developing capacity for reclaimed water, working with farm and forest owners to address climate change impacts, planning for effects of climate change on human health, taking steps to improve the resiliency of our natural and built environments, and ensuring that the County can continue to provide services such as transit, wastewater treatment, and flood protection.

E-201 King County should participate in and support appropriate local, regional and national efforts and organizations focused on reducing greenhouse gas emissions and preparing for climate change impacts.

Status of King County Climate Change Efforts

As articulated in King County's Strategic Plan, the 2010 King County Energy Plan, King County Climate Motion 12362, the 2012 King County Strategic Climate Action Plan and policies in this section of the King County Comprehensive Plan, a high bar has been set for county efforts to respond to climate change. Significant progress has been made. For example direct non-transit greenhouse gas emissions from government operations were reduced approximately 13.1 percent between 2000 and 2010, and countywide emissions have stabilized on a per capita basis between 2003 and 2008. Additionally, important steps have been taken to plan for and reduce operational and countywide vulnerabilities to climate change-related impacts such as flooding and sea level rise.

Despite this progress, the magnitude of the challenge is daunting. For example, achieving King County's long-term emissions reduction target of at least 80 percent below 2007 levels by 2050—the amount scientists tell us is necessary to avoid some of the most catastrophic impacts of climate change – will require significant changes to government operations and the broader fossil fuel-based economy.

King County's climate change related efforts are led and coordinated by the Department of Natural Resources and Parks. The broad scope of climate change issues means that staff from all departments – from the Department of Public Health and the Department of Transportation to the Department of Executive Services and the Department of Development and Environmental Services – share

responsibilities and resources to implement the county's climate change policies. This model of collaboration works in implementing many related projects and programs, from green building and sustainable development, to energy efficiency and renewable energy projects, to climate change impacts preparedness and planning efforts. This model also works as a way to leverage limited available resources to accomplish as much as possible.

In 2012, the county will initiate its Strategic Climate Action Plan (SCAP). The SCAP will provide the mechanism by which the county will refine specific strategies and program activities to achieve the twin objectives of reducing greenhouse gas emissions and adapting to climate change impacts. Additionally, the SCAP will identify clear performance targets (how much change is the county attempting to achieve) for those strategies and priority activities. It will allow for the reporting of all strategies, program activities, and performance measures related to climate change in one location. By 2015, the county intends to combine the SCAP and Energy Plan into one plan to allow for a more efficient and cohesive use of county resources dedicated to these interrelated issues and provide a platform for unified reporting on the county's efforts to reduce energy use and the effects of climate change.

A. Assessment

King County has completed regular inventories and assessments of greenhouse gas emissions associated with government operations as well as emissions associated with all citizen, resident and business activity in the county since 2000. These assessments have provided valuable data to inform actions that will reduce greenhouse gas emissions as well as to monitor progress toward meeting emissions reduction targets.

In 2006, King County joined the Chicago Climate Exchange (CCX) and tracked and reported emissions from government operations via this program through 2010. New protocols for monitoring and verifying emissions from local government operations have emerged, including through The Climate Registry, and King County continues to annually assess operational greenhouse gas emissions.

In addition to tracking emissions from government operations, King County also frequently assesses greenhouse gas emissions associated with all resident, business, and other local government activities in King County. Accounting for countywide emissions can be challenging, as it requires diverse sources of data and information, and there are currently no county-scale accounting protocols that are widely accepted. In partnership with the Puget Sound Clean Air Agency, the City of Seattle, and the US Department of Energy, King County conducted a comprehensive assessment of 2008 calendar year greenhouse gas emissions in King County. These inventories quantified all sources within the county's geographic borders and also for the first time estimated emissions associated with local consumption of

food, goods and services, regardless of where these commodities were produced. This work shows that through a consumption perspective, sources of emissions associated with personal transportation, home energy usage, food, goods such as furniture and electronics, and services such as health care and banking, are all nearly equal.

E-202 **Through reporting on its major environmental sustainability programs, King County shall assess and publicly report on:**

a. Its normalized and total energy usage and total greenhouse gas emissions associated with county operations;

b. Countywide greenhouse gas emissions associated with resident, business, and other local government activities; and

c. countywide greenhouse gas inventories that quantify all direct local sources of greenhouse gas emissions as well as emissions associated with local consumption.

E-203 **King County should collaborate with other local governments regionally, nationally and internationally to set transparent standards to account for the net energy and greenhouse gas emissions impacts of government actions such as constructing transportation infrastructure and providing services such as recycling and transit and should assess and publically report these impacts as practicable.**

E-204 **King County should collaborate with experts in the field of climate change, including scientists at the University of Washington's Climate Impacts Group, to monitor and assess the impacts of climate change in King County.**

B. Reducing Greenhouse Gas Emissions

King County is leading by example in reducing operational sources of greenhouse gas emissions through efforts such as:

- Green building and sustainable development practices that reduce emissions of capital facilities projects;
- Purchasing and maintenance practices that reduce emissions associated with the production, use and disposal of goods and services;
- Modifying operations of county buildings and facilities that reduce emissions and resource demand;

- Purchasing and efficiently using alternative vehicles such as electric powered vanpools and hybrid cars and buses;
- Improving energy efficiency and producing renewable energy sources at King County's wastewater treatment and solid waste disposal facilities; and
- Protecting forested areas, encouraging and supporting active stewardship, and undertaking reforestation projects that enhance biological carbon sequestration.

King County is also supporting emissions reductions at the broader countywide scale through sustainable land use policies, transportation infrastructure, and through the provision of important services such as recycling and transit, including actions and policies such as:

- Land use designations and zoning that influence the pattern and density of development and the level of reliance on single occupancy vehicles;
- Use of voluntary tools like Transfer of Development Rights to reduce development density on Rural and Resource Lands;
- Building codes and facilities standards that can influence the types of building materials and future energy demands; and
- Promoting the use of transit and non-motorized travel modes to decrease vehicle miles traveled.

Many actions that reduce greenhouse gas emissions result in additional benefits, such as saving energy and fuel costs, improving health, and minimizing other types of air and water pollution. For example, healthy communities, as described in Chapter 2, have been shown to have significantly below average per capita greenhouse gas emissions while at the same time saving residents money, supporting healthier lifestyles and creating stronger communities.

In some cases, county actions are direct sources of greenhouse gas emissions, but when considered at a broader scale have a net emissions reduction benefit. For example, providing public transportation results in significant direct greenhouse gas emissions, primarily from combusting diesel, but the availability of public transportation also reduces emissions from single occupancy vehicle trips that are avoided. Public transit also helps reduce traffic congestion and facilitates the development of denser, more efficient communities. As this example shows, there are broad and complex considerations that need to be taken into account in making decisions about greenhouse gas emissions reduction strategies.

Policies related to King County efforts to reduce operational and countywide greenhouse gas emissions are presented below. Policies related to green building and sustainable development can be found in Chapter 8, Services, Facilities and Utilities, relating to public development and Chapter 9, Economic Development, relating to private development. Policies related to reducing greenhouse gas emissions and adaptation strategies for agriculture and forestry can be found in Chapter 3, Rural Area and Natural

Resource Lands. Policies related to reduction of GHG emissions from transit and fleet vehicles can be found in Chapter 7, Transportation. Policies related to water supply, use of reclaimed water, and energy can be found in Chapter 8, Services, Facilities and Utilities.

Government Operations

E-205 **King County should seek to reduce greenhouse gas emissions from all facets of its operations and actions associated with construction and management of county-owned facilities, infrastructure development, transportation, and environmental protection programs.**

E-206 **King County shall reduce total greenhouse gas emissions from government operations, compared to a 2007 baseline by at least 80% by 2050.**

F-207 **King County shall develop near-term reduction targets of greenhouse gas emissions emanating from its government operations to help achieve the 2050 goal.**

E-208 **King County shall maximize the creation of resources from waste products from county operations such as gases produced by wastewater treatment and solid waste disposal in a manner that reduces greenhouse gas emissions and produces renewable energy.**

E-209 **King County will continue to evaluate its own maintenance and operations practices, including procurement, for opportunities to reduce its own emissions or emissions produced in the manufacturing of products.**

Countywide

Many King County cities, businesses, non-profits and citizens are taking steps to reduce greenhouse gas emissions. For example, at least 17 of the 39 King County cities have signed the US Conference of Mayors' Climate Protection Agreement, committing to emissions reduction targets for their communities and to take actions to reduce greenhouse gas emissions. In addition to individual commitments such as these, state and regional requirements and policies are providing a regional focus on reducing emissions.

The Washington State legislature established statewide greenhouse gas emission reduction requirements (RCW 70.235.020) and vehicle miles traveled reduction goals (RCW 47.01.440). The greenhouse gas emissions requirements are to limit emissions to 1990 levels by 2020, to twenty-five percent below 1990

levels by 2035, and to fifty percent below 1990 levels by 2050. The vehicle miles traveled goals are to decrease annual per capita vehicle miles traveled by eighteen percent by 2020, thirty percent by 2045, and fifty percent by 2050. The Puget Sound Regional Council incorporated these provisions into VISION 2040.

E-210 **King County shall collaborate with its cities, and other partners, to meet or exceed the statewide greenhouse gas emissions reduction requirement of 50 percent below 1990 levels by 2050.**

E-211 **King County shall collaborate with its cities and other partners to develop near term targets to achieve greenhouse gas emission reductions throughout the region to 80 percent below 2007 levels by 2050.**

E-212 **King County will work with its cities and other partners to establish a greenhouse gas emissions inventory and measurement framework for use by all King County jurisdictions to efficiently and effectively measure progress toward countywide targets.**

Renewable energy technology, such as solar power, has the potential for replacing a significant share of King County's energy portfolio. Renewable energy technologies that have the benefit of zero or very low levels of greenhouse gas emissions should be encouraged. The renewable technology industry is evolving and no single technology is guaranteed to fit all the county's alternative energy needs. King County should provide flexibility in its policies and regulations to adapt to the changing circumstances**.**

E-213 **King County should ensure that its land use policies, development and building regulations, technical assistance programs, and incentive programs support and encourage the use of viable renewable energy technologies that have zero or minimal greenhouse gas emissions.**

E-214 **King County, through its comprehensive plan policies and development regulations, should promote healthy community designs that enable walking, bicycling, and public transit use, thereby reducing greenhouse gas emissions and regional air pollution.**

New Development

Nearly every new development results in new sources of greenhouse house gas emissions. These include emissions from construction and land development, emissions created from producing and

transporting building materials, energy used in operating buildings and structures, and transportation associated with the development. Although the emissions associated with construction occur today, the emissions associated with energy and transportation will occur over the life of the development, which may extend for fifty years or more. This means that decisions we make today about development will have an effect on climate change far into the future.

Building and energy codes can assist in ensuring that new structures are energy efficient to the maximum extent practical. Land use policies that encourage or require compact urban development can also ensure that developments are located in ways that will result in the best use of transportation alternatives. However, these regulatory systems may not be adequate to address the impacts of all kinds of developments or may not have been updated to incorporate climate change impacts. The State Environmental Policy Act (SEPA) provides a tool that can be used to fill in the gaps of this regulatory scheme until a more robust regulatory system is available.

SEPA was enacted by the Washington State legislature in the 1970s and requires King County to look at a variety of environmental impacts from development proposals that may have a significant adverse impact on the environment, including impacts to the air. With the United States Supreme Court decision in Massachusetts v. EPA in 2007, and the Environmental Protection Agency's subsequent Endangerment Finding in 2009, greenhouse gas emissions have been recognized as coming within the scope of the federal Clean Air Act and the National Environmental Protection Act (NEPA) and, as a result, also within the scope of SEPA.

Executive Order PUT 7-10-1 requires King County departments to consider greenhouse gas emissions in their SEPA review. In implementing this direction, the Departments of Development and Environmental Services and Natural Resources and Parks developed a worksheet to assist project proponents in estimating their greenhouse gas emissions. Applicants have been required to include these estimates with the SEPA checklists since October 2007. More recently, the Washington State Department of Ecology has developed guidance to assist local governments throughout the state in including greenhouse gas emissions in their SEPA reviews. See http://www.ecy.wa.gov/climatechange/sepa.htm.

E-215 **King County shall evaluate proposed actions subject to the State Environmental Policy Act (SEPA) for their greenhouse gas emissions. King County may exercise its substantive authority under SEPA to condition or deny proposed actions in order to mitigate associated individual or cumulative impacts to global warming. In exercising its authority under this policy, King County should consider project types that are presumed to be not significant in generating greenhouse gas emissions and do not require review for their**

greenhouse gas emissions. Any standards related to consideration of greenhouse gas emissions through the SEPA process shall be subject to council review and adoption by ordinance.

C. Adaptation

Anticipation of environmental change has enabled institutions and societies to adjust and adapt in the past. Based on the potentially severe impacts of climate change to public health and safety, the environment, and economic prosperity in the King County region, the county needs to take action now to increase resiliency of our natural and built systems to climate change impacts using the best information available.

King County can increase resiliency and adapt to climate change through actions such as:

- Coordinated public health and disaster planning;
- Climate-sensitive land use planning;
- Investments in flood hazard management projects;
- Collaborative planning with water suppliers and development of reclaimed water sources;
- Comprehensive approaches to conserving biodiversity that may make habitats more resilient to climate change impacts;
- Information sharing and collaboration with other local governments developing strategies for climate change adaptation;
- Cooperation with farm and forest land owners to identify and address impacts of climate change; and
- Siting facilities and using sustainable building practices to reduce vulnerability to the impacts of climate change.

King County, in partnership with scientists from the University of Washington Climate Impacts Group and other agencies, has begun to implement and learn from practical preparedness steps. Examples include analyzing and planning for sea level rise impacts on Vashon Island and wastewater and road infrastructure, assessing and reducing flood impacts in partnership with the King County Flood Control District, and developing reclaimed water systems and markets. Effective climate change adaptation actions will require a high degree of coordination among state, regional and local governments, academic institutions, business leaders, and King County residents.

Recent research on local climate change impacts is helping to support planning and preparedness efforts. However, additional specific local information is still needed to understand how climate change will affect extreme weather, flooding, human health, and other important issues. Additionally, we know that some communities and populations may shoulder a greater burden from the impacts of both air pollution and climate change as a result of their location or abilities to adapt to changes, and the county may need to take proactive steps to address these inequalities.

Collaboration

E-216 **King County should take steps to raise awareness about climate change impacts, including impacts on human health, and should collaborate with climate science experts, federal and state agencies, and other local governments to develop strategies to adapt to climate change.**

E-217 **King County will work with its cities and other partners to formulate and implement climate change adaptation strategies that address the impacts of climate change to public health and safety, the economy, public and private infrastructure, water resources, and habitat.**

Built Environment

E-218 **King County should collaborate with climate scientists, federal and state agencies, and other local governments to evaluate and plan for the potential impacts associated with sea level rise.**

E-219 **King County shall consider projected impacts of climate change, including more severe winter flooding and heat events, when updating disaster preparedness, levee investment, and land use plans; siting King County infrastructure; and updating development regulations.**

E-220 **The county should inventory essential county facilities and infrastructure, including roads and wastewater treatment and conveyance facilities, that are subject to impacts that may be exacerbated by climate change, such as flooding and inundation from sea level rise, and develop strategies for reducing risks and mitigating future damages.**

Natural Environment

E-221 **King County should periodically review and evaluate climate change impacts on natural resources that its resource programs are designed to protect, such as open space, forests, fisheries, productive farmland, and water quality and treatment, in order to assess and improve the efficacy of existing strategies and commitments.**

E-222 **King County should collaborate with climate scientists in order to increase knowledge of current and projected climate change impacts to biodiversity.**

E-223 **King County shall consider projected impacts of climate change on habitat for salmon and other wildlife when developing long-range conservation plans and prioritizing habitat protection and restoration actions.**

E-224 **To foster resilience to climate change in ecosystems and species, the county should prioritize efforts such as the restoration of riparian vegetation to reduce warming in cold water systems, restore wetlands to reduce drought and flooding, improve connections between different habitats, facilitate migration opportunities for species whose ranges shift in latitude and altitude and protect and restore areas most likely to be resistant to climate change.**

Public Health

Vulnerable populations are often defined as groups whose unique needs may not be fully integrated into planning for disaster response. These populations include, but are not limited to, those who are physically or mentally disabled, blind, deaf, hard-of-hearing, cognitively impaired, or mobility challenged. Also included in this group are those who are non-English (or not fluent) speakers, geographically or culturally isolated, medically or chemically dependent, homeless, frail elderly and children. Public Health – Seattle - King County has established a Vulnerable Population Action Team to address the needs of this population.

See www.kingcounty.gov/healthservices/health/preparedness/VPAT.aspx

E-225 **Through land use and transportation actions, King County should work to reduce air quality and climate change related health inequities and the exposure of vulnerable populations to poor air quality and extreme weather events.**

E-226 **King County shall develop and incorporate into outreach efforts public health messages related to the health implications of climate change, particularly in urban communities, and the benefits of actions, such as using alternative transportation options that simultaneously reduce greenhouse gas emissions, improve air quality, and improve public health.**

D. Collaboration with Others

King County recognizes that the climate change challenge is worldwide in its scope, and that far reaching consequences to the environment and to humankind's quality of life may result if this issue is not

addressed effectively. King County's actions are important contributors to addressing this issue; however, its global nature will require cooperation across local, regional, state and international boundaries. King County can play important roles in collaborating with others on solutions, especially through community outreach, education, advocacy and information sharing with other local governments and universities.

E-227 **King County should support appropriate comprehensive approaches to reducing greenhouse gas emissions, such as market-based emissions reduction programs and products, renewable energy standards for electricity production, and vehicle efficiency performance standards.**

E-228 **King County should advocate for federal and state initiatives and grant and loan programs that support local investments in projects and programs such as community solar and energy efficiency retrofits to reduce greenhouse gas emissions and prepare for climate change impacts.**

E-229 **King County shall work with the business community to support efforts that reduce energy use and greenhouse gas emissions, and to promote King County and the Puget Sound region as a center for green manufacturing. The county shall also work with community groups, consumers, and the retail sector to promote the consumption of green-manufactured products.**

III. Air Quality

A. Overview

Clean air, free of pollutants, is essential for the day-to-day quality of life and long-term health of county residents. King County has shown critical leadership in forging solutions to air pollution and will continue to do so well into the future.

King County works for clean air in partnership with the Puget Sound Clean Air Agency (PSCAA), which has the lead regulatory and monitoring responsibilities for the region in accordance with the Clean Air Act. Underlying drivers of the Clean Air Act include protecting public health, reducing property damage, and generally protecting the environment. Because air quality impacts water quality, a better understanding is needed regarding the input of pollutants via air transport from both local and distant sources.

PSCAA is responsible for monitoring and regulating six "criteria air pollutants" using standards set by the EPA. The six "criteria" air pollutants are:

- Fine particulate matter (dust, soot, smoke);
- Ground-level ozone (smog);
- Carbon monoxide (gas primarily from vehicle exhaust);
- Sulfur dioxide (gas primarily from industrial processes like smelters, paper mills, and power plants);
- Oxides of nitrogen; and
- Lead.

PSCAA also focuses on reducing harmful air toxics that come primarily from wood smoke and diesel burning, as well as greenhouse gases such as carbon dioxide and methane from landfills.

Efforts to address climate change and improve air quality are strongly linked. For example, conversion from conventional to hybrid buses and fleet vehicles not only helps to reduce greenhouse gas emissions, but also reduces emissions of particulates. Additionally, a likely impact of climate change on air quality is an increase in ground-level ozone because higher temperatures enhance the conversion of precursors into ground-level ozone. Ozone can exacerbate asthma and reduce respiratory system functioning. Because of these linkages, there is significant overlap with this section and the climate change section of this chapter. Section II, subpart B of this chapter relates to reducing greenhouse gas emissions. These strategies usually concurrently reduce other types of air pollution. Section II, subpart C of this chapter describes the linkages between climate change and health impacts, including policies related to minimizing health inequities among vulnerable populations more negatively impacted by climate change and air pollution.

B. Ozone, Fine Particulate, Toxics

Reducing criteria pollutants will continue to be a primary focus for King County. The ozone strategy identified by PSCAA for our region focuses on reducing volatile organic compounds (VOCs), which are precursors to ozone formation. Emission of VOCs results mostly from vehicles, as well as to a significant degree from household chemicals and paint evaporation.

In addition to ozone, fine particulates also represent a serious health threat. Health studies have shown a significant association between exposure to fine particles and premature death from heart or lung disease. Fine particles can aggravate heart and lung diseases and have been linked to effects such as: cardiovascular symptoms; cardiac arrhythmias; heart attacks; respiratory symptoms; asthma attacks; and bronchitis. These effects can result in increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days. Individuals that may be particularly sensitive to fine particle exposure include people with heart or lung disease, older adults, and children. Diesel emissions are one of the county's largest sources of fine particulate emissions. King County's participation in the ultra-low sulfur diesel (ULSD) program, known as "Diesel Solutions," has made tremendous strides in cleaning up King County Metro's fine particulate emissions. Indoor burning and outdoor burning are a major source of fine particulates.

Lastly, as a large county with a mix of urban and rural land uses, King County will continue to face risks from air toxics. Examples of air toxics include benzene, formaldehyde, mercury, and dioxins. The air quality impact of toxics cannot be evaluated in isolation. Their greatest health risk comes from their combined effect. National air toxics assessment data indicate that air toxics risks in the Puget Sound region are in the top five percent in the nation. EPA and its regulatory partners at the State and local level identify steps to reduce toxic air pollutants and provide important health protections: reducing toxic emissions from industrial sources; reducing emissions from vehicles and engines through stringent emission standards and cleaner burning gasoline; and addressing indoor air pollution though voluntary programs.

Local air monitoring data done by the Washington State Department of Ecology indicates that diesel exhaust and wood smoke are key contributors to toxics.

In 2002, King County Metro became the first transit agency in the United States to test articulated hybrid-diesel electric buses. King County Metro currently owns 214 articulated hybrid buses, the largest such fleet in the nation. A National Renewable Energy Laboratory study found articulated hybrids provide a 30 percent reduction in greenhouse gases and are 40 percent more reliable than diesel fueled articulated buses.

Wood smoke is a leading contributor to air toxics. King County will examine proposals to curtail the impacts of woodstove burning and land-clearing practices in rural parts of the county.

The focus of King County air quality improvement efforts is to engage in projects and changed practices to reduce county emissions and promote policies that incorporate consideration of air quality impacts. Motorized vehicle and other fuel burning engine-related emissions are the primary source of ozone, fine particulate, toxics and greenhouse gas emissions in King County and therefore should be a primary focus for emissions reduction.

E-301 **King County should support initiatives that reduce emissions due to indoor and outdoor wood burning consistent with the actions of Puget Sound Clean Air Agency to control this source of public health threat.**

E-302 **King County will continue to actively develop partnerships with the Puget Sound Clean Air Agency, local jurisdictions, the state, and public, private, and not-for-profit groups to promote programs and policies that reduce emissions of ozone, fine particulates, toxics, and greenhouse gases, particularly for those populations already experiencing health disparities linked to air quality.**

More detailed policies related to reducing greenhouse gas emissions and improving air quality can be found in Section II of this chapter, Chapter 7, Transportation, and Chapter 8, Services, Facilities and Utilities.

IV. Land and Water Resources

A. Conserving King County's Biodiversity

It is King County's goal to conserve fish and wildlife resources in the county and to maintain countywide biodiversity. This goal may be achieved through implementation of several broad policy directions that form an integrated vision for the future. Each of the pieces is necessary for the whole to be successful. The policy objectives are to: (1) initiate multi-species, biodiversity management approaches, (2) integrate biodiversity conservation goals and climate change planning into new and existing developments and habitat restoration programs, (3) identify and protect fish and wildlife habitat conservation areas (FWHCAs), (4) connect the FWHCAs and other important conservation areas and protected lands through a habitat network system, and (5) provide education and incentive opportunities to engage citizens. Incentives can include, but are not limited to, tax incentives, regulatory flexibility (e.g., alternatives to fixed-width buffers), streamlined permit processing, reduced permit fees, and free or low-cost technical assistance. Conservation of biodiversity is necessary if benefits including important ecosystem services such as clean water, natural flood control, timber production, climate regulation, and pollination currently enjoyed and relied upon by residents of the county are to be available for future generations.

1. Biodiversity

Because of its size, topography, and geology, the diversity of landscapes and habitats in King County is dramatic. From the Cascade Mountains to Puget Sound, alpine areas to lowland bogs, King County possesses an astonishing array of habitats and species. Approximately 220 species of breeding and non-breeding birds are usually seen on an annual basis in King County. Based on an analysis by the State of Washington, 69 species of mammals, 12 species of amphibians, and 8 species of reptiles are thought to be breeding in the county. About 50 species of native fish (and 20 species of introduced fish) are found in the freshwater streams, rivers, ponds, and lakes of King County. In the county's marine environment, over 200 species of fish, some 500 species of invertebrate animals, and 8 species of marine mammals can be found. 1,249 (383 introduced) species of vascular plants have been identified in the county. The diversity of geography combined with King County's history of land use has shaped the biodiversity of the past and present and will continue affecting it into the future.

King County defines biodiversity as the variety of living organisms considered at all levels, from genetic diversity through species, to higher taxonomic levels, including the variety of habitats, ecosystems, and landscapes in which the species are found. The Washington Biodiversity Conservation Strategy provides another working definition: Biodiversity is the full range of life in all its forms, including the habitats in

which they live, the ways species interact with each other and their environment, and the natural processes (like flooding) that support those interactions.

The biggest threats to biodiversity in King County visible today are habitat loss and fragmentation from development, invasive plant and animal species, and climate change.

E-401 **The county shall strive to conserve the native diversity of species and habitats in the county.**

E-402 **In the Urban Growth Area, King County shall strive to maintain a quality environment that includes fish and wildlife habitats that support the greatest diversity of native species consistent with GMA-mandated population density objectives. In areas outside the Urban Growth Area, the county should strive to maintain and recover ecological processes, native landscapes, ecosystems, and habitats that can support viable populations of native species. This should be accomplished through coordinated conservation planning and collaborative implementation.**

E-403 **King County should develop a biodiversity conservation framework and conservation strategy to achieve the goals of maintaining and recovering native biodiversity. This framework should be coordinated with the Washington Biodiversity Conservation Strategy where applicable.**

E-404 **King County should collaborate with other governments and private and non-profit organizations to establish a bioinventory, an assessment and monitoring program, and a database of species currently using King County to provide baseline and continuing information on wildlife population trends in the county.**

2. Climate Change and Biodiversity

The effects of climate change on native biodiversity in the Pacific Northwest are likely to be serious, but as yet are largely unpredictable. In King County, some effects already are apparent as average temperatures over the last decade have increased slowly but steadily, especially in winter. For many of our native species, climate change will present added stresses to ecosystems and populations, including changes in distribution and availability of food, cover, and breeding habitat. Changes in temperature can alter productivity and growth rates or cause direct mortality, particularly for salmon, and trigger invasions of non-native species. The range and seasonal presence of some species will shift, and it is likely that the

timing of when some species are in certain habitats won't match with the availability of their food sources. Finally, changing lake and ocean temperatures may have devastating impacts on the base of food web.

The effects of climate change are only beginning to be observed and understood in the county and are presumed to increase over time. In the face of climate change, biodiversity conservation may be of critical importance for buffering the effects of rising temperatures on regional ecosystems, damping the rates of ecological change, and reducing the potential for sudden, extreme changes in the environment.

E-405 **King County should evaluate a range of projected future climate scenarios based on best available science to help ensure that conservation efforts are able to meet their objectives in a changing climate.**

3. Biodiversity Conservation Approaches

This section provides guidance for biodiversity management of the county's natural resources. The following concepts and principles are based on current approaches to conservation biology, restoration ecology, and climate science combined with input from the new Washington State Climate Change Response Strategy.

a. Landscape Context

Natural resource protection occurs within an ecological context. Environmental management should consider not only the immediate site but also the spatial and temporal context that surrounds it. In terms of spatial context, different activities will require consideration of different scales—from small sub-basins of a few square miles to watersheds and ecosystems that contain many hundreds or thousands of square miles. For example, watershed boundaries are useful ways to define ecological planning units for resource protection of aquatic systems whereas large-scale vegetation communities may be more useful for terrestrial systems.

In terms of temporal contexts, habitat conditions and populations can fluctuate over long time periods. It may take decades to see the results of habitat restoration projects and other environmental management actions on populations, and in the interim climate change and possibly major events such as flooding will also impact the trajectory of restoration actions.

There is no single scale appropriate for all planning and management of conservation activities. Management within the context of a landscape helps to ensure the actions in one area will not be undone or rendered unsustainable by conditions in the surrounding watershed or ecoregion. Conservation efforts designed to protect only one species could have an unintended, detrimental effect on others. Ecological communities consist of multiple species often that interact in the same geographical area.

E-406 **King County's conservation efforts should be integrated across multiple landscape scales, species, and ecological communities.**

E-407 **Distribution, spatial structure, and diversity of native wildlife and plant populations should be taken into account when planning restoration activities, acquiring land, and designing and managing parks.**

E-408 **King County should carry out conservation planning efforts in close collaboration with other local governments, tribes, state and federal governments, land owners, and other conservation planning stakeholders.**

"Ecoregions" are land areas that contain a geographically unique set of species, communities, and environmental conditions. Washington is a highly diverse state, with portions of nine ecoregions located within its boundaries. Three ecoregions cover parts of King County: the Puget Lowland Ecoregion in the western half of the county, the North Cascades Ecoregion in the northeastern and east central portion, and the Cascades Ecoregion in the southeastern portion of the county.

Ecoregions are the largest units of biodiversity in King County, and this scale is appropriate for broader natural resources planning and management. More localized habitats and species can be identified within these ecoregions, and can inform actions at the watershed and even property-specific level. Funding for landscape evaluations of this nature is extremely limited and will typically require grant funds. The County should take advantage of opportunities that may arise to collaborate with other ecoregional planning efforts.

E-409 **King County should develop a countywide landscape characterization system based on ecoregions as a key tool for assessing, protecting, and recovering biodiversity.**

b. Habitat connectivity

Protecting and enhancing habitat connectivity is a critical action for maintaining ecosystem integrity and resilience, particularly in the face of climate change. However, funding for such evaluations is extremely limited. Protection of isolated blocks of habitat is critical but not enough to adequately protect wildlife in King County. Critical wildlife habitats and refuges also need to be connected across the landscape through a system of habitat corridors, or networks.

How wide the corridors within the network should be is related to requirements of target wildlife species, length of network segment and other important characteristics within the network. Wider corridors will be required for larger species if the distance between refuges is great or if multiple uses, such as public access and trails, are desired. Because it may not be possible to protect wide corridors in the Urban Growth Area, it may not be possible to accommodate larger wildlife species in all areas. Networks will address some of the problems of habitat fragmentation for smaller species within the Urban Growth Area.

Open spaces set aside during subdivision of land should be located to make connections with larger offsite systems. This approach will also benefit other open space goals.

E-410 **Habitat networks for threatened, endangered and Species of Local Importance, as listed in this chapter, shall be designated and mapped. Habitat networks for other priority species in the Rural Area should be identified, designated and mapped using ecoregion information about the county and its resources and should be coordinated with state and federal ecosystem mapping efforts as appropriate.**

As mentioned above, protecting and enhancing habitat connectivity is critical for maintaining ecosystem integrity and resilience. Functional habitat connectivity is the degree to which a given species can easily move between habitat areas. Because individual species respond to the landscape, functional connectivity depends on both the features in the landscape and how particular species respond to that landscape. Focal species are used to identify important linkages between habitat areas that will be suitable for a variety of species.

E-411 **King County should conduct an analysis to identify areas critical for functional habitat connectivity. This assessment should be coordinated with state and federal mapping efforts as appropriate. Areas identified by this analysis as being critical for functional habitat connectivity should be prioritized by King County for land conservation actions and programs.**

In planning for climate change, it will be increasingly important to provide for habitat connectivity not only across jurisdictional boundaries, but also across a range of environmental gradients. As the "Washington State Integrated Climate Change Response Strategy" explains:

> Habitat connectivity is expected to allow species and ecosystems to better withstand climate change by allowing them to follow changes in climate across the landscape and maintain critical ecological processes such as dispersal and gene flow. In general, it is

much costlier and more difficult to restore connectivity than to maintain existing connectivity, yet ongoing development rapidly removes this opportunity. Planning for habitat connectivity in the near term will be far more economical the sooner it is implemented.

E-412 **King County should work with adjacent jurisdictions, state and federal governments, tribes, and landowners during development of land use plans, Water Resource Inventory Area plans, and site development reviews to identify and protect habitat networks at jurisdictional and property boundaries.**

Additional medium- and long-term strategies identified in the "Washington State Integrated Climate Change Response Strategy" that are appropriate for the County to consider when planning for connectivity include:

- Identifying and designating areas most suitable for core habitat and connectivity in view of a changing climate.
- Protecting and restoring areas most suitable for current core habitat, likely future core habitat, and connections between them.
- Protecting and re-establishing connectivity of rivers and their floodplains.
- Adjusting the size and boundaries of conservation areas (parks and natural areas) to accommodate anticipated shifts in habitat and species' ranges.
- Adjusting land use designations in important connectivity areas (for example, allowable density).
- Facilitating inland migration of marine shoreline habitats.

Connectivity is addressed further below, as the Wildlife Habitat Network is a designated Fish and Wildlife Habitat Conservation Area.

c. Ecosystem Resilience and Natural Processes

Ecosystems and habitats suitable for particular species communities are the result of various geologic, hydrologic, and biologic processes. Where habitat forming processes are intact, ecosystems and their inhabitants are more likely to persist in the face of environmental variation.

Further, reducing vulnerability of systems to large-scale disturbances including disease, invasive species, catastrophic fire, flooding, and drought is best accomplished by supporting resilience, which is the ability of a system to return to its former state after a disturbance. When an ecosystem is resilient, that system with its species communities is better able to bounce back following disturbance or change with ecological functions and processes still intact. In addition, current efforts such as the Washington State

Department of Ecology's Watershed Characterization analysis can be used to inform decisions and direct resources for regarding land protection and restoration efforts with maximum ecological benefit.

E-413 **King County's efforts to restore and maintain biodiversity should place priority on protecting and restoring ecological processes that create and sustain habitats and species diversity.**

E-414 **When acquiring land for habitat protection, efforts should be made to protect and restore areas of each habitat type most likely to be resistant to and enhance resilience to climate change.**

"Structural diversity" is an accepted scientific term whose meaning varies depending on the ecosystem. For example in in a forest, structural diversity means the combination of tree species, tree height classes, and legacy components (snags, logs); the more of each of these there are, the greater the forest structural diversity. Structural diversity of a river or stream means the degree of sinuosity (meaning curviness of the river and more is better) combined with both native riparian habitat and natural in-stream structure, which includes downed wood, various-sized substrate, and a combination of pools, riffles, and glides. "Landscape diversity" means the size, shape, and connectivity of different ecosystems across a large area; a mosaic of heterogeneous land cover types and vegetation types; assemblages of different ecosystems.

E-415 **King County should conserve areas where conditions support dynamic ecological processes that sustain important ecosystem and habitat functions and values, and promote structural and landscape diversity.**

d. Decisions in the Face of Uncertainty

Both current and historical information on habitat conditions and species distribution can inform ecologists and decision-makers about environmental management decisions. However, decision-makers do not always have access to complete information, and uncertainty is often the only thing that is certain.

E-416 **King County should use a mixture of information on historic, current, and projected future conditions to provide context for managing public hazards and protecting habitat.**

E-417 **King County should take precautionary action informed by best available science where there is a significant risk of damage to the environment.**

Precautionary action should be coupled with monitoring and adaptive management.

e. Rare Ecosystems, Habitats, and Species

Rare or sensitive habitats and species are at a greater risk of extinction than those that are widespread and abundant and therefore should be a high priority for conservation. An important secondary benefit of protecting habitat for rare, endemic (native to a particular area), or keystone (a species that is central to the survival of a multitude of other species) species is that habitat for many other species is protected as well. For example, the most effective way to protect and enhance native salmonid populations is through protection of those river and stream channels, riparian corridors, lakes, wetlands, groundwater, headwaters, and watersheds that provide or impact spawning and rearing habitat, food resources, and fish passage. Protecting these resources also enhances protection of habitat for other species.

E-418 **King County should assess the relative scarcity of different land types and resources, the role of these lands in supporting sensitive species, and the level of threat to these lands in terms of habitat modifications that would likely reduce populations of sensitive species.**

E-419 **King County should give special consideration to protection of rare, endemic, and keystone species when identifying and prioritizing land areas for protection through acquisition, conservation easements, and incentive programs.**

E-420 **King County should incorporate climate change projections into new species protection plans and shall revise older species protection plans when feasible or when conducting regular plan updates to incorporate projected impacts from climate change.**

Rare ecosystems, habitats, and species are also addressed in the Fish and Wildlife Habitat Conservation Areas section below.

f. Integrated Land and Water Management and Planning

In the past, aquatic and terrestrial habitats and species have often been managed independently of each other. Effective conservation and resource management of aquatic and terrestrial systems requires coordinated planning among departments with authority over development regulations and guidelines, wastewater treatment, stormwater management, flood hazard management, groundwater protection, transportation planning and road building, water quality, natural resource management, agriculture, and

fish and wildlife conservation. Effective conservation planning must include the interests of private landowners as well.

Coordinated planning and management can improve understanding of cumulative effects on terrestrial and aquatic systems, and can allow for a systems-based approach to avoiding or mitigating for adverse effects and improving habitat functions and value over time.

E-421 **Terrestrial and aquatic habitats should be conserved and enhanced to protect and improve conditions for fish and wildlife.**

E-422 **King County's land use planning, regulatory, and operational functions related to environmental protection, public safety, and equity should be closely coordinated across departments and with other applicable agencies and organizations to achieve an ecosystem-based approach.**

g. Habitat and Development

A key element in local wildlife conservation is the integration of wildlife and habitats into developments of all types. Wildlife protection does not have to be at odds with many types of development. Urban multifamily projects, industrial developments, new school facilities and rural open space projects all provide opportunities to enhance wildlife amenities. Residential developers and businesses have been able to use wildlife in marketing strategies to attract more potential homeowners, renters and quality employees.

Techniques such as minimizing clearing during site preparation, using native plant species in required buffers, landscaping, using bridges and wildlife-specific crossings rather than culverts to cross streams and innovative site design can be used to promote wildlife presence and connectivity and minimize problems with nuisance wildlife. Other plan elements, such as open space, road system design and housing density, also have related impacts on the remaining wildlife values that must be considered.

Benefits to wildlife are enhanced if screening and landscaping is composed of native vegetation. Retention of natural vegetation can provide wildlife and aesthetic benefits often at a lower cost than non-native or constructed options.

E-423 **New development should, where possible, incorporate native plant communities into the site plan, both through preservation of existing native plants and addition of new native plants.**

E-424 **The county should steward public lands well and should integrate fish and wildlife habitat considerations into capital improvement projects whenever feasible. Fish and Wildlife Habitat Conservation Areas should be protected and, where possible, enhanced as part of capital improvement projects.**

Standard buffers for streams and wetlands will not always adequately protect wildlife resources that utilize those sensitive areas. Areas with critical wildlife resources may need larger buffers to protect the resource.

E-425 **Stream and wetland buffer requirements may be increased to protect King County species of Local Importance and their habitats, as appropriate. Whenever possible, density transfers, clustering and buffer averaging should be allowed.**

h. Non-Native Species

Non-native species are often invasive because they did not evolve as part of the ecosystem and therefore do not have natural controls or competition. These species may be terrestrial, freshwater, or marine. Invasive species can create costly maintenance problems for both public and private landowners. Noxious and invasive weeds and animal species pose threats to the environmental health of all landscapes in King County, including natural, agricultural, wildlife, wetland, stream, and recreational areas. Weeds spread in a variety of ways, including the transport of seeds or plant parts by vehicles boats, shoes, clothing and animals (including pets, livestock, wildlife, birds and insects), in soil, gravel and other landscaping and building materials, down watercourses and in floods, by wind, and occasionally through deliberate introduction by people. They alter ecosystems through disrupting food chains, out-competing native species, and reducing habitat for native wildlife. Invasive species, including weeds, are widely recognized as having a significant negative impact on wildlife biodiversity.

King County offers technical assistance with identification and removal of non-native plants through programs like Forest Stewardship and Naturescaping. The county also partners with volunteer groups to remove invasive plants from open space and natural areas. Some non-native species are classified as “noxious” weeds. The King County Noxious Weed Control Program provides many services to county residents, including: educational materials and workshops, current information on control and eradication of noxious weeds, support to volunteer and land owner groups, and annual road-side surveys. In addition, the Noxious Weed Control Program implements the State Weed Law (RCW chapter 17.10) in

the county which requires all landowners to eradicate Class A noxious weeds and control designated class B and county-selected Class C noxious weeds on their properties.

The State Weed Law applies to both private and public lands. King County manages approximately 4,250 parcels of public land totaling 33,300 acres. King County also owns or manages over 1,500 linear miles of roads and right of way. These lands are managed by multiple county agencies, including the King County Departments of Natural Resources, Transportation, and Executive Services. Since weed infestations can spread from property to property, on both public and private lands, it is critical that the county have a coordinated strategy for controlling noxious and invasive weeds on county-owned and managed lands.

E-426 **Introductions of non-native, invasive plant, vertebrate, and invertebrate species should be avoided in terrestrial, freshwater, and marine environs.**

E-427 **King County should promote and restore native plant communities where sustainable, feasible, and appropriate to the site and surrounding ecological context and should incorporate climate change considerations into planting design.**

E-428 **On county-owned lands, King County should use locally adapted native species for natural area landscaping, restoration, rehabilitation, and erosion control. Habitat restoration projects should include provisions for adequate maintenance of plantings to prevent invasion of weeds and ensure survival of native plantings.**

E-429 **King County should provide incentives for private landowners who are seeking to remove invasive plants and noxious weeds and replace them with native plants.**

E-430 **King County shall implement its strategy to minimize impacts of noxious weeds to the environment, recreation, public health and the economy on all lands in the County. This includes preventing, monitoring and controlling infestations of state-listed noxious weeds and other non-native invasive weeds of concern on county-owned and managed lands.**

i. Adaptive Management

Adaptive management refers to modifying management actions based on ongoing monitoring and data analysis. To sustain native biodiversity and improve the county's efforts at conservation, it must always be advancing the understanding of the systems under its care and change its efforts accordingly.

E-431 **Management activities should, when feasible and practicable, be designed in a manner that can test them against management objectives and adjust as appropriate.**

Additional text and policies related to monitoring and adaptive management can be found at the end of this chapter.

4. Fish and Wildlife Habitat Conservation Areas

Fish and wildlife habitat conservation, according to the state's definition, means land management for maintaining populations of species in suitable habitats within their natural geographic distribution so that the habitat available is sufficient to support viable populations over the long term and isolated subpopulations are not created. This definition does not mean that all individuals of all species at all times must be maintained, but it does mean not degrading or reducing populations or habitats so that they are no longer viable over the long term. Additionally, it should be recognized that geographic distributions will shift with climate change,

King County's fish and wildlife policies and regulations have been informed by current state fish and wildlife guidance, recommendations, and requirements. The GMA directs local jurisdictions to designate and protect critical areas, including Fish and Wildlife Habitat Conservation Areas. Fish and Wildlife Habitat Conservation Areas are designated with the intent to ensure the conservation of individual species recognized as declining or imperiled as well as protect and connect specific areas of habitat deemed important. This approach of protecting individual species and their habitat comprises one of the five major objectives described above for protecting the county's biodiversity. Because biodiversity encompasses a variety of levels, from genes to ecosystems, and occurs at multiple spatial scales, a wider approach beyond single-species management is necessary to conserve biodiversity in King County. Additionally, most fish and wildlife species are not confined to small portions of the landscape; rather, they move about for feeding, breeding, rearing young, and interacting with other members of their species to insure adequate genetic exchange and population viability.

Federal laws have been enacted over the past century to protect a wide range of species. In addition to the Endangered Species Act (ESA), other federal laws include the Marine Mammal Protection Act~~,~~ and the Migratory Bird Treaty Act. Individuals of ESA-listed species, marine mammals, and migratory birds in King County are protected under the provisions of these laws.

In order to build a robust approach to biodiversity conservation, especially in view of a changing climate, individual species and habitat protections must be integrated with a landscape-scale approach to fostering and protecting resilient and diverse ecosystems. Fish and Wildlife Habitat Conservation Areas occur on both publicly and privately owned lands. Designating these areas is an important part of land use planning for appropriate development densities, urban growth area boundaries, open space corridors, incentive-based land conservation and stewardship programs, and acquisition planning. The policies in this section are intended to fulfill federal and state requirements for protection of specific species and habitats while implementing landscape-based approaches to conserve native biodiversity in the long term. Protection measures designed to help maintain populations of certain species may necessarily include protecting the habitat where those species have a primary association with the protected area such as spawning or breeding, and also for rearing young, resting, roosting, feeding, foraging, and migrating.

E-432 **King County shall designate the following areas as Fish and Wildlife Habitat Conservation Areas:**

- **a. Areas with which federal or state listed endangered, threatened or sensitive species have a primary association;**
- **b. Habitats of Local Importance and Habitats for Species of Local Importance;**
- **c. Wildlife habitat networks designated by the county;**
- **d. Commercial and recreational shellfish areas;**
- **e. Kelp and eelgrass beds;**
- **f. Herring, smelt, and sand lance spawning areas;**
- **g. Riparian corridors; and**
- **h. State aquatic reserves.**

E-433 **King County should map Fish and Wildlife Habitat Conservation Areas. King County shall protect Fish and Wildlife Habitat Conservation Areas through measures such as regulations, incentives, capital projects or purchase, as appropriate.**

The WAC guidelines suggest considering waters of the state, wetlands, salmonid habitat (which includes marine nearshore areas), and riparian ecosystems when designating fish and wildlife habitat conservation areas. All of these areas and their associated buffers are highly valuable wildlife habitat, and they serve many other functions as well. Protections for these areas are addressed more broadly in other provisions of this chapter.

a. Federal and State Listed Endangered, Threatened, Sensitive Species

The importance of designating seasonal ranges and habitat elements where federal and state listed endangered, threatened and sensitive species have a primary association is that these areas, if altered, may reduce the likelihood that the species will survive over the long term. The state recommends that King County and other local jurisdictions identify and classify these areas.

E-434 **Habitats for species that have been identified as endangered, threatened, or sensitive by the state or federal government shall not be reduced and should be conserved.**

b. Species and Habitats of Local Importance

Federal and state listings of species as endangered or threatened often encompass relatively large geographic areas. More localized declines of species within King County may not be captured by state and federal listings. For example, local monitoring data indicate the extinction of the Early Lake Sammamish Kokanee run and significant declines in the Middle and Late Lake Sammamish Kokanee salmon runs. In 2000, a petition to list just the Early run was filed with the US Fish and Wildlife Service (USFWS), but by 2003 the run went extinct without any federal action to prevent that result. In 2007, a second petition was filed to list all remaining Lake Sammamish kokanee. This petition led to an official review of the population's status by USFWS. On September 30, 2011, USFWS concluded that kokanee and sockeye should be considered together in their listing determination and therefore declined to list this kokanee population. However, King County believes the conservation of local native kokanee to be important, and the County maintains strong collaborative relationships with the watershed cities, the USFWS, Washington Department of Fish and Wildlife (WDFW), non-governmental organizations, and watershed residents to improve habitat, conduct research, and support captive brood stock program.

King County defines Species of Local Importance as those species that are of local concern primarily because of their population status or their sensitivity to habitat manipulation. The county takes into consideration native species named as priority species by WDFW; anadromous salmonids aquatic species whose populations are particularly vulnerable to changes in water quality and quantity; species

whose habitat or mobility is limited (local populations of species that are immobile or have very limited habitat); and species that can be directly impacted by King County (for example, where road projects or other infrastructure development can impact habitat; where the county may acquire, protect, or restore certain habitat types). King County Species of Local Importance are identified so that they and their habitats may be considered during land use planning and protected during project implementation and development. Habitats for Species of Local Importance are designated as a type of Fish and Wildlife Habitat Conservation Area and are covered by polices and regulations designed to protect those areas. However, individual animals or plants may also be at risk of injury from development or during construction or other changes to the landscape and may require additional measures to protect them from injury. For example, freshwater mussels may be protected from an instream project by relocating individual animals so they are not injured or killed during construction. Or, a rare individual plant may require the protection of an area of land because the plant cannot be relocated.

E-435 **King County designates the following to be Species of Local Importance:**

- **a. Salmonids and other anadromous fish – Kokanee salmon, Sockeye/red salmon, Chum salmon, Coho/silver salmon, Pink salmon, Coastal resident/searun cutthroat trout, Rainbow trout, Dolly Varden, and Pacific lamprey;**
- **b. Native Freshwater Mussels – Western pearlshell mussel, Oregon and western floater, and western ridge mussel;**
- **c. Shellfish – Dungeness crab, Pandalid shrimp, Geoduck clam, and Pacific oyster;**
- **d. Marine Fish – White sturgeon, Pacific herring, Longfin smelt, Surfsmelt, Lingcod, Pacific sand lance, English sole, and Rock sole;**
- **e. Birds – Western grebe, American bittern, Great blue heron, Brant, Harlequin duck, Wood duck, Hooded merganser, Barrow's goldeneye, Common goldeneye, Cinnamon teal, Tundra swan, Trumpeter swan, Surf scoter, White-winged scoter, Black scoter, Osprey, Western screech-owl, Sooty grouse, Band-tailed pigeon, Belted kingfisher, Hairy woodpecker, Olive-sided flycatcher, Western meadowlark, Cassin's finch, and Purple finch;**
- **f. Mammals – American marten, mink, Columbian black-tailed deer, Elk in their historic range, mountain goat, Pika, roosting concentrations of Big-brown bat and Myotis bats;**
- **g. Amphibians – Red-legged frog;**
- **h. Reptiles – Western fence lizard;**

i. Rare Plants – bristly sedge; Canadian St. John's-wort; clubmoss cassiope; Oregon goldenaster; toothed wood fern; Vancouver ground-cone; and white-top aster; and

j. High-quality ecological communities - Douglas-fir - Pacific Madrone / Salal; Douglas-fir - Western Hemlock / Swordfern; Forested Sphagnum Bog PTN, Low Elevation Freshwater Wetland PTN, North Pacific Herbaceous Bald and Bluff, Red Alder Forest; Western Hemlock - (Western Redcedar) / Bog Labrador-tea / Sphagnum Spp.; Western Hemlock - (Western Redcedar) / Devil's-club / Swordfern; Western Hemlock - (Western Redcedar) / Sphagnum Spp.; Western Hemlock / Swordfern – Foamflower; Western Redcedar - Western Hemlock / Skunkcabbage; and Willow Spp. Shrubland [Provisional]).

E-436 King County shall protect Species of Local Importance through measures such as regulations, incentives, capital projects, or purchase, as appropriate.

Caves, cliffs, and talus (a sloping mass of rocky fragments at the base of a cliff) occupy a very small percent of the total land area, yet they are disproportionately important as wildlife habitats. The same is true for sphagnum-dominated peat bogs, old-growth forest, and snag-rich areas, which have all declined as a result of development. Each of these habitats concentrates and supports a unique animal community. Plant associations adjacent to caves, cliff, and talus are important because they help stabilize light and wind patterns, and as with snag-rich areas, they provide perches for raptors. Caves, cliffs, talus, and sphagnum-dominated peat bogs are fragile environments that can be easily destroyed, but cannot be easily restored

E-437 King County shall designate the following to be Habitats of Local Importance:

a. Caves;

b. Cliffs;

c. Talus;

d. Old-growth forest;

e. Sphagnum-dominated peat bogs; and

f. Snag-rich areas.

The federal and state governments also designate “candidate” species. In the context of the ESA, candidate means any species being considered for listing as an endangered or a threatened species but not yet the subject of a proposed rule. Lists of federal candidate species are updated annually. Review of these lists and the supporting assessments can provide valuable information about threats to species found within King County and can help the county to be proactive in preparing for potential future listings.

E-438 **King County should review federal and state candidate listings for information about candidate species that are under consideration for listing as an endangered or threatened species and found in King County. King County shall protect habitat for candidate species, as listed by the Washington Department of Fish and Wildlife or a federal agency. Information regarding candidate species should be used to inform King County's long-term wildlife conservation and planning efforts.**

E-439 **King County should review fish and wildlife surveys and assessments with local application to King County and consider additional habitat protections where warranted. Habitat protection should be accomplished through incentives, cooperative planning, education, habitat acquisition, habitat restoration, or other appropriate actions based on best available science.**

E-440 **King County should regularly review the Washington Department of Fish and Wildlife's list of Priority Species and other scientific information on species of local importance, and evaluate whether any species should be added to or deleted from the lists in E-435 and E-437. Any additions or deletions should be made through the annual amendment process for the comprehensive plan.**

E-441 **Development proposals shall be assessed for the presence of King County Species of Local Importance. A comprehensive assessment should follow a standard procedure or guidelines and shall occur one time during the development review process.**

Salmon are particularly important because of their significance to local and regional character, tribes, salt and freshwater ecosystems, and recreational and commercial fisheries. A growing number of salmon stocks within King County and other areas of Puget Sound are in a serious state of decline. Three salmonid species present within King County have been listed under the ESA, several others have significant potential for listing, and the salmon-dependent Orca whale has been listed as endangered.

The protection and restoration of river and stream channels, riparian corridors, lakes, wetlands, headwaters and watersheds, and marine nearshore habitats that provide or impact spawning and rearing habitat, food resources and fish passage is essential to the conservation of native fish populations. Intermittent streams also can be critical to native fish populations.

Hatcheries and other artificial propagation facilities that are properly managed to protect the abundance, productivity, genetic diversity, and spatial distribution of native salmon may contribute in the near term to both maintaining sustainable salmon stocks and harvest opportunities while habitat protection and restoration measures for salmon are implemented.

E-442 **King County should conserve and restore salmonid habitats by ensuring that land use and facility plans (transportation, water, sewer, electricity, gas) include riparian and stream habitat conservation measures developed by the county, cities, tribes, service providers, and state and federal agencies. Project review of development proposals within basins that contain hatcheries and other artificial propagation facilities that are managed to protect the abundance, productivity, genetic diversity, and spatial distribution of native salmon and provide harvest opportunities should consider significant adverse impacts to those facilities.**

c. Wildlife Habitat Network

The King County Wildlife Habitat Network was designed to help reduce the effects of fragmentation by linking diverse habitats through the developed and developing landscape. The network is intended to facilitate animal dispersal by connecting isolated critical areas, segments, open space, and wooded areas on adjacent properties. The corridors tend to follow riparian and stream corridors across the lowlands and the upland plateau to the east and southeast of Lake Washington into the foothills. The Wildlife Habitat Network is mapped on the “Wildlife Network and Public Ownership Map.”

5. Conservation Incentives and Education

King County offers landowner technical assistance for protection of fish and wildlife habitat through programs like Forest Stewardship, Noxious Weed Control, the GoNative website, and assistance for native plant restoration and landscaping. Other organizations, including King Conservation District, Natural Resource Conservation Service, WSU Extension, and Washington Department of Fish and Wildlife’s Backyard Wildlife Sanctuary Program offer support to landowners to enhance fish and wildlife habitat. Landowners can also receive property tax reductions through the King County Public Benefit Rating System in exchange for protecting and improving habitat.

E-443 **The county should promote voluntary wildlife habitat enhancement projects by private individuals and businesses through educational, active stewardship, and incentive programs.**

E-444 **King County should partner with community associations, realtors, community groups, and other agencies to conduct targeted outreach to potential and new property owners about fish and wildlife habitat education and forestry education and incentive programs, particularly in rural and resource lands areas of the county.**

B. Stormwater Quality

Rivers, streams, lakes, wetlands, and groundwater must be protected from the adverse impacts of urbanization and land use change to continue functioning in a beneficial manner. Because urbanization both increases runoff from storms and reduces streamflows in dry months by limiting infiltration, control of the quantity and quality of stormwater runoff is critical. Unmitigated stormwater runoff can cause erosion, sedimentation and flooding with resulting adverse impacts on water quality, fish and wildlife habitat, property and human safety. In addition, stormwater runoff can carry pollutants such as oil, heavy metals, fertilizers, herbicides, pesticides and animal wastes into waters. Sedimentation from soil disturbed by clearing, grading, farming and logging can reduce river or stream channel capacity, fill lakes and wetlands, and smother aquatic life and habitat.

King County stormwater management encompasses a wide range of programs that integrate proven, traditional approaches with new and innovative concepts, such as low impact development (LID) practices intended to minimize pollutants and mimic the natural flow of stormwater runoff. These programs and practices include such actions as changing land use and development practices; encouraging public behaviors through education and social marketing that maximize natural hydrologic processes; improving pollution source control by legislating product or material restrictions; changing business practices and educating the public about pollution generating activities; implementing programs that minimize land clearing and preserve or restore native vegetation; housing clustering and smart growth to reduce development impacts and the construction and maintenance of conveyance; and flow control (detention or infiltration) and water quality treatment facilities and their associated drainage systems. Together these programs and practices will reduce pollution and flow impacts in King County's surface and ground waters.

King County supports the implementation of new approaches such as low impact development (LID) best management practices (BMPs) techniques as part of a comprehensive stormwater management program. LID requires the public to maintain stormwater features on their properties, including but not limited to rain gardens, dispersion areas, permeable pavement driveways, and vegetated roofs. As with any new approach or technology, the effectiveness and limitations of LID practices must be determined. These

evolving technologies need to be studied further to determine operational effectiveness, long term maintenance needs, and appropriate placement.

Some stormwater practices require changes in how we live and work on the land. Successful implementation will include different product use, new land development approaches, and, in some areas, the setting aside of private land and its dedication to stormwater purposes. In addition, effective stormwater management will require a regional approach that includes landscape level analysis to identify areas of greatest need for additional management including retrofitting older developed areas and constructing facilities where no or minimal management exists now.

E-445 **Stormwater runoff shall be managed through a variety of methods, with the goal of protecting surface water quality, in-stream flows, and aquatic habitat; promoting groundwater recharge while protecting groundwater quality; reducing the risk of flooding; protecting public safety and properties; and enhancing the viability of agricultural lands.**

E-446 **King County should evaluate the need for product or material restrictions because of water quality impacts.**

C. Upland Areas

1. Forest Cover

King County recognizes the value of trees and forests in both rural and urban communities for benefits such as improving air and water quality and enhancing fish and wildlife habitat. Forests absorb and slowly release rainwater to streams and aquifers, filter runoff, and provide food, shade, and cover for wildlife. In doing so, they help to prevent flooding and erosion, protect drinking water, and support fish and wildlife and their habitat. Therefore, it is important that regulations protecting critical areas like wetlands take into consideration both regulations and incentive programs intended to protect forest cover in upland areas. Forests in rural King County are also relied upon for recreation and resource use, including harvest and firewood collection. Forest Stewardship Plans provide mechanisms for tailoring regulations and best management practices for forest management to individual properties. Completion of one of these plans can also qualify landowners for tax incentive programs and streamlined permitting. The retention or restoration of forest cover and native vegetation also reduces stormwater runoff and maximizes natural infiltration processes, thus reducing the need for additional stormwater management.

E-447 **King County recognizes that protecting and restoring headwater and upland forest cover is important for preventing flooding, improving water quality, and**

protecting salmon and other wildlife habitat. The central role that forest cover plays in supporting hydrologic and other ecological processes should be reflected in policies and programs addressing stormwater management, flooding, wildlife, and open space.

E-448 **King County's critical areas and clearing and grading regulations should provide for activities compatible with long-term forest use, including use of recreational trails, firewood collection, forest fire prevention, forest management, and control of invasive plants.**

E-449 **The county shall promote retention of forest cover and significant trees using a mix of regulations, incentives, and technical assistance.**

2. Soils and Organics

Soils play a critical role in the natural environment. The benefits of healthy soils include: (1) keeping disease-causing organisms in check, (2) moderating runoff, (3) filtering, binding, and biodegrading pollutants, (4) recycling and storing nutrients, and (5) serving as the basis for forest and agricultural fertility. More recently, the carbon storage properties of soils have been recognized as a major climate-moderating influence. The properties of a healthy soil are similar to those of a sponge, faucet and filter. They soak up and store water, naturally regulate the flow of water, and bind and degrade pollutants. The presence of millions of macro and microorganisms in soil creates a vibrant soil culture where organic material is consumed and air and water are retained. Nutrients are made available to plants to allow healthy root growth and oxygen generation.

It is common for healthy native soils to be removed during land development. Even when soils are not removed, development and other human activity often cause soil compaction, removal and erosion of healthy, native soils. Fewer organisms are present in disturbed soils. The resulting decrease in organic matter inhibits the soil's ability to hold water, which increases surface water runoff. In addition, plants cannot thrive in disturbed soils because of the lack of nutrients. This, in turn, causes people to use more chemical fertilizers, pesticides, and water to induce plant growth. The combination of increased runoff and increased fertilizer and pesticide use results in greater water pollution downstream.

Increasing the organic content in disturbed soils can help restore their environmental function. Composted organic materials that might be used include yard debris, food and wood wastes, soiled paper, biosolids and/or livestock wastes, but not others, such as fly ash from industrial smokestacks. Benefits of incorporating composted organic materials in soils include: improving stream habitat,

supporting healthier plants, reducing runoff, and closing the recycling loop for organic materials. The transformation of degraded soils to enhance their ability to uptake and store carbon may be the one of the most effective actions that can be taken to mitigate the near-term effects of climate change.

It is preferable to leave native soil and vegetation in place as much as possible so that it can continue to function as a natural sponge and filter, minimizing erosion and surface water runoff. Where soil is disturbed or removed, soil function can be improved by providing soil with adequate depth and organic matter content.

E-450 **Site development practices should minimize soil disturbance and maximize retention of native vegetation and soils. Where soil disturbance is unavoidable, native soils should be stockpiled on site and reused on site in accordance with best management practices to the maximum extent possible.**

E-451 **King County shall require the use of organic matter to restore disturbed soils on site developments.**

Salmon play an important role in sustaining the productivity of soils in riparian and floodplain areas. Salmon mature in saltwater environments and then spawn and die in their original spawning streams. In doing so, salmon transport nutrients back to watersheds that eventually become available to vegetation.

E-452 **The role of salmon in transferring nutrients and maintaining the productivity of riparian and floodplain soils should be incorporated in the development of salmon and soil conservation plans.**

Organics comprise a large portion of the waste generated by King County residences, businesses and farms. This organic waste stream requires significant solid waste, farm management, and wastewater treatment resources. Many of these “waste materials” (yard debris, food and wood waste, soiled paper, biosolids, and agricultural livestock wastes), can be recycled and reused to provide numerous uses that are beneficial to the environment and the economy.

King County has a long history of resource conservation and waste recycling. Programs have successfully captured organic materials for beneficial use such as yard debris and biosolids applications to farms, forests and composting. However, large volumes of organic waste continue to be disposed of in the landfill. Significant volumes of livestock waste generated in the suburbs and rural areas are inadequately managed, which can adversely impact water quality and fish habitat.

Although efforts are underway to increase the amount of organic materials that are recycled, the region still lacks the capacity to process all of these materials. Along with its efforts to promote beneficial use of these products, King County is working with organic material processors and others to try and increase the processing capacity in the region.

E-453 **King County should implement programs to improve availability and markets for organic materials for soils that have been disturbed by new and existing developments.**

E-454 **King County shall regard the region's organic waste materials as resources which should be reused as much as possible, and minimize the disposal of such materials.**

E-455 **King County shall work with regional stakeholders to ensure a viable and safe organics recycling infrastructure that allows for yard, food, wood, biosolids, manure and other organic wastes to be turned into resources benefiting climate change, soil health, water quality, and maximizing landfill diversion.**

King County seeks to divert as much material as possible from disposal to reduce overall costs of solid waste management, conserve resources, protect the environment, and strengthen the county's economy (see Chapter 8, Services, Facilities and Utilities, Policy F-266). In many cases, organic materials can be recycled into a beneficial, highly valued resource helping to meet these diversion goals. Beneficial uses of organic materials include, but are not limited to, the following: soil amendment, mulch, erosion control, and even energy production.

King County recognizes that in most cases, the best management method for yard debris and livestock wastes is to compost it on the property where it is generated. Examples of residential onsite yard debris management techniques include grasscycling (leaving the grass on the lawn when it is cut) and backyard composting.

E-456 **King County shall promote, encourage, and require, where appropriate, the beneficial use of organic materials, including but not limited to their use in the following activities: agriculture and silviculture; road, park and other public project development; site development and new construction; restoration and remediation of disturbed soils; nursery and sod production; and landscaping. For these purposes, organic materials do not include fly ash.**

E-457 **King County agencies shall use recycled organic products, such as compost, whenever feasible and promote the application of organic material to compensate for historic losses of organic content in soil caused by development, agricultural practices, and resource extraction.**

E-458 **King County will seek to enhance soil quality, and protect water quality and biodiversity across the landscape by developing policies, programs, and incentives that support the goal of no net loss of organic material.**

Biosolids are the nutrient rich organic product from the wastewater treatment process which can be recycled as a soil amendment. At King County's wastewater treatment plant, solids are removed from the wastewater and treated in large digesters where the organic solids are stabilized, reducing the volume by half. After digestion, a portion of water is removed, leaving the semisolid material ready for recycling.

The Biosolids Management Program's mission is to safely and sustainably return carbon and nutrients to the land through the use of biosolids. The Biosolids Management Program pursues environmental stewardship through diverse public-private partnerships. One hundred percent of county biosolids are beneficially used through the forestry and agriculture programs. A portion of the County's biosolids are composted as a Class A product.

E-459 **King County supports and should explore ways to beneficially use biosolids locally, whenever feasible.**

On-farm composting as a method of managing livestock waste and other organic waste materials is becoming an important waste management strategy for farmers. Benefits of on-farm composting include:

- Additional revenue from the sale of compost;
- Reduced costs for water, fertilizers and pesticides, due to reduced water usage and reduced reliance on fertilizers and pesticides;
- Reduced impacts to surface waters; and
- Increased crop yields.

King County's Livestock Management Ordinance (LMO), adopted in December 1993, sets manure management standards in order to minimize impacts to water quality-by preventing farm wastes from contaminating the region's watersheds. The LMO encourages farmers to implement farm plans in collaboration with the King Conservation District (KCD) to protect and enhance natural resources, including water quality-The KCD provides technical assistance and education to agricultural landowners on how to implement best management practices, which include manure storage facilities and pasture

renovation, as well as stream and wetland buffer fencing and clean water diversion. The resulting farm plans can include provisions for onsite and offsite management of livestock wastes and strategies to integrate processing livestock wastes with other organic waste materials. These strategies should be consistent with the King County Comprehensive Solid Waste Management Plan, including but not limited to on-farm composting and land application of processed yard debris. Farm plans that address livestock waste management further compliance with the provisions of the Clean Water Act and other federal and state mandates regarding water quality.

E-460 **King County shall promote livestock waste management that keeps waste out of stormwater runoff and from infiltration to groundwater, and enhances soil health by methods such as combining livestock waste with other plant and animal waste material for incorporation into crop soils.**

D. Aquatic Resources

King County's aquatic resources include rivers, streams, lakes, wetlands, groundwater, and the marine waters of Puget Sound. These resources provide many beneficial functions, including fish and wildlife habitat; food supplies; flood risk reduction; water supply for agricultural, commercial, domestic and industrial use; energy production; transportation; recreational opportunities; and scenic beauty.

In order to preserve and enhance aquatic resources in King County, they must be managed as an integrated system together with terrestrial resources, and not as distinct and separate elements. The hydrologic cycle (the occurrence, distribution and circulation of water in the environment) is the common link among aquatic resources and describes their interdependence.

Use and modification of water resources and the surrounding terrestrial environment affects how the hydrologic cycle functions and can cause unintended detrimental impacts such as flooding, low stream and river flows, reduced groundwater availability, erosion, degradation of water quality, loss of fish and wildlife habitat, and loss of archeological and traditional cultural resources that depend upon but do not damage natural resources. In order to minimize adverse impacts on the water resources of King County and ensure the continued ability to receive the beneficial uses they provide, the county will need to promote responsible land and water resource planning and use. These beneficial uses include fish and wildlife habitat, flood risk reduction, water quality control, sediment transport, energy production, transportation; recreational opportunities, scenic beauty, and water supply for agricultural, municipal, and industrial purpose.

E-461 **King County shall use incentives, regulations, capital projects, open space acquisitions, public education and stewardship, and other programs like**

reclaimed water to manage its aquatic resources (Puget Sound, rivers, streams, lakes, freshwater and marine wetlands and groundwater) and to protect and enhance their multiple beneficial uses. Use of water resources for one purpose should, to the fullest extent practicable, preserve opportunities for other uses.

E-462 **Development shall occur in a manner that supports continued ecological and hydrologic functioning of water resources and should not have a significant adverse impact on water quality or water quantity, or sediment transport[1] and should maintain base flows, natural water level fluctuations, unpolluted groundwater recharge in Critical Aquifer Recharge Areas and fish and wildlife habitat.**

1. Watersheds

A watershed is an area that drains to a common outlet or identifiable water body such as Puget Sound, a river, stream, lake or wetland. There are six major watersheds in King County (Cedar/Lake Washington, Green/Duwamish, Puget Sound, South Fork Skykomish, Snoqualmie and White) that, in turn, contain numerous smaller catchments and water bodies. Surface and ground waters are managed most effectively by understanding and considering potential problems and solutions for an entire watershed. Because watersheds frequently extend into several jurisdictions, effective planning and implementation must be coordinated.

E-463 **King County shall integrate watershed plans with marine and freshwater surface water, flood hazard management, stormwater, groundwater, drinking water, wastewater, and reclaimed water planning, as well as federal and state Clean Water Act compliance and monitoring and assessment programs to provide efficient water resource management.**

E-464 **King County shall protect and should enhance surface waters, including streams, lakes, wetlands and the marine waters and nearshore areas of Puget Sound, on a watershed basis by analyzing water quantity and quality problems and their impacts to beneficial uses, including fish and wildlife habitat, flood risk reduction, and erosion control. Conditions of and impacts to the downstream receiving marine beaches and waters of Puget Sound shall be included in watershed management efforts.**

Over the past several years King County has been working cooperatively with many of the water utilities, local governments, state agencies, tribes, and other interested parties in the region to gather data and information to support a regional water supply planning process. (For more information and specific policies related to regional water supply planning, please see Chapter 8, Services, Facilities and Utilities). This cooperative work includes assessments of current and future water demands and supplies, potential climate change impacts on water, opportunities for use of reclaimed water, and potential improvements to steam flows. These cooperative efforts will provide valuable information to inform not only water supply planning but also salmon recovery planning and projects.

E-465 **King County should use the information from local and regional water supply planning processes to enhance the county's water resource protection and planning efforts, including salmon recovery planning and projects.**

E-466 **As watershed plans are developed and implemented, zoning, regulations and incentive programs may be developed, applied and monitored so that critical habitat in King County watersheds is capable of supporting sustainable and fishable salmonid populations. Watershed-based plans should define how the natural functions and values of watersheds critical to salmonids are protected so that the quantity and quality of water and sediment entering the streams, lakes, wetlands and rivers can support salmonid spawning, rearing, resting, and migration.**

E-467 **Responsibility for the costs of watershed planning and project implementation, including water quality, groundwater protection, and fisheries habitat protection, should be shared between King County and other jurisdictions within a watershed.**

King County contains a number of wetlands, lakes and river and stream reaches that are important to the viability of fish and wildlife populations and are therefore considered biological, social and economic resources. Some resource areas, including Regionally Significant Resource Areas and Locally Significant Resource Areas, were previously identified through basin plans and other resource inventory efforts. Additional high-priority habitat areas have been identified through Water Resource Inventory Area-based salmon conservation plans, "Waterways 2000," Cedar River Legacy Program, acquisition plans, and through basin conditions maps used to establish protective buffers along wetlands and streams under the Critical Areas Ordinance.

These areas contribute to the resource base of the entire Puget Sound region by virtue of exceptional species and habitat diversity and abundance when compared to basins of similar size and structure elsewhere in the region. These areas may also support rare, endangered or sensitive species, including ESA-listed salmonids. They also provide wetland, lake, and stream habitat that is important for wildlife and salmonid diversity and abundance within the basin.

E-468 **King County's Shoreline Master Program, watershed management plans, Water Resource Inventory Area plans, flood hazard management plans, master drainage plans, open space acquisition plans, and critical areas regulations should apply a tiered system of protection that affords a higher standard of protection for more significant resources.**

E-469 **A tiered system for protection of aquatic resources should be developed based on an assessment of basin conditions using Regionally Significant Resource Area and Locally Significant Resource Area designations, Water Resource Inventory Area Plans, habitat assessments completed for acquisitions plans, the Water Quality Assessment, Total Maximum Daily Loads, ongoing monitoring programs, and best available science.**

2. Wetlands

Wetlands are valuable natural resources in King County. They include deep ponds, shallow marshes and swamps, wet meadows, and bogs. Wetlands comprise forested and scrub-shrub communities, emergent vegetation, and other lands supporting a prevalence of plants adapted to saturated soils and varying flooding regimes. Wetlands, with their highly diverse forms and diffuse distribution, can be particularly challenging to categorize and manage.

The federal and state governments also have roles in identifying and regulating certain types of wetlands and development activity. In order to streamline and synchronize regulatory standards for wetlands, the county relies on guidance from the Washington State Department of Ecology, US Army Corps of Engineers Seattle District and Environmental Protection Agency for wetland identification, delineation, categorization, and, where appropriate, mitigation.

E-470 **King County shall use current manuals and guidance from state and federal governmental agencies and departments to identify, delineate, and categorize wetlands and to establish mitigation requirements for wetlands.**

E-471 **King County will apply the current scientifically accepted methodology for wetland mitigation based on technical criteria and field indicators. Where appropriate, King County should rely on publications and recommendations from state and federal agencies to ensure King County-approved mitigation will be accepted by state and federal agencies with jurisdiction.**

Some wetlands are large and their physical boundaries as well as their functions and values extend beyond individual jurisdictional boundaries.

E-472 **King County shall communicate and coordinate with other jurisdictions and tribes to establish uniform countywide wetlands policies that provide protection of both regionally and locally highly-rated wetlands.**

Wetlands are productive biological systems, providing habitat for fish and wildlife. Wetlands also store flood waters and control runoff, thereby reducing flooding, downstream erosion and other damage. Further, wetlands protect water quality by trapping sediments and absorbing pollutants. They allow rain and snowmelt to infiltrate into aquifers, recharging them and potentially making that water available for human use. They discharge groundwater, making it available to plants and animals. Wetlands store peak flows and discharge to streams in dry periods, thus enabling fish and riparian animal populations to survive. They may serve as outdoor classrooms for scientific study. Some are used for hiking, hunting, and fishing. These wetland functions and values need consideration from a watershed perspective. Measures to protect wetland functions and values need to be taken at both the site-specific and watershed scale. In the urban growth area, land use authority is often shared by multiple jurisdictions at the scale of a drainage basin. Similarly, efforts to protect and restore wetlands may be sponsored by multiple parties, including local governments.

E-473 **King County's overall goal for the protection of wetlands is no net loss of wetland functions and values within each drainage basin. Acquisition, enhancement, regulations, and incentive programs shall be used independently or in combination with one another to protect and enhance wetlands functions and values. Watershed management plans, including Water Resource Inventory Area plans, should be used to coordinate and inform priorities for acquisition, enhancement, regulations, and incentive programs within unincorporated King County to achieve the goal of no net loss of wetland functions and values within each drainage basin.**

Buffers are necessary but often insufficient to adequately protect wetland values and functions especially when wetlands are small and the adjacent watershed large. Consequently, the location of development in addition to its size is important in determining its impact on wetland functions and values.

The functions and values of a wetland will change as the surrounding land is altered by development and other human activities, and as local conditions are influenced by climate change. Silviculture, agriculture, and development-related changes in forest cover and impervious surface affect stormwater runoff patterns, flooding, water quality, and wetland hydrology.

E-474 **Development adjacent to wetlands shall be sited such that wetland functions and values are protected, an adequate buffer around the wetlands is provided, and significant adverse impacts to wetlands are prevented.**

The diversity of plants and animals found in wetlands generally far exceeds that found in terrestrial habitats in the Pacific Northwest. Habitat loss and fragmentation are considered the greatest threats to this native biodiversity. Wetlands in the Urban Growth Area will experience the largest reduction in the distribution and number of native animals and plants due to habitat loss and fragmentation. It is anticipated that climate change will exacerbate the adverse effects of habitat loss and fragmentation by further reducing existing wetland habitat and altering wetland hydroperiods thereby increasing the inter-habitat distances and potentially restricting the dispersal and movement of plants and wildlife between favorable wetlands and habitats.

Protecting wetland biodiversity depends upon supporting the natural processes (like hydrology, nutrient cycling, and natural disturbances) that shape wetland habitat, protecting wetlands functions and values from the impacts of adjacent land uses, maintaining biological linkages, and preventing fragmentation of wetland habitats. Small wetlands strategically located between other wetlands may provide important biological links or “stepping stones” between other, higher quality wetlands. Wetlands adjacent to habitat networks also are especially critical to wildlife because they allow individual animals to escape danger and populations to inter-disperse and breed. Wetlands adjacent to habitat networks should receive special consideration in planning land use.

E-475 **Areas of native vegetation that connect wetland complexes should be protected. Whenever effective, incentive programs such as buffer averaging, density credit transfers, or appropriate non-regulatory mechanisms shall be used for this purpose.**

Many wildlife species require access to both wetlands and adjacent terrestrial lands to support them at different stages of their lives. For example, many amphibians breed in the water and need access to terrestrial habitat for feeding and for shelter during the winter. Fixed-width buffers alone are unlikely to adequately address these needs or entirely protect wetlands from surrounding human activity. Adjacent and accessible terrestrial habitat may be too small or fragmented to provide core feeding, overwintering, and other habitat needs.

E-476 **King County should identify upland areas of native vegetation that connect wetlands to upland habitats and that connect upland habitats to each other. The county should seek protection of these areas through acquisition, stewardship plans, and incentive programs such as the Public Benefit Rating System and the Transfer of Development Rights Program.**

E-477 **The unique hydrologic cycles, soil and water chemistries, and vegetation communities of bogs and fens shall be protected through the use of incentives, acquisition, best management practices, and implementation of the King County Surface Water Design Manual to control and/or treat stormwater within the wetland watershed.**

E-478 **Public access to wetlands for scientific, recreational, and traditional cultural use is desirable, providing that public access trails are carefully sited, sensitive habitats and species are protected, and hydrologic continuity is maintained.**

E-479 **Regulatory approaches for protecting wetland functions and values, including the application of wetland buffers and the siting of off-site compensatory mitigation, should consider intensity of surrounding land uses and basin conditions. King County should continue to review and evaluate wetland research and implement changes in its wetland protection programs based on such information.**

E-480 **Enhancement or restoration of degraded wetlands may be allowed to maintain or improve wetland functions and values, provided that all wetland functions are evaluated in a wetland management plan, and adequate monitoring, code enforcement and evaluation is provided and assured by responsible parties. Restoration or enhancement must result in a net improvement to the functions and values of the wetland system. Within available resources, King County**

should provide technical assistance to small property owners as an incentive to encourage the restoration or enhancement of degraded wetlands.

E-481 **Alterations to wetlands may be allowed to:**

a. Accomplish a public agency or utility development;

b. Provide necessary crossings for utilities, stormwater tightlines and roads; or

c. Allow constitutionally mandated "reasonable use" of the property, provided all wetland functions are evaluated, the least harmful and reasonable alternatives are pursued, affected significant functions are appropriately mitigated, and mitigation sites are adequately monitored.

When adverse impacts cannot be avoided, compensatory mitigation may be allowed. This means wetland enhancement, restoration, or creation to replace project-induced losses of wetland functions and values. The county recognizes that, especially in the Urban Growth Area, allowing alteration of low-function wetlands in exchange for compensatory mitigation that contributes to wetlands of higher functions and values within a connected wetland system may achieve greater resource protection than simply preserving the low functioning wetland.

E-482 **A small Category IV wetland that is less than 2,500 square feet and that is not part of a wetland complex may be altered to move functions to another wetland as part of an approved mitigation plan that is consistent with E-483 and E-484.**

E-483 **Wetland impacts should be avoided if possible, and minimized in all cases. Where impacts cannot be avoided, they should be mitigated on site if possible and if ecologically appropriate. Where on-site mitigation is not possible or appropriate, King County may approve off-site mitigation.**

E-484 **Mitigation projects should contribute to an existing wetland system or restore an area that was historically a wetland. Mitigation should only create new wetlands after site monitoring indicates that hydrologic conditions exist to support a new wetland. Mitigation sites should be strategically located to reduce habitat fragmentation or to restore and enhance area-specific functions within a watershed.**

E-485 **Land used for wetland mitigation should be preserved in perpetuity. Monitoring and maintenance in conformance with King County standards should be**

provided or paid for by the project proponent until the success of the site is established. Long-term stewardship should occur at mitigation sites to ensure sites continue to provide desired functions and values.

Mitigation banks and in-lieu fee programs are forms of watershed-based compensatory mitigation, with the goal of providing greater resource protection and benefit to the public. Both approaches can allow for the consolidation of multiple, small mitigation projects into a large-scale wetland or wetland complex, resulting in economies of scale in planning, implementation and maintenance. Depending on their location and functions, mitigation banks and projects constructed using in-lieu fee programs can result in wetlands of greater hydrologic, chemical, and biological value because of their size and ecological context and the commitment to long-term management. These mitigation approaches also provide applicants with a range of options for meeting their off-site mitigation obligations.

Mitigation banking allows compensatory mitigation to occur prior to the loss of existing wetlands and their functions and values, thereby reducing "temporal" losses. Mitigation banking allows a project proponent to mitigate for their impacts by contributing fees to a bank sponsor for the creation or restoration of the bank site. In-lieu fee programs, such as King County's Mitigation Reserves Program (MRP), allow an applicant to meet its off-site wetland mitigation requirements through payment of a fee to King County or another authorized agent with the capacity to design and construct, maintain, and monitor a successful mitigation project. Both types of programs enable fees to be pooled so that larger projects can be constructed to offset many small, incremental, and cumulative impacts throughout a watershed. Moreover, King County's MRP enables such projects to be constructed on lands with degraded wetlands or aquatic areas or lands with the potential to reestablish wetlands or aquatic areas that could be restored or enhanced to benefit overall watershed functions. These Mitigation Reserve lands are managed for long term ecological protection, so that the landscape and stream basin context support a successful enhancement project. Such projects should be planned in a watershed context and may achieve multiple ecological objectives, including meeting salmon conservation and other habitat protection objectives as well as wetland enhancement needs.

E-486 **The county in partnership with other governmental entities and interested parties should encourage the development and use of wetland mitigation banks through which functioning wetlands are enhanced, restored, or created prior to the impacting of existing wetlands. The county shall encourage establishment of such banks by established government entities as well as by private, entrepreneurial enterprises.**

In 2008 the US Army Corps of Engineers and the US Environmental Protection Agency jointly issued new federal rules (40 CFR Part 230 and 33 CFR Part 332) regarding compensatory mitigation for losses to functions and values of aquatic resources associated with unavoidable permitted impacts. These rules require implementation of mitigation in a watershed context and consideration of functional losses to resources from permitted impacts and functional gains at mitigation sites.

King County revised its compensatory mitigation program in 2011 to comply with these new federal rules and is well positioned to become a regional service provider for compensatory in-lieu fee mitigation – both to permittees in unincorporated King County and within cities when appropriate agreements are in place. The revised program offers private and public project proponents the opportunity to pay a fee to King County in lieu of completing their own mitigation. These fees in turn will be used to implement mitigation projects that address watershed needs as determined through analysis of best available science.

In approving mitigation proposals, King County should consider the ecological context of the impacted wetland, as well as the wetland impact acreage, functions, and values. Mitigation sites should be located in areas in which the project will enhance ecological conditions of the watershed and should first replace or augment the functions and values that are most important to the optimum functioning of the wetland being created, restored, or enhanced. These functions and values may differ from those lost as a result of the impacting development project. Wetland mitigation proposals should result in no net loss, and if possible, in an increase in overall wetland functions and values within the watershed in which the impacted site is located.

E-487 **The county should continue to implement and encourage use of its Mitigation Reserves Program to provide a fee-based option for permit applicants to mitigate for unavoidable impacts of permitted development on wetland and aquatic area functions and values. The fee structure shall be based on the full costs of land acquisition, construction and long-term maintenance and monitoring. Mitigation projects implemented through the Mitigation Reserves Program should occur within a watershed context.**

E-488 **King County should be a regional service provider of compensatory mitigation through the Mitigation Reserves Program by working with local cities, other counties, and state agencies to establish partnerships for implementation of inter-jurisdictional in-lieu fee mitigation.**

A large portion of western Washington farming occurs in lands that were once wetlands. Region-wide, agricultural lands have been targeted as mitigation sites because the relative cost of land is low and the

likelihood of success in returning wetland functions is high. King County's Agricultural Production Districts (APDs) that are located in floodplains and the poorly drained Osceola soils of the Enumclaw Plateau are no exception. Unless carefully sited and engineered, wetland mitigation projects can inadvertently raise water tables on adjacent agricultural properties. King County has joined other counties in discouraging the use of productive farmland for wetland mitigation, while working with farmers on wetland enhancement and restoration at a scale appropriate to sustaining their farms.

Through the King County Mitigation Reserves Program (MRP), restoration sites are selected and pre-purchased in advance of development related impacts. Selected sites, with wetland or aquatic area enhancement, restoration or creation potential, will be purchased and actively managed as mitigation sites and will be protected in perpetuity as open space. Mitigation projects implemented through the MRP will enhance, restore, and/or create ecological functions at the site to compensate for wetland, stream, river, and/or buffer functions and values lost during unavoidable impacts associated with permitted construction of projects at other locations. Sites and projects through the MRP will occur where the projects will have sustainable long-term benefits to aquatic resources in the watershed, ensuring projects at protected sites occur in places with importance to ecological integrity of the watershed. King County's MRP has received approval from the US Army Corps of Engineers, the Environmental Protection Agency and the Washington Department of Ecology to serve as an in-lieu fee program to mitigate for the impacts to wetlands and other aquatic resources subject to state and federal regulations.

E-489 **Wetland mitigation projects should avoid impacts to and prevent loss of farmable land within Agricultural Production Districts (APDs). Creation of wetland mitigation banks are not allowed in the APDs when the purpose is to compensate for wetland impacts from development outside the APDs.**

3. Lakes

There are approximately 700 lakes in King County ranging in size from less than one acre to Lake Washington's roughly 21,500 acres. These lakes provide habitat that is essential for various life stages of many species of fish and wildlife, including salmonids, as well as recreational opportunities and scenic beauty. Development and runoff into lakes can alter their functioning and lead to eutrophication (increases in nutrients), loss of shoreline habitat, and threats to human health. Although sewage treatment has greatly reduced pollution in urban lakes like Lake Washington, runoff polluted by oil, metals, sediments, pet waste, lawn fertilizers, and pesticides can threaten human health, aquatic life, and habitat. Construction of bulkheads and docks also has the potential to impact habitat by altering shoreline vegetation and natural erosion patterns.

King County conducts water quality monitoring assessment on lakes throughout King County, in some cases supported by interlocal agreements with cities. Some of the earliest evidence of climate change includes temperature changes in our regional lakes. Changes in annual temperature cycles in King County's regional lakes, particularly Lake Sammamish, Lake Union, and Lake Washington, provide some of the most accurate measures of climate change available locally.

During the summer months, the county conducts regular monitoring at public swimming beaches. When monitoring indicates a public health hazard, the information is provided to Public Health -- Seattle & King County, which can issue a temporary closure order.

E-490 **Lakes should be protected through management of lake watersheds and shorelines. Lakes sensitive to nutrients shall be protected through the management of nutrients that stimulate potentially harmful algae blooms and aquatic plant growth. Where sufficient information is available, measurable standards for lake quality should be set and management plans established to meet the standards. Formation of lake management districts or other financing mechanisms should be considered to provide the financial resources necessary to support actions for protection of sensitive lakes.**

E-491 **The county, in partnership with other governments and community groups, should monitor and assess lake water and sediment quality, physical habitat, and biotic resources. Assessment should identify trends and describe impacts on human health, aquatic life, and wildlife habitat.**

E-492 **Swimming beaches on lakes should be monitored for bacterial contamination and algal toxins. When data shows public health to be at risk, Public Health -- Seattle & King County should take appropriate action to address public health risks.**

4. Groundwater Resources

Protecting groundwater is an important regional issue because groundwater provides approximately 30 percent of the water used in King County and is the primary source of water in rural areas. On Vashon Island and in other sole-source aquifer areas, it is the only source of drinking water.

The natural hydrologic system can be altered by development practices and overuse of the aquifer. The result may be depletion of aquifers. Groundwater is also subject to contamination from human activity.

Once a source of groundwater is contaminated it may be lost forever. The cost of protection is considerably less than the cost of remediation and replacement. Having accurate, up-to-date information on groundwater quality and quantity is essential for managing this resource. Mapping risk could be achieved for a variety of pollutants or pollutant classes by integrating groundwater protection level, distance to groundwater, soil type, pollutant mobility, and land use information into a new map layer for each pollutant. Finally, public education (particularly for individual well owners) and coordinated groundwater management efforts will help to protect this resource over the long-run.

E-493 **King County shall identify and map areas in unincorporated King County that are considered Critical Aquifer Recharge Areas and sole-source aquifers. The county shall periodically update this map with new information from adopted groundwater and wellhead protection studies and other relevant sources. King County should develop and maintain map layers of groundwater risk level when funding is available.**

E-494 **King County should protect the quality and quantity of groundwater countywide by:**

- **a. Implementing adopted Groundwater Management Plans;**
- **b. Reviewing and implementing approved Wellhead Protection Programs in conjunction with cities, state agencies and groundwater purveyors;**
- **c. Developing, with affected jurisdictions, best management practices for development and for forestry, agriculture, and mining operations based on adopted Groundwater Management Plans and Wellhead Protection Programs. The goals of these practices should be to promote aquifer recharge quality and to strive for no net reduction of recharge to groundwater quantity;**
- **d. Refining regulations to protect Critical Aquifer Recharge Areas and well-head protection areas;**
- **e. Educating the public about Best Management Practices to protect groundwater;**
- **f. Encouraging forest retention and active forest stewardship;**
- **g. Incorporating into its land use and water service decisions consideration of potential impacts on groundwater quality and quantity, and the need for long-term aquifer protection;**
- **h. Coordinating groundwater management efforts with cities, water districts, groundwater committees, and state and federal agencies;**

i. Requiring the proper decommissioning of any well abandoned in the process of connecting an existing water system to a Group A water system; and

j. When funding is available, monitoring groundwater status and trends, especially for the groundwater protection planning areas established by King County, and evaluating the groundwater monitoring results, along with groundwater monitoring performed by public water systems, plus their annual quantities of groundwater pumped over the five year period. Findings as an indicator of environmental quality should be reported for each groundwater management area.

E-495 **King County should protect groundwater recharge quantity by promoting low impact development and other methods that infiltrate runoff where site conditions permit and where pollution source controls and stormwater treatment can prevent potential groundwater contamination.**

E-496 **In making future zoning and land use decisions that are subject to environmental review, King County shall evaluate and monitor groundwater policies, their implementation costs, and the impacts upon the quantity and quality of groundwater. The depletion or degradation of aquifers needed for potable water supplies should be avoided or mitigated, and the need to plan and develop feasible and equivalent replacement sources to compensate for the potential loss of water supplies should be considered.**

E-497 **King County should protect groundwater in the Rural Area by:**

a. Preferring land uses that retain a high ratio of permeable to impermeable surface area, and that maintain and/or augment the natural soil's infiltration capacity and treatment capability for groundwater; and

b. Requiring standards for maximum vegetation clearing limits, impervious surface limits, and, where appropriate, infiltration of surface water.

Climate change has the potential to impact future groundwater availability. Warmer temperatures in the Pacific Northwest are projected to lead to greater demand for water in the summer and fall, while reduced snow pack and associated stream flows could reduce seasonal groundwater recharge. Further analysis of the potential impacts of climate change on groundwater supplies is needed to understand and mitigate for potential impacts.

E-498 **The county should, in partnership with water utilities, evaluate the likely effects of climate change on aquifer recharge and groundwater supplies and develop a strategy to mitigate potential impacts in coordination with other climate change initiatives.**

5. Rivers and Streams

There are approximately 3,100 miles of rivers and streams in King County. The river and stream channels, the surrounding riparian (streamside) areas and upland areas all contribute to the functioning and integrity of rivers and streams. Many rivers and streams provide habitat that is essential for various life stages of many species of wildlife and fish, including salmonids.

Rivers and streams are dynamic systems. Winter floods can dramatically alter river and stream courses, creating new channels, eroding banks, and depositing sediment and gravel. Flooding and erosion can also dislodge trees creating log jams. These changes help to support dynamic and complex habitat for fish and wildlife. At the same time, they can create public safety issues for people living along and recreating in rivers. In addition, public access to rivers and streams is a requirement of the Shoreline Management Act and a goal for King County to support the regional economy and provide recreational opportunities for the community. People enjoy rivers and streams for the scenic and recreation values, including boating, swimming, and fishing. Management of these systems needs to consider not only habitat protection, but also public health and safety and opportunities for education and stewardship.

E-499 **Rivers and streams are inherently dangerous. King County should coordinate across county departments and with other agencies and organizations to promote public awareness of the dynamics and dangers of river and stream systems and the need for personal responsibility when living near or recreating in or on rivers and streams.**

E-499a **When King County places large wood in rivers and streams for habitat restoration or enhancement, it should do so in a manner that minimizes danger to the public.**

In urban areas, rivers and streams in some cases also serve as stormwater drainage systems. During the winter months, runoff during storms can bring pollutants to these water bodies. During the summer months, lawn irrigation and other water uses can also carry pollutants to rivers and streams.

E-499b **River and stream channels, stream outlets, headwater areas, riparian corridors, and areas where dynamic ecological processes are present should be preserved, protected and enhanced for their hydraulic, hydrologic, ecologic and aesthetic functions, including their functions in providing large wood to salmonid-bearing streams. Management of river and stream channels should consider other beneficial uses of these water bodies, including recreation.**

E-499c **The designation of buffers for aquatic areas, including rivers and streams, should take into account watershed-scale actions to mitigate the impacts of upland development on flooding, erosion, and habitat.**

E-499d **The county should continue to monitor and assess river and stream flows, water and sediment quality, physical habitats, and biotic resources in rivers and streams. Assessment should identify trends and describe impacts on human health and safety, aquatic life, and wildlife habitat.**

E-499e **To maintain and restore stream health, sources of uncontrolled stormwater flows contributing to peak flows in small streams should be managed using on-site structural or non-structural flow control techniques.**

Specific policies addressing management of large wood are found in the King County Flood Hazard Management Plan.

Most streams in King County originate in either mountainous terrain or on rolling glacial uplands. These streams often descend through steep, narrow ravines before reaching the floodplain. At the point where these streams leave their ravines and flow onto the floodplain, the channel gradient (slope) and confinement decrease quickly, dramatically reducing the streams' ability to carry sediment. These are areas of natural sediment deposition and channel migration. The combination of sediment deposition and repeated channel migration creates fan-shaped depositional features known as alluvial "fans."

During periods of heavy rainfall, streams often carry large sediment loads from upstream that deposit on downstream alluvial fans. Landslides, beaver dam failures and other natural disturbances can create episodes of particularly high rates of sediment production and delivery. In many stream systems, instances of heavy sediment deposition may occur episodically with years or decades of apparent stability in the intervening periods. In many instances, sediment production and tributary or stream flow rates are exacerbated by upland land use conditions and associated stormwater effects.

Alluvial fans share many of the ecological attributes and land use risks associated with channel migration hazard areas and landslide hazards, though they are unique in many respects. In a natural environment, alluvial fans often provide some of the best available spawning habitat in a tributary stream, while also providing a source of gravel for areas downstream. In some heavily altered streams, the alluvial fan may represent the only remaining areas that are suitable for spawning. Alluvial fans can also form the highest ground available in the floodplain, and have historically been used for construction of buildings (including farm buildings), roads and other structures. Unfortunately, they are inherently unstable environments in which to build. During high flows coupled with sediment deposition, a stream may jump its bank in the area of the alluvial fan, in some cases damaging private property, disrupting agricultural activities, destroying culverts and road crossings, stranding fish, and creating risks to public safety. Protecting buildings, roads, and crops on and along alluvial fans often requires extensive, ongoing maintenance activities. Maintenance activities can have adverse effects on habitat.

The Rural and Natural Resource Lands chapter calls for alluvial fan pilot projects to test best management practices and innovative solutions for reducing hazards to agricultural landowners and protecting and restoring habitat.

E-499f **King County should improve the management of alluvial fans by developing and clarifying definitions of alluvial fans, mapping the locations of existing alluvial fans, and developing appropriate management strategies. Strategies should protect intact habitat and restore degraded habitat, reduce threats to public safety, and accommodate existing land use. Findings from Alluvial Fan Management Pilot Projects should inform management strategies for alluvial fans.**

6. Puget Sound

There are approximately 110 miles of marine shoreline in King County, including 51 miles in unincorporated areas. Shorelines provide important functions for maintaining a healthy ecosystem and also provide essential habitat for a variety of important and listed species, including mammals, birds, fish, and invertebrates. In addition to recreational opportunities, the marine nearshore environment provides essential habitat for a variety of species including juvenile salmonids, forage fish, and several commercially important shellfish species. Kelp and eelgrass populations are particularly important for providing food and habitat, especially for juvenile life stages for a variety of key fish and invertebrate species. Marine resources and shoreline development are susceptible to impacts from water pollution, changes in upland vegetation, alteration of natural bluff and beach erosion patterns, and alteration of nearshore substrates and aquatic vegetation.

The majority of marine waters within King County are subtidal waters, which provide important ecosystem functions and essential habitat for a variety of important species, including marine mammals, birds, fish and invertebrates. Subtidal waters support geoduck, shrimp, and bottomfish commercial fisheries as well as provide migratory pathways for marine mammals and salmonids. Resident killer whales are often observed in King County subtidal waters feeding on salmonids. Adult life stages of many species, such as rockfish and Dungeness crab, use subtidal waters extensively. In addition, subtidal waters provide an important connection to Pacific Ocean waters as well as waters within other parts of Puget Sound. Subtidal habitat is susceptible to impacts from water pollution, over-utilizing of biological resources, and climate change.

King County conducts water quality monitoring in marine offshore and nearshore areas throughout King County as part of the Marine Monitoring Program. Nutrients and dissolved oxygen are measured along with other physical and chemical parameters. Biological parameters, such as chlorophyll and phytoplankton community structure are also assessed. Offshore sediment quality is assessed in various areas and nearshore sediments are assessed throughout King County.

King County's freshwater and saltwater environments are integrally linked. Water, sediments, and nutrients move from upland areas to Puget Sound. Many species, including salmon, spend critical periods of their lives in both fresh and salt water. Salmon migrating from saltwater to their spawning areas bring nutrients back to the upland areas. Given the functional linkages between freshwater and saltwater environments, it is critical that planning and management be integrated.

E-499g **King County should collaborate with the federal and state agencies, cities, tribes, counties, and universities to monitor and assess marine waters and nearshore areas of Puget Sound. Monitoring and assessment should address water and sediment quality, bioaccumulation of chemicals, physical habitat, and biotic resources. Assessment should identify trends and describe impacts on human health and safety, aquatic life, and wildlife habitat.**

E-499h **King County should protect and enhance the natural environment in those areas recommended or adopted as Aquatic Reserves by Washington State Department of Natural Resources. This should include participation in management planning for the aquatic reserves and working with willing landowners adjacent to the reserve on restoration and acquisition projects that enhance the natural environment.**

Human waste contains high levels of nutrients and pathogens. These pollutants can enter Puget Sound marine waters from a variety of pathways including combined sewer overflow outfalls, septic systems, stormwater runoff, and rivers and streams. Nutrients are also present in treated wastewater effluent. A number of properties on Vashon-Maury Islands have on-site sewage systems that pre-date regulatory oversight and are undocumented. Washington State Department of Health surveys have indicated that failing systems are a significant problem in some areas of the Vashon-Maury Island shoreline. Public Health – Seattle & King County (PHSKC) is responsible for assuring that onsite sewage systems in King County meet state and local regulations. In addition, PHSKC is required to identify areas where marine water quality is threatened or impaired as a result of contamination from onsite sewage systems, to designate these areas as Marine Recovery Areas (MRAs), to develop a plan to identify failed septic systems within the MRAs, and to assure that these systems are repaired and maintained. The ability to install new systems is often severely constrained in the shoreline, due to small lot size, topography, and soils. In some cases, community treatment systems are needed to effectively treat waste. A four-year study to evaluate the role of nitrogen plays in causing low-level dissolved oxygen events in Quartermaster Harbor began in 2009. Sources of nitrogen will be identified and quantified for the study and nitrogen impacts on dissolved oxygen will be modeled.

E-499i **King County should work with landowners, the state Department of Health, sewer districts, and the Puget Sound Partnership to develop more effective strategies and additional resources for addressing failing septic systems in constrained shoreline environments.**

E. Watershed-Based Salmon Recovery

The protection and recovery of salmonid species that are listed under the ESA is and will continue to be a significant issue for King County. The listing of a species under the act is cause for great concern, because wild Pacific salmon have great environmental, cultural, economic, recreational and symbolic importance to the Puget Sound region

It is King County's goal to ensure the recovery and maintenance of our salmon populations to sustainable and harvestable levels, and to accrue the ecological, cultural and economic benefits that will be provided by healthy salmon stocks. King County will pursue salmon conservation strategies that sustain the region’s vibrant economy. Successful restoration and maintenance of healthy salmon populations will require time, money and effort, and collaboration with federal, state, tribal and local governments, as well as businesses, environmental groups, and citizens.

The increasing number and diversity of ESA federally protected species in King County and around the Puget Sound calls for the development and implementation of species conservation actions that are embedded within a strategy that addresses natural resource management issues at the ecosystem scale. Although species are listed one at a time, managing them toward recovery and robust health that way increases the likelihood that conservation efforts will be incomplete, redundant, and more expensive.

As a means to address salmonid listings and to sustain this precious resource for generations to come, local governments in the Puget Sound region, in cooperation with state and tribal governments and other major stakeholders, have developed long-term salmon habitat conservation strategies at the Watershed Resource Inventory Area (WRIA) level. The boundaries of WRIAs are defined under state regulations, and generally adhere to the watershed boundaries of major river or lake systems. King County participated as an affected jurisdiction in the development WRIA plans for WRIA 8 (Cedar/Sammamish Watershed), WRIA 9 (the Green/Duwamish Watershed), WRIA 7 (the Snohomish/Snoqualmie Watershed), about half of which is in King County, and WRIA 10 (the White/Puyallup Watershed), a small percentage of which is in King County. Additionally, King County has acted as a service provider at the direction of multi-jurisdictional forums for the development and implementation of the salmon recovery plans for WRIAs 8 and 9, and for the King County portion of WRIA 7.

E-499j **King County shall continue to participate in the Water Resource Inventory Area-based salmonid recovery plan implementation efforts and in other regional efforts to recover salmon and the ecosystems they depend on, such as the Puget Sound Partnership. King County's participation in planning and implementation efforts shall be guided by the following principles:**

- **a. Focus on federally listed salmonid species first, take an ecosystem approach to habitat management and seek to address management needs for other species over time;**
- **b. Concurrently work on early actions, long-term projects and programs that will lead to improvements to, and information on, habitat conditions in King County that can enable the recovery of endangered or threatened salmonids, while maintaining the economic vitality and strength of the region;**
- **c. Address both King County's growth management needs and habitat conservation needs;**
- **d. Use best available science as defined in WAC 365-195-905 through 365-195-925;**
- **e. Improve water quality, water quantity and channel characteristics;**
- **f. Coordinate with key decision-makers and stakeholders; and**

g. Develop, implement and evaluate actions within a watershed-based program of data collection and analysis that documents the level of effectiveness of specific actions and provides information for adaptation of salmon conservation and recovery strategies.

The WRIA plans recommend an array of actions including the restoration, acquisition and preservation of landscapes, municipal programmatic activities, and public outreach and education. The plans suggest that programmatic activities for salmon habitat conservation can generally be accomplished with the following three tools: regulation, incentives and education. Consequently, in addition to capital projects, local governments including King County will need to incorporate salmon recovery objectives and strategies into their normal operations, making best use of a wide range of their authorities and programs.

E-499k **King County should use the recommendations of approved Water Resource Inventory Area salmon habitat plans to inform the updates to development regulations as well as operations and capital planning for its surface water management, transportation, wastewater treatment, parks, and open space programs.**

E-499l **King County should seek to support Water Resource Inventory Area plan goals of maintaining intact natural landscapes through:**

a. Retaining low density land use designations such as Agriculture, Forestry and Rural;

b. Promoting Current Use Taxation and other incentives;

c. Promoting stewardship programs including development and implementation of Forest Plans, Farm Plans, and Rural Stewardship Plans;

d. Promoting the use of Low Impact Development methods; and

e. Acquiring property or conservation easements in areas of high ecological importance with unique or otherwise significant habitat values.

Many of the county's functional plans, programs and development regulations assist in the county's effort to conserve and recover ESA listed species. These include the code provisions governing zoning, critical areas, clearing and grading, landscaping, and the shoreline master program. County plans include the Surface Water Design Manual, the flood hazard management plan, and regional wastewater services plan. Finally the county's reliance on best management practices for vegetation management, use of

insecticides, herbicides and fungicides, and pest management, as well as for management of agricultural and forest lands also play a crucial role in protecting ESA listed species.

E-499m **King County will monitor and evaluate programs and regulations to determine their effectiveness in contributing to ESA listed species conservation and recovery, and will update and enhance programs and plans as necessary. King County should amend regulations, plans and best management practices to enhance their effectiveness in protecting and restoring salmonid habitat, using a variety of resources, including best available science as defined in WAC 365-195-905 through 365-195-925.**

E-499n **Through the Watershed Resource Inventory Area planning process, geographic areas vital to the conservation and recovery of listed salmonid species have been identified. King County will evaluate this information to determine appropriate short and long-term strategies, including, but not limited to: designation of Fish and Wildlife Habitat Conservation Areas, development regulations (special district overlays, zoning, etc.), acquisitions, facility maintenance programs, and capital improvement projects.**

E-499o **King County may use its authority under the Growth Management Act, including its authority to designate and protect critical areas, such as fish and wildlife habitat conservation areas, to preserve and protect key habitat for listed salmonid species by developing and implementing development regulations and nonregulatory programs.**

E-499p **King County shall, in cooperation with the cities, ensure a no net loss of housing capacity that preserves the ability to accommodate the 2022 growth targets, while pursuing compliance with Endangered Species Act requirements. To achieve this goal, densities shall be increased on buildable lands, consistent with U-319.**

Local governments primarily have authority and influence over land use actions affecting habitat. However, protecting and restoring habitat is just one piece of the salmon recovery puzzle. Management of fish harvest, hatchery, hydropower, and water storage actions is also critical, and actions need to be coordinated with entities having authority in these areas.

E-499q **King County should continue to take actions that ensure its habitat restoration and protection actions are implemented as part of a watershed-based salmon conservation strategy that integrates habitat actions with actions taken by harvest and hatchery managers. Harvest and hatchery managers specifically include tribes, the Washington Department of Fish and Wildlife, the National Marine Fisheries Service, and the US Fish and Wildlife Service. Appropriate venues for this coordination include watershed plan implementation groups and other local or regional salmon management entities that rely on actions by habitat, harvest and hatchery managers to achieve specific goals and objectives.**

Lastly, to ensure the long-term success of salmon recovery actions, King County will need to develop and implement a program that provides for the monitoring for effectiveness of recovery actions and provides valuable information to redirect and adapt salmonid recovery strategies and actions. Please see the Monitoring and Adaptive Management Section at the end of this chapter for policies related to this topic.

F. Flood Hazard Management

Floodplains are lands adjacent to lakes, rivers and streams that are subject to periodic flooding. Floodplains naturally store flood water, contribute to groundwater recharge, protect water quality and are valuable for recreation, agriculture and fish and wildlife habitat. Floodplains also provide a deposition zone for sediments mobilized by rivers and streams. Wetlands are often an integral part of floodplains. Floodplains are designated based on the predicted frequency of flooding for a particular area. For example, a 100-year floodplain is a land area that has a one percent probability of experiencing flooding in any given year.

Development can reduce the floodplain's ability to store and convey floodwaters, thereby increasing the velocity and depth of floodwaters in other areas. In addition, floodplain development often occurs at the expense of important fish and wildlife habitat. King County has adopted the Flood Hazard Management Plan to provide guidance for decisions related to land use and floodplain management activities.

E-499r **King County's floodplain land use and floodplain management activities shall be carried out in accordance with the King County Flood Hazard Management Plan.**

The primary focus of King County's Flood Hazard Management efforts is protecting public health and safety. However, in many cases, flood hazard management projects can be designed in a manner that enhances or restores flood storage, conveyance, and ecological values of the floodplain and associated

wetlands and riparian corridors. Requirements for state and federal permits necessary for construction of capital projects typically require that projects be designed to protect and enhance habitat.

E-499s **The existing flood storage and conveyance functions and ecological values of floodplains, wetlands, and riparian corridors shall be protected, and should, where possible, be enhanced or restored.**

G. Hazardous Waste

Throughout King County, businesses use and generate hazardous materials as part of their normal operations. There are numerous rules and requirements for the proper management of these materials and requirements can vary slightly by jurisdiction. Often the businesses will learn of these requirements after they have found out that they are not in compliance. To help mitigate the potential harmful effects to human health and the environment and to minimize the economic impacts to businesses that may generate hazardous chemicals, King County provides education and technical assistance to businesses on requirements for proper management and disposal of hazardous chemicals, as well as information on less toxic alternatives.

Contacting businesses with information on proper hazardous waste disposal as early as possible in the business development phase can help to prevent improper disposal of hazardous waste and associated risks to public safety and the environment. Taking a preventative approach can also help to avoid costly code violations.

E-499t **King County should review new business permit and change of use applications for businesses that propose to use hazardous chemicals or generate hazardous waste as part of their operations. The county should offer to provide technical assistance related to hazardous waste disposal requirements, spill response, and non-toxic alternatives.**

V. Geologically Hazardous Areas

King County is located on the active, tectonic Pacific "Ring of Fire," which is characterized by numerous, dynamic geologic processes that include frequent earthquakes and recurring volcanic eruptions. The relatively recent glacial history has left numerous steep and unstable hillsides throughout the county. Because of these steep and unstable hillsides, many areas of the county are prone to naturally occurring landslides and tree falls. Snow avalanches are also a common occurrence in the Cascade Mountains in Eastern King County. Often times the result of these naturally occurring events can be beneficial to the environment, by providing gravel and woody debris in streams and rivers, and continuing the process of natural regeneration. Salmon need gravel for spawning and in-stream debris for cover and to provide shade and regulate temperature. King County must balance the positive benefits of these natural occurrences with any adverse impacts that pose a threat to public health and safety. The county must also strike a balance between allowing naturally occurring landslides and erosion, and the need to prevent the unnatural acceleration of landslides and erosion due to development activities.

Coal mines have created additional areas of subsidence and instability in addition to those which occur naturally. When human activity occurs in areas subject to such active geologic processes, the potential consequences to life, property and environmental integrity can be enormous. If geologic processes are recognized and appropriately addressed in the course of development activities, adverse consequences can be substantially reduced if not completely eliminated.

A. Erosion Hazard Areas

Virtually any area in King County can experience soil erosion if subjected to inappropriate grading and construction practices. The US Department of Agriculture Soil Conservation Service has identified certain soil types in King County as being especially subject to erosion, if disturbed. These Erosion Hazard Areas may not be well suited to high-density developments and intensive land uses because of the sensitivity of these soils to disturbance.

E-501 **Grading and construction activities shall implement erosion control best management practices and other development controls as necessary to reduce sediment and pollution discharge from construction sites to minimal levels.**

E-502 **Land uses permitted in Erosion Hazard Areas shall minimize soil disturbance and should maximize retention and replacement of native vegetative cover.**

E-503 **Slopes with a grade of 40 percent or more shall not be developed unless the risks and adverse impacts associated with such development can be reduced to a nonsignificant level. No-disturbance zones shall be designated where basin plans identify the need to prevent erosion damages in areas that are extremely sensitive to erosion impacts. Properly designed stormwater tightlines may be allowed within designated no-disturbance zones.**

Vegetation is an important component of the natural environment. This general term refers to all plant life growing at, below or above the soil surface. It includes trees, shrubs, herbs, grasses and aquatic plants.

Vegetation, especially forests, provides many significant ecological functions. Vegetation absorbs, filters and slows surface water flow. This is particularly important over aquifer recharge areas. Native vegetation also provides wildlife habitat to which native species are well adapted. Forests are key components in atmospheric cycles; they absorb carbon dioxide, produce oxygen and filter particulate matter. Additionally, they absorb noise and are aesthetically pleasing.

Noxious weeds are nonnative invasive plants that pose a threat to health and safety, agriculture, wildlife, wetlands and recreational areas. They tend to spread in areas that have been disturbed by urban development and agriculture and are difficult to eradicate once they become established. Without natural predators, some noxious weeds can displace native plant communities, reducing plant diversity. Invasive plants also decrease the quality of wildlife habitats, reduce visual quality, and increase maintenance and production costs for natural resource managers and farmers.

E-504 **King County should protect native plant communities by encouraging management and control of nonnative invasive plants, including aquatic plants. Environmentally sound methods of vegetation control should be used to control noxious weeds.**

E-505 **Through training and other programs, King County should actively encourage the use of environmentally safe methods of vegetation control. Herbicide use should be minimized. King County should be a good steward of public lands and protect water quality, by reducing the use of insecticides, herbicides and fungicides through the use of integrated pest and vegetation management practices.**

E-506 **The use of native plants should be encouraged in landscaping requirements and erosion control projects, and in the restoration of stream banks, lakes, shorelines, and wetlands.**

E-507 **In response to watershed-based salmon conservation Water Resource Inventory Area plans and as part of King County's continued basin planning and stewardship programs, King County may adopt vegetation retention goals for specific drainage basins. These goals should be consistent with R-334, as applicable. The county should adopt incentives and regulations to attain these goals, and the county should monitor their effectiveness.**

B. Landslide and Avalanche Hazard Areas

Certain hillsides in King County are either naturally unstable or susceptible to instability when disturbed. These hillsides contain slopes greater than 15 percent, are underlain by impermeable soils, and are subject to seepage. They also include areas that have experienced landslides in the past and have slopes that are being undermined by stream or beach erosion. Construction in these areas is expensive and difficult. Landslides on such slopes following development can result in enormous public and private costs and severe threats to human health and safety. Such landslides can also cause severe natural resource damage.

Many of the mountainsides in the Cascade Range in Eastern King County are subject to snow avalanches during the winter. Such avalanches are destructive and can be deadly. King County supports all efforts to monitor and share information regarding avalanche dangers and to alert the public of those dangers.

E-508 **Avalanche or Landslide Hazard Areas should not be developed unless the risks and adverse impacts associated with such development can be reduced to a nonsignificant level. Development proposed in or adjacent to avalanche or landslide hazard areas shall be adequately reviewed and mitigated to ensure development does not increase landslide or erosion hazards that would adversely impact downstream properties or natural resources.**

C. Seismic Hazard Areas

King County is an earthquake-prone region subject to ground shaking, seismically induced landslide and liquefaction of soil. Areas with low-density soils are likely to experience greater damage from earthquakes.

E-509 **In areas with severe seismic hazards, special building design and construction measures should be used to minimize the risk of structural damage, fire and injury to occupants and to prevent post-seismic collapse.**

D. Volcanic Hazard Areas

King County is located in a region characterized by active volcanism. The volcanic hazard that poses the greatest risk to safety and well being of county residents would be from a lahar (volcanic mudflow) originating on Mt. Rainier and flowing down the White River valley (possibly overflowing into the lower Green River Valley). Ongoing investigations by the United States Geological Survey continue to clarify the nature of this hazard. Current information provides the basis for taking steps to mitigate that risk.

E-510 **King County should work with the United States Geological Survey to identify lahar hazard areas and shall work with local governments to assess the risk to county residents from lahars and to implement appropriate emergency planning and implement appropriate development standards.**

E. Coal Mine Hazard Areas

King County has a long and varied history of underground and surface coal mining. Some coal mining was conducted by large, well-capitalized mining companies that used methods such as detailed underground and surface mapping and protection of surface improvements. Other mines were small operations or re-mining operations that sought to maximize coal extraction with less regard for surface impacts or mapping. Some intensively developed areas of King County are located over abandoned underground coal workings, including Talbot Hill and the north Benson Hill of Renton, the Spring Glen area around Cascade Vista, East Fairwood, Black Diamond, southwest Issaquah, and the Newcastle/Coal Creek area.

The greatest dangers to people, wildlife and surface facilities typically exist around mine portals, timber chutes, air shafts, and workings which have collapsed to the surface. Other areas were deep mined by "room and pillar" mining techniques in which "pillars" of coal were left to provide support for the mining of adjacent "rooms." Once abandoned, pillars would collapse and rooms of mined-out coal would fill with collapsed roof material, coal debris and water. Regional downwarping of these areas was generally not observable and usually happened in the early years following mining of a section. Deep mined areas with a high ratio of overburden/cover-to-void usually present no hazards for surface development. However, areas with low overburden/cover-to-void ratio present higher risks and may require more advanced investigations and construction techniques for development. Mine portals, timber chutes, airshafts, and

workings which have collapsed to the surface require the greatest need for detailed engineering studies to ensure that these sites are safe for new, productive use.

E-511 **King County will encourage efforts by public and private property owners and the Office of Surface Mining, Reclamation, and Enforcement to return lands to their highest productive use by safely minimizing or eliminating coal mine hazards.**

E-512 **King County shall require all development proposals potentially subject to coal mine hazards to assess the mine-related hazards, including risks to structures, improvements, occupants and public health and safety.**

E-513 **King County shall allow development within coal mine hazard areas if the proposal includes appropriate mitigation for identified, mine-related hazards using best available engineering practices and if the development is in compliance with all other local, state and federal requirements.**

E-514 **King County shall require all landowners proposing new development in coal mine hazard areas to document the potential hazard on the title of the parcel or parcels being developed. This notice may include reference to any available technical studies or detailed hazard delineations.**

VI. Monitoring and Adaptive Management

King County's environment is constantly changing in response to land and water management actions that are within our control, as well as climate cycles and geologic processes that are beyond our control. The county makes significant investments in projects, programs, and policy implementation to help ensure that our environment supports a range of ecological, cultural and economic values that are fundamental to the region's quality of life.

King County's policies, regulations, and actions to protect and restore the environment need to be assessed on an ongoing basis to ensure that they are having the intended effect, and that they are responding to changing conditions. Our efforts to protect the environment will also need to reflect improvements in our knowledge about the natural environment and how human activity impacts ecological systems, and uncertainties about ecological and biological processes.

Assessing the effectiveness of specific and cumulative actions requires data collected within rigorous monitoring programs. Monitoring provides essential information to track: (1) changes in the natural and built environment, (2) implementation of planned and required actions (like construction of wetland mitigation projects), and (3) effectiveness of our environmental protection actions. Monitoring information can support a formal Adaptive Management program to modify policies, goals, and management decisions as necessary, and inform regulatory change.

Adaptive management can be used to help insure that projects, programs and policies are moving the county toward its environmental goals over time. Adaptive Management is defined as the process of making hypotheses of management outcomes, collecting data relevant to those hypotheses, and then using monitoring data to inform changes to policies and actions to better achieve intended goals. Adaptive management concepts are often applied in programs intended to address complex natural resource management problems, for example in Water Resource Inventory Area plans for salmon recovery or in Habitat Conservation Plans to comply with the ESA. The Washington Administrative Code calls for local governments to use monitoring and adaptive management to address uncertainties in best available science for protecting critical areas like wetlands.

King County conducts a diverse array of monitoring activities, ranging from project-specific monitoring of Capital Improvement Projects and legally required monitoring of municipal wastewater and stormwater discharges in compliance with National Pollutant Discharge Elimination System permit requirements, to watershed-wide ambient monitoring of groundwater, rivers, streams, lakes, and marine waters of Puget Sound to the extent that funding allows. King County maintains a continuous water quality monitoring program for freshwater streams, rivers, lakes, and marine waters. This long-term monitoring program

informs our understanding of changes in water quality over time including those caused by climate change, and contributes to the identification of emerging pollution issues *and sources of water pollution*. The monitoring program also allows the quantification of water quality and aquatic habitat improvements. The data collected by these programs additionally provides the necessary baseline information for many scientific studies conducted in King County wetlands, lakes, streams, and marine waters by county scientists as well as scientists at universities and state and federal agencies.

Financial resources for environmental protection programs, including monitoring, are limited. Because baseline monitoring does not result in an actual project "on the ground," and often is not mandated, it may not compete well with other priorities for limited funding. However, investments in monitoring will provide essential information for evaluating the effectiveness of current actions and guiding future policy decisions, priorities, and investments. To make the most efficient use of limited resources, it is critical that the county look for opportunities to coordinate its data collection and dissemination efforts so that they can meet as many information needs as possible. The county should also partner with entities conducting monitoring, including other governments and universities.

When data are collected, it is important that its usefulness is maximized. "Metadata" is background information on data, and is necessary to facilitate the understanding, use, storage, sharing, and management of data. For example, metadata can describe how a particular data set was collected, provide definitions for types of data, and describe the reliability of the data.

E-601 **King County should conduct a comprehensive and coordinated program of environmental monitoring and assessment to track long-term changes in climate (e.g., precipitation, temperature), water quality and quantity, land use, land cover and aquatic and terrestrial habitat, natural resource conditions, and biological resources as well as the effectiveness of policies, programs, regulations, capital improvement projects, and stormwater treatment facility design. This monitoring program should be coordinated with other jurisdictions, state and federal agencies, tribes, and universities to ensure the most efficient and effective use of monitoring data.**

E-602 **King County should seek to develop and maintain a publicly accessible, geo-spatial database on environmental conditions to inform policy decisions, support technical collaboration, and inform the public. All King County monitoring data should be supported by metadata.**

E-603 **King County should establish a decision-support system suitable for adaptive management that uses data from its environmental monitoring programs.**

A. Performance Measurement, Performance Management, and KingStat

Like adaptive management in realm of science, performance management includes collecting data, analyzing data to inform decision-making, and making programmatic course corrections based on this analysis.

King County has already started to report to the public both community-level conditions and agency performance measures. Monitoring data referenced in this chapter serves as a core element of helping elected officials and the public stay informed about the state of the environment and the effectiveness of agency programs.

The executive's KingStat program is using environmental monitoring data to assess environmental conditions, develop appropriate county responses, and provide an opportunity to collaborate and partner with other organizations in making improvements. With respect to environmental conditions, data used in KingStat includes marine water, freshwater, terrestrial habitat, fish and wildlife, atmosphere, and resource consumption.

E-604 **The county should continue to collect data on key natural resource management and environmental parameters for use in KingStat, King County's Strategic Plan implementation goals and objectives, and other environmental benchmarking programs. Findings should be reported to the public, partner agencies, and decision-makers. The information collected should be used to inform decisions about policies, work program priorities and resource allocation.**

B. National Pollutant Discharge Elimination System Compliance

A new National Pollutant Discharge Elimination System general municipal stormwater permit for discharges from the county's municipal stormwater system was issued in January of 2007 for a term of five years. The new permit contains prescriptive requirements for controlling and monitoring pollutants in municipal stormwater.

E-605 **King County shall carry out monitoring in compliance with its National Pollutant Discharge Elimination System municipal permit. Data collected through these**

monitoring efforts should be coordinated with King County's other monitoring efforts to the extent possible, and carried out in the most cost-effective and useful manner possible.

C. Water Resource Inventory Areas Plan Implementation

The Puget Sound region has responded commendably to the listing of Puget Sound Chinook. In King County, more than 40 jurisdictions have joined together to cooperatively lead salmon recovery in our watersheds. In the five years since the plans were adopted (2006-2010), King County has implemented 23 priority salmon restoration projects within its jurisdiction and has initiated work on an additional 55. In 2010, NMFS conducted a five-year assessment of progress to implement the Puget Sound Salmon Recovery Plan. Some of the conclusions and recommendations of the five -year assessment are:

- Habitat continues to decline, and the region needs to increase its scrutiny of the sources of habitat decline and the tools used to protect habitat sites and ecosystem process.
- Habitat protection needs improvement, and lead entities and regional groups should advocate for stronger regulatory programs to protect habitat.
- Habitat work is underway, but funding sources tend to favor capital projects over the funding of staff necessary to perform the work.
- Funding is unavailable to fully implement current three-year work programs.
- Adaptive Management Plans are not completed: A process should be established to recognize changes that are being made to Recovery Plan strategies as implementation proceeds.

Although Water Resource Inventory Area plans are Chinook salmon-focused, they are expected to also provide the basis for recovery planning for other listed aquatic species, including Orcas and other listed salmonids.

E-606 **King County should work with other Water Resource Inventory Area plan partners to establish a program (framework and methodology) for monitoring project specific and cumulative effectiveness of King County salmonid recovery actions. This program should include data collection and analysis and should provide information to guide an adaptive management approach to salmonid recovery.**

E-607 **The county should coordinate with other governments, agencies, tribes, non-governmental organizations and others to develop and implement regional and watershed-based Adaptive Management programs focused on achieving salmon recovery goals.**

D. Effectiveness of Critical Areas Regulations

Under the GMA, all counties and cities are required to periodically review their comprehensive plans and development regulations, including critical area regulations, for consistency with the GMA. GMA also requires local governments to include best available science in the development of land use policies and regulations to protect the functions and values of critical areas. Washington State Department of Commerce procedural criteria for adoption of comprehensive plans and development regulations provide direction on how local governments should include best available science in their critical area regulations (WAC 365-195). The procedural criteria call for the use of a precautionary approach, in which development and land use activities are strictly limited until the uncertainty is sufficiently resolved, where the science is uncertain. Coupled with this precautionary approach should be an adaptive management program that allows for changes to regulations as new information comes in to address uncertainties. The adaptive management program is dependent upon a monitoring program that is designed to obtain the information needed to determine the effectiveness of regulations.

E-608 **King County should develop and implement a framework for effectiveness monitoring of critical areas regulations, and use monitoring data to inform the future review and updates of its critical areas policies and regulations.**

Wildlife Habitat Network and Public Ownership 2012

King County Comprehensive Plan, 2012
Chapter Four, Environment

Public Lands

- King County Open Space System
- State
- Federal
- City & Other Jurisdiction

- Tribal Lands
- Incorporated Areas
- Wildlife Network
- Wilderness Boundary

Source: U.S. Forest Service, King County Departments of Assessments, Natural Resources and Parks, and Development and Environmental Services

Notes

Public Ownership within incorporated areas are not displayed

The maps in the King County Comprehensive Plan and its technical appendices are produced with a computer geographic information system. They are reduced in size but available at a larger scale.

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

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February 2012

King County
Department of Development and Environmental Services

Date: Februrary 15, 2012
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CHAPTER 5
SHORELINES

I. Introduction

A. Recitals

King County adopts the following, which are based on the Shoreline Management Act legislative findings in RCW 90.58.020. These recitals represent King County's belief and agreement that a coordinated approach to utilizing, managing, and protecting the shoreline resource is necessary and essential. These recitals apply to the shoreline jurisdiction.

1. Shorelines are some of the most valuable and fragile of King County's natural resources. There is appropriate concern throughout the county relating to the utilization, protection, restoration, and preservation of the shoreline jurisdiction.
2. Ever increasing pressures of additional use are being placed on the shoreline jurisdiction, which in turn necessitates increased coordination in its management and development.
3. Much of the shoreline jurisdiction and the uplands adjacent thereto are in private ownership. Unrestricted construction on the privately owned or publicly owned shorelines is not in the best public interest; and therefore, coordinated planning is necessary in order to protect the public interest associated with the shoreline jurisdiction while recognizing and protecting private property rights consistent with the public interest.
4. There is a clear and urgent demand for a planned, rational, and concerted effort, jointly performed by federal, state, and local governments, to prevent the inherent harm in an uncoordinated and piecemeal development of King County's shoreline jurisdiction.
5. It is the intent of King County to provide for the management of the shoreline jurisdiction by planning for and fostering all reasonable and appropriate uses. This program is designed to insure the development in a manner that, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest.
6. King County shoreline policies are intended to protect against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto.
7. In the implementation of this chapter, the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines shall be preserved to the greatest extent feasible consistent with the overall best interest of the state, the county, and the people generally. To this end uses shall

be preferred which are consistent with control of pollution and prevention of damage to the natural environment or are unique to or dependent upon use of the state's shoreline.

8. Alterations of the natural condition of the shoreline jurisdiction, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines, industrial and commercial developments that are particularly dependent on their location on or use of the shoreline jurisdiction, and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines.
9. Shorelines and shorelands in King County shall be appropriately designated and these classifications shall be revised when circumstances warrant, regardless of whether the change in circumstances occurs through man-made causes or natural causes. Any areas resulting from alterations of the natural condition of the shorelines and shorelands no longer meeting the definition of "shorelines of the state" shall not be subject to the provisions of King County Shoreline Master Program.
10. Permitted uses in the shorelines zone shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline jurisdiction and any interference with the public's use of the water.

B. About King County & King County Shorelines

1. Geography

King County covers 2,130 square miles and extends from Puget Sound in the west to 8,000-foot Mt. Daniel at the Cascade crest in the east. King County’s shoreline jurisdiction includes saltwater coastline, river floodplains, and extensive lakes and streams.

2. King County’s shoreline jurisdiction

King County’s diverse shorelines fringe or flow into Puget Sound. Puget Sound and surrounding lowland lakes and river valleys are relatively young in geologic terms. Puget Sound is a glacially-carved, deep fjord between the Cascade and Olympic mountains.

Puget Sound is King County’s link to the Pacific Ocean via two connections: the Strait of Juan de Fuca and the Strait of Georgia. Water, people and a diverse array of fish and wildlife travel freely between the ocean and King County via Puget Sound and these Straits.

Puget Sound is a large estuary complex created by the freshwater it receives from streams, rivers and springs and tidal exchange introduced through the two Straits. It is one of the more prominent and productive estuaries in the world. In 1988, it was identified as an Estuary of National Significance by the United States government. Within Puget Sound are numerous small to large estuaries. The largest estuary in King County is the Green-Duwamish, although it is now a small remnant of its pre-development state.

Puget Sound consists of five basins. King County's portion of Puget Sound lies within the Central Basin and includes Vashon-Maury Island. The Central or Main Basin extends from Admiralty Inlet to Tacoma Narrows. It is the largest and deepest of the basins. The major drainages to the Central Basin, including Cedar River/Lake Washington watershed (including Lake Sammamish and the Sammamish River), the Green-Duwamish watershed, and Puyallup River/White River watershed, drain a total area of about 2,700 square miles and contribute slightly less than 20% of Puget Sound's freshwater input. The Snohomish watershed (including the Snoqualmie River Basin that lies mostly in King County) outlet into Puget Sound lies in Everett.

Puget Sound is located in a region that has great overlap between valuable natural resources and a burgeoning human population. The productivity, diversity and value of the resources are greatly affected by the extent and density of the population. Due to proximity to transportation routes and abundant food and water resources, most of the region's human development since the mid-1800s, when settlers of European descent started to explore and develop the region, has occurred along Puget Sound's shorelines, large lakes and rivers.

C. Washington State's Shoreline Management Act

1. Overview of Shoreline Management Act

Washington's Shoreline Management Act (SMA) was passed by the Legislature in 1971 and adopted by the public in a 1972 referendum. The goal of the SMA is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines."

The act establishes a broad policy giving preference to uses that:

- Protect the quality of water and the natural environment,
- Depend on proximity to the shoreline ("water-dependent uses"), and
- Preserve and enhance public access or increase recreational opportunities for the public along shorelines.

The SMA establishes a balance of authority between local and state government. Cities and counties are the primary regulators but the state, through the Department of Ecology (Ecology), has authority to review local shoreline master programs and shoreline permit decisions.

Under the SMA, each city and county adopts a shoreline master program that is based on Ecology's shoreline master program rules or guidelines, but tailored to the specific needs of the community. More than 200 cities and all 39 counties have shoreline master programs. Local shoreline master programs combine both plans and regulations. The plans are a comprehensive vision of how shoreline areas will be used and developed over time. Regulations are the standards that shoreline projects and uses must meet.

Ecology provides technical assistance to local governments undertaking master program amendments. Master programs and master program amendments are only effective after Ecology's approval. In reviewing master programs, Ecology is limited to a decision on whether or not the program is consistent with the policy and provisions of the SMA and Ecology's guidelines.

Local governments may modify master programs to reflect changing local circumstances, new information, or improved shoreline management approaches. All changes to master programs require public involvement and Ecology approval. At a minimum, local governments must hold public hearings.

In 2003, Ecology adopted revised state guidelines. Cities and counties with shoreline master programs are required to update their shoreline master programs to bring them into compliance with these new state guidelines.

2. History of shoreline management in King County

King County adopted its original Shoreline Master Program (SMP) through two ordinances adopted by the King County Council and approved by the King County Executive, John Spellman, on May 2, 1978. Ordinance 3692 adopted the Shoreline Master Plan, which established the goals, objectives, and policies of the King County SMP. Ordinance 3688 adopted the development regulations that implemented the Shoreline Master Plan. By a letter dated June 30, 1978, Ecology stated that it had approved King County's SMP.

The 1978 Shoreline Master Plan addressed the required elements of the shoreline guidelines originally adopted by Ecology in 1972. The 1978 Plan established goals, objectives, and policies for eight different shoreline elements. For each of the four shoreline environments, it also established general policies.

The 1978 Plan stated that:

"Each environment represents a particular emphasis in the type of uses and the extent of development that should occur within it. The system is designed to encourage uses in each Environment which enhance the character of the Environment while at the same time requiring reasonable standards and restrictions on development so that the character of the Environment is not destroyed."

Finally, the 1978 SMP included general policies for a variety of different shoreline use activities, including agriculture, mining, recreation, and residential development. Associated shoreline regulations establish the designation criteria, the allowed uses, and development standards for the four shoreline environments recognized by the 1972 state guidelines.

In 1990, the King County Council adopted regulations governing environmentally sensitive areas, some of which include areas also within shoreline jurisdiction. (Ordinance 9614) King County updated its critical areas regulations effective January 1, 2005. (Ordinances 15032, 15033, and 15034) King County's Critical Areas Regulations and its SMP both provide that the regulations that are most protective of the environment apply in the case of a conflict.

3. Shoreline jurisdiction under the SMA

Shorelines of the State in King County, as defined by the SMA, include all marine waters, lakes greater than 20 acres, and rivers and streams with a minimum of 20 cubic feet per second (cfs) mean annual flow. The shoreline jurisdiction includes these water bodies and shorelands. Shorelands are defined as those areas extending landward for two hundred feet from the ordinary high water mark, floodways and contiguous floodplain areas landward two hundred feet from such floodways, and all associated wetlands and river deltas. King County currently includes the 100-year floodplain in its shoreline jurisdiction. Shoreline jurisdiction under the Shoreline Management Act does not include tribal reservation lands or lands held in trust by the federal government for the tribes.

Table S-1 below shows the number of shoreline miles managed under King County's SMP.

Table S-1. Miles of shoreline under King County's jurisdiction

Shoreline (miles)		
Lake	**River/Stream**	**Marine**
234	1,696	51

D. King County's Shoreline Master Program

The SMP adopted by King County provides a legal framework for decision making on land use and other activities that complies with the SMA. This section describes the elements of the SMP, with the details being further developed throughout this chapter.

1. Components of the Shoreline Master Program

The King County SMP consists of this chapter and the implementing shoreline management regulations.

This chapter describes King County's shoreline goals and policies. It addresses the shoreline jurisdiction, overall shoreline policy goals, shoreline element policies, SMP relationship to other laws, shoreline environment designations, environmental protection, shoreline use and modification, and administrative policies. The following documents provide supporting information for these goals and policies:

King County Shoreline Protection and Restoration Plan (September 2010): The Shoreline Protection and Restoration Plan summarizes the methods and results of King County's shoreline analysis with respect to restoration planning, the elements and applicability of the restoration plan, and the ways in which shoreline restoration is expected to occur over time.

King County Shoreline Public Access Plan (September 2010): The Shoreline Public Access Plan includes an inventory of existing formal and informal shoreline public access opportunities in the unincorporated area, and identifies gaps in public access opportunities. The Shoreline Public Access Plan describes King County's priorities for providing new public access to major shorelines in the unincorporated area.

King County Shoreline Cumulative Impacts Assessment (September 2010): The Shoreline Cumulative Impacts Assessment provides a mechanism for examining the potential success of county policies and regulations in meeting the goal of no net loss of shoreline ecological processes and functions.

King County Shoreline Inventory and Characterization (May 2007): The Shoreline Inventory and Characterization includes the data and analytic methods used to develop King County's shoreline inventory and shoreline characterization (including evaluation of existing physical and shoreline ecological processes and functions, public access and recreation, land use and economic development, public facilities and utilities, and archaeological and historic resources). In addition, the Shoreline Inventory and Characterization includes methodologies for cumulative impact analysis associated with shoreline management and comprehensive shoreline restoration planning. Specific data can be found at: http://www.kingcounty.gov/shorelines.

King County Shoreline Map Folio (September 2010): The Shoreline Map Folio includes all maps produced and referenced as part of the SMP update, with the exception of those maps included in this chapter. All geographic information can be found at: http://www.kingcounty.gov/shorelines/shorelines-plan-update.aspx

The terms "Shoreline Master Program," "SMP," "Shoreline Program" and "Program" are all used throughout this chapter to describe King County's shoreline policies (this chapter) and shoreline management regulations in their entirety.

2. Shoreline policies

The SMP contains specific policies relating to a wide variety of shoreline uses and issues.

Shoreline policies establish broad shoreline management directives. They are statements of intent by King County that direct or authorize a course of action or specify criteria for regulatory or non-regulatory action. The policies serve as the basis for regulations that govern use and development along the shoreline.

King County's shoreline policies must:

1. Be consistent with the SMA;
2. Address the master program elements of RCW 90.58.100;
3. Include policies for environmental designations as described in WAC 173-26-211;
4. Be designed and implemented in a manner consistent with all relevant constitutional and other legal limitations on regulation of private property; and
5. Be consistent with the King County Comprehensive Plan and functional plans adopted as components of the Comprehensive Plan.

Shoreline policies provide a comprehensive foundation for the SMP regulations, which are more specific standards that are used to evaluate shoreline development proposals. King County must evaluate permit applications in light of the shoreline policies and may approve a permit only after determining that the development conforms to the policies in the Shoreline Master Plan.

In addition, shoreline policies assist in prioritizing King County's spending on facilities and services within shorelines of the state. Finally, the shoreline policies provide direction for regional issues such as resource management, environmental protection, transportation, inter-governmental coordination and regional planning.

3. Shoreline Environments

The SMA requires that shoreline management programs classify shoreline areas into specific environment designations. Ecology's guidelines recommend six different environment designations, but does not require that local programs adopt this particular scheme. King County's 1978 SMP adopted the four environment designations recommended by Ecology at that time: Urban, Rural, Conservancy, and Natural. In this update, King County is adopting eight environment designations in total, based on the recommendations from Ecology. These environment designations are:

High Intensity Shoreline Environment: Applied to areas that provide high-intensity water-oriented commercial, transportation, and industrial uses.

Residential Shoreline Environment: Applied to accommodate residential uses at urban densities, while allowing for non-residential uses that are consistent with the protection of the shoreline jurisdiction.

Rural Shoreline Environment: Applied to accommodate rural residential shoreline development, while allowing for rural non-residential uses that are consistent with the protection of the shoreline.

Conservancy Shoreline Environment: Applied to protect and conserve the shoreline for ecological, public safety, and recreation, purposes. Includes areas with important shoreline ecological processes and functions, valuable historic and cultural features, flood and geological hazards and recreational opportunities. Residential areas can also be designated as conservancy shorelines.

Resource Shoreline Environment: Applied to allow for mining and agriculture land uses, except for shorelines that are relatively intact or that have minimally degraded shoreline processes and functions.

Forestry Shoreline Environment: Applied in areas to allow for forest production and protect municipal water supplies.

Natural Shoreline Environment: Applied to shorelines that are relatively intact or have minimally degraded shoreline processes and functions that are intolerant of human use.

Aquatic Shoreline Environment: Applied to the areas waterward of the ordinary high water mark.

4. Shoreline program elements

The SMA identifies eight "program elements" that must be addressed and included in local shoreline master programs:

Economic development element that considers the location and design of industries, industrial projects of statewide significance, transportation facilities, port facilities, tourist facilities, commerce, and other developments that are particularly dependent on shorelines of the state.

Public access element that considers public access to publicly owned land along shorelines of the state.

Recreational element that identifies recreational opportunities along shorelines, such as parks, tidelands, beaches, and recreational areas, and that pursues acquisition through implementation of the King County SMP.

Circulation element that consists of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities.

Land use element that considers the general distribution and location, as well as the extent of use on the shorelines and adjacent areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private use of the land.

Conservation element that addresses the preservation of natural resources including, but not limited to, scenic vistas, aesthetics, and vital estuarine areas for fish and wildlife.

Historic, cultural, scientific and educational element that prevents the destruction of or damage to any site having historic, cultural, scientific, or educational value as identified by the appropriate authorities, including affected Tribes, and the state office of archaeology and historic preservation.

Flood hazard element that considers the prevention and minimization of flood damages.

5. Shoreline modifications and uses

The SMA requires that local shoreline master programs distinguish between shoreline modifications and shoreline uses.

Shoreline modifications are generally related to construction of a physical element such as a dike, breakwater, dredged basin, or fill, but can include other actions such as clearing, grading or application of chemicals. A shoreline modification is usually undertaken in support of or in preparation for a shoreline use.

Shoreline uses are classified as "water-dependent," "water-related," "water-enjoyment," or "water-oriented."

A water-dependent use is a use or portion of a use that cannot exist in a location that is not adjacent to the water and that is dependent on the water by reason of the intrinsic nature of its operations.

A water-related use is a use or portion of a use that is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because:

(a) The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or

(b) The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive or more convenient.

A water-enjoyment use is a recreational use or other use that facilitates public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which, through location, design and operation, ensures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.

A water-oriented use is a use that is water-dependent, water-related, water-enjoyment, or a combination of such uses.

II. Shoreline Jurisdiction

A. King County's Responsibility to Regulate Shorelines

1. King County assumes primary responsibility for shoreline planning and regulation

King County has primary responsibility for shoreline management planning and for the administration of shoreline regulations within its jurisdiction.

S-101 **King County has primary responsibility within its boundaries for planning required by the Shoreline Management Act and for administering its shoreline regulatory program.**

King County recognizes that its SMP is subject to review and approval by the Washington State Department of Ecology and that the SMP must be consistent with the policies and provisions of the SMA (RCW 90.58).

2. King County's Shoreline Master Program is intended to be consistent with the Shoreline Management Act & Guidelines

King County's SMP is intended to be consistent with the required elements of Ecology's guidelines for implementing the SMA that are found in WAC 173-26 and 173-28. King County's SMP shall be interpreted consistently with the SMA. In the event of a conflict between SMA and King County's SMP, the SMP should be interpreted to give meaning and effect to the SMA.

S-102 **King County's Shoreline Master Program is to be interpreted consistently with the policies and requirements of the Shoreline Management Act (RCW 90.58).**

S-103 **King County's Shoreline Master Program is to be interpreted consistently with the required elements of the shoreline guidelines found in WAC 173-26 and 173-28.**

3. King County's Shoreline Master Program is to be liberally construed

The SMA explicitly provides that it is exempt from the rule of strict construction and must be liberally construed to give full effect to the Act's objectives and purposes. By adopting a liberal standard of

construction, the state Legislature demonstrated the importance it attached to protecting the shoreline and accomplishing the goals and policies of the SMA. Consistent with this mandate, and because King County believes that accomplishing the goals and objectives of the SMA within the county is of primary importance, the SMP is to be liberally construed to accomplish its objectives and purpose.

S-104 **King County's Shoreline Master Program is exempted from the rules of strict construction and shall be construed liberally to give full effect to its objectives and purpose.**

B. Shoreline Jurisdiction

1. Shoreline jurisdiction extends over all "shorelines" and "shorelines of statewide significance" within unincorporated King County

The SMA applies to all "shorelines of the state." "Shorelines of the state" are defined to include "shorelines" and "shorelines of statewide significance."

It is important to understand the distinction between the terms "shorelines" and "shorelines of statewide significance." Both terms are used throughout the SMA and define the scope of King County's shoreline jurisdiction. The distinction is important because the SMA imposes greater and more specific obligations when dealing with shorelines of statewide significance.

a. "Shorelines"

Shorelines are defined in the SMA as follows:

> "Shorelines" means all of the water areas of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

b. "Shorelines of statewide significance"

Shorelines of statewide significance, as specifically defined in the SMA include:

- Those areas of Puget Sound between the ordinary high water mark and the line of extreme low tides;
- Lakes, whether natural, artificial or a combination thereof, with a surface acreage of 1,000 acres or more measured at the ordinary high water mark; and

- Natural rivers or segments thereof downstream of a point where the mean annual flow is measured at 1,000 cubic feet per second or more.

In unincorporated King County, the water bodies that qualify as shorelines of statewide significance include:

- The marine waters around Vashon-Maury Island
- Northeast Lake Washington (north of Kirkland) and southwest Lake Washington (west of Renton)
- Lake Sammamish at Marymoor State Park and Lake Sammamish State Park
- Mud Mountain Reservoir and White River from river mile 15.5 to river mile 46 (excluding the Muckleshoot Indian Reservation between river mile 8.9 and river mile 15.5)
- Green River from its confluence with the Duwamish River to river mile 95
- Duwamish River from river mile 3.5 to river mile 5
- Chester Morse Lake (Reservoir)
- Tolt Reservoir
- Mainstem Snoqualmie River to river mile 43 and Middle Fork Snoqualmie River to river mile 39
- South Fork Skykomish River to river mile 30

Associated shorelands that are adjacent to shorelines of statewide significance are included within the shoreline of statewide significance jurisdiction.

c. "Shorelands"

Shorelines includes "associated shorelands" which are defined in the SMA as follows:

> "Shorelands" or "shoreland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter.

d. Shoreline jurisdiction

King County's shoreline jurisdiction consists of the combination of shorelines, shorelines of statewide significance, and shorelands.

S-105 **King County's shoreline jurisdiction extends over all shorelines of the state, as that term is defined in the Shoreline Management Act, in unincorporated King County. This includes jurisdiction over shorelines, shorelines of statewide significance and shorelands.**

e. Options to extend geographic jurisdiction over shorelines and shorelines of statewide significance

The SMA gives King County two options concerning the scope of its shoreline jurisdiction. The first option allows the county to include one-hundred year floodplains:

> Any county or city may determine that portion of a one-hundred-year-floodplain to be included in its master program as long as such portion includes, as a minimum, the floodway and the adjacent land extending landward two hundred feet therefrom.

(RCW 90.58.030(2)(f)(i))

In its original SMP adopted in 1977, King County included the one-hundred year floodplain. The continued regulation of the one-hundred year floodplain is necessary to comply with certain federal requirements under the National Flood Insurance Program. Therefore, King County continues to extend its shoreline jurisdiction to cover one-hundred year floodplains.

S-106 King County includes within its shoreline jurisdiction the one-hundred year floodplains of shorelines of the state.

The second option allows the extension of shoreline jurisdiction to include land necessary for buffers for critical areas that extend beyond the 200 foot shoreland jurisdiction:

> Any city or county may also include in its master program land necessary for buffers for critical areas, as defined in chapter 36.70A RCW, that occur within shorelines of the state, provided that forest practices regulated under chapter 76.09 RCW, except conversions to non-forest land use, on lands subject to the provisions of this subsection (2)(f)(ii) are not subject to additional regulations under this chapter.

(RCW 90.58.030(2)(f)(ii))

King County is not exercising its option to extend its shoreline jurisdiction to include lands for buffers for critical areas.

S-107 Where critical areas are located within the unincorporated King County shorelands, the shoreline jurisdiction shall not include the critical area buffers that extend outside of the shoreline jurisdiction boundary.

2. Jurisdictional map

Applying these definitions within King County has involved an extensive survey of the shoreline jurisdiction, which is discussed in detail in the King County Shorelines Inventory and Characterization

(May 2007). The Shorelines of the State map at the end of this chapter shows the complete scope of King County's shorelines and shorelines of statewide significance.

III. Shoreline Policy Goals

A. Introduction to Shoreline goals

King County's shoreline has a long history of settlement because of the abundant natural resources, availability of water, and usefulness as transportation routes. The shoreline also draws people to enjoy the aesthetic and recreational value that marine beaches, lakes, and rivers provide. The shoreline supports some of the region's most important industries, such as shipping, fishing, and tourism.

Because of the unique and irreplaceable value of the shorelines of the state, King County recognizes that it is in the public interest to protect shoreline ecological processes and functions, while allowing reasonable and necessary use of shorelines to support the regional economy and provide recreational opportunities for the public.

The high demand for shoreline use over time has degraded shoreline ecological processes and functions in many areas. Many segments of King County's shoreline jurisdiction are devoid of native vegetation, the banks are hardened with additions of rock and other materials, sediment movement is no longer driven by natural forces, and valuable fish and wildlife habitat is gone or impaired to a significant extent. Unaltered shorelines are increasingly rare. It has become critical to restore and enhance degraded shorelines.

A vast majority of the shoreline jurisdiction, particularly in the lower parts of the regional watersheds and along the marine shorelines, is in private ownership, giving the citizens of King County an important role in protecting unique and irreplaceable shoreline values. The challenge for King County is to manage these lands in a manner that protects, restores, and enhances King County's shoreline jurisdiction, while respecting private property rights and protecting the public interest.

King County has established a set of general policy goals that provide overarching guidance for discretionary decision-making, support shoreline regulations, and define the vision that King County has for the use, protection, restoration and enhancement of the shorelines of the state. These policy goals reflect the wide range of SMA mandates, while at the same time preserving the maximum possible flexibility for King County to address the unique shoreline conditions within its jurisdiction.

B. Statement of Applicability

The SMA includes a requirement that development proposals must obtain a shoreline substantial development permit. However, the SMA includes a number of exemptions from this requirement. For

example, proposals to construct a single family residence or to construct a bulkhead to protect a single family residence are exempt from the requirement to obtain a substantial development permit. Activities that do not require a shoreline substantial development permit can, individually and cumulatively, adversely impact adjacent properties and natural resources. King County has both the authority and the responsibility to enforce SMP regulations on all uses and development in the shoreline jurisdiction. In order to ensure that permit-exempt activities comply with the SMA and the County's SMP, King County generally requires applicants with exempt projects to apply for a shoreline exemption.

Because there has been confusion in the past regarding the scope of the SMA, Ecology requires that all master programs contain the following policy statement:

S-201 **All proposed uses and development occurring within King County's shoreline jurisdiction must conform to the Shoreline Management Act and to King County's Shoreline Master Program.**

C. Shoreline Preferred Uses

The SMA establishes mandatory preferences for uses that are unique to or dependant upon a shoreline location. These preferred uses apply to the entire shoreline jurisdiction, both the shorelines and shorelines of statewide significance. The SMA preferred uses are recognized in the following policies.

S-202 **In establishing and implementing shoreline policies and development regulations, King County shall give preference to uses that are unique to or dependent upon a shoreline location.**

S-203 **King County, when determining allowable uses and resolving use conflicts in the shoreline jurisdiction, shall apply the following preferences and priorities in the order listed below:**

a. **Reserve appropriate areas for protecting and restoring shoreline ecological processes and functions to control pollution and prevent damage to the natural environment and to public health.**

b. **Reserve shoreline areas for water-dependent and associated water-related uses. Harbor areas, established pursuant to Article XV of the State Constitution, and other areas that have reasonable commercial navigational accessibility and necessary support facilities, such as transportation and utilities, should be reserved for water-dependent and water-related uses that are associated with commercial navigation,**

unless adequate shoreline is reserved for future water-dependent and water-related uses and unless protection of the existing natural resource values of such areas preclude such uses. Shoreline mixed-use developments may be allowed if they include and support water-dependent uses and address specific conditions that affect water-dependent uses.

c. Reserve shoreline areas for other water-related and water-enjoyment uses that are compatible with ecological protection and restoration objectives.

d. Locate single-family residential uses where they are appropriate and can be developed without significant impact to shoreline ecological processes and functions or displacement of water-dependent uses.

e. Limit nonwater-oriented uses to those locations that are inappropriate for higher priority uses or where the nonwater-oriented uses demonstrably contribute to the objectives of the Shoreline Management Act.

S-204 **In particular circumstances, the preferred use policies, the local economic and land use conditions, and the policies and regulations that assure protection of shoreline resources may result in a determination that other uses may be considered as necessary or appropriate. These other uses may be accommodated, provided that the preferred uses are reasonably provided for throughout the shoreline jurisdiction.**

D. General Policy Goals

The SMA policies of protecting shoreline ecological processes and functions, fostering reasonable use, and maintaining the public right of navigation and corollary uses result in certain mandatory policy goals for the shoreline jurisdiction.

These policies apply to both shorelines and shorelines of statewide significance. The policies are not ranked in a specific order. King County reserves the right to balance these general policies based on the unique circumstances, location and physical condition of the shoreline.

S-205 **The following policy goals apply to all of the shoreline jurisdiction. The goals are not ranked in importance and have been assigned a number for identification purposes only.**

1. **The use of the shoreline jurisdiction for those economically productive uses that are particularly dependent on shoreline location or use.**
2. **The use of the shoreline jurisdiction for public access and recreation.**
3. **Protection and restoration of the ecological processes and functions of shoreline natural resources.**
4. **Protection of the public right of navigation and corollary uses of waters of the state.**
5. **The protection and restoration of buildings and sites having historic, cultural, and educational value.**
6. **Planning for public facilities and utilities correlated with other shorelines uses.**
7. **Prevention and minimization of flood damage.**
8. **Recognizing and protecting private property rights.**
9. **Preferential accommodation of single-family residential uses.**
10. **Coordination of shoreline management with other relevant local, state and federal programs.**

E. Shorelines of Statewide Significance Policy Goals

The Shoreline Management Act identifies certain shorelines as "shorelines of statewide significance" and raises their status by setting use priorities and by calling for a higher level of effort in implementing the SMP. The state legislature has declared that the interest of all people shall be paramount in the management of shorelines of statewide significance.

S-206 **The interests of all people shall be paramount in the management of shorelines of statewide significance within King County.**

The legislature has established policy goals that govern shorelines of statewide significance. Significantly, these policy goals are ranked in order of preference, i.e., the first goal must be given priority over all subsequent goals.

The following policy recognizes and accepts the policy goals as directed by the SMA for shorelines of statewide significance:

S-207 **In developing and implementing its Shoreline Master Program for shorelines of statewide significance, King County shall give preference, in the following order of preference, to uses that:**

a. Recognize and protect the statewide interest over local interest;

b. Preserve the natural character of the shoreline;

c. Result in long-term over short-term benefit;

d. Protect the resources and ecology of the shoreline;

e. Increase public access to publicly owned areas of the shorelines;

f. Increase recreational opportunities for the public in the shoreline; and

g. Provide for any other element as defined in RCW 90.58.100.

S-208 **In developing and implementing policies relating to shorelines of statewide significance, King County shall provide for optimum implementation of policies that satisfy the statewide interest.**

F. State-Owned Shoreline Policy Goals

The state also owns property within King County. The SMA requires that certain policies be adopted with regard to shoreline land owned by the state. This is distinct from shorelines of statewide significance, which may or may not be in state ownership. Because state-owned shoreline is often adapted to providing recreational activities for the public, King County has given special consideration to these factors in developing the SMP.

S-209 **King County should encourage and help facilitate the use of state-owned shorelines for public recreational activities, where appropriate.**

G. Balancing Policy Goals

The policy goals for the management of the shoreline jurisdiction have the potential for conflict. King County shorelines are considered among the most valuable and fragile of King County's natural resources. These shorelines are valuable for economically productive industrial and commercial uses, recreation, navigation, residential amenity, scientific research, and education. They are fragile because shorelines depend upon a balance between physical, biological, and chemical systems that may be significantly altered by both natural forces (earthquakes, volcanic eruptions, landslides, storms, droughts, floods) and human activities (industrial, commercial, residential, recreation, navigational). Unbridled use of the shorelines ultimately could destroy their utility and value for human use.

S-210 **The policy goals of King County's Shoreline Master Program relate both to the use and protection of the extremely valuable and vulnerable shoreline resources of the state.**

S-211 **King County shall accommodate in the shoreline jurisdiction all reasonable and appropriate uses consistent with protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and consistent with public rights of navigation.**

S-212 **The policy of achieving both shoreline use and protection is reflected in the provision that permitted uses in the shoreline jurisdiction shall be designed and conducted in a manner to avoid or minimize, in so far as practical, any resultant damage to the ecology and environment of the shoreline area and the public's use of the water.**

S-213 **King County shall balance shoreline use and shoreline protection when meeting the policy goals of the Shoreline Management Act.**

H. Multiple Approaches to Accomplishing Policy Goals

The policy goals in the SMP may be achieved through a variety of methods that go beyond simply regulating development within the shoreline jurisdiction. There are a wide range of non-regulatory tools available that provide incentives for property owners to work cooperatively with King County to achieve these policy goals. In addition, King County works closely with other public and non-profit groups to achieve mutually beneficial objectives.

S-214 **The King County Shoreline Master Program policies may be achieved by a number of different means, both regulatory and non-regulatory. These include, but are not limited to:**

- **a. Regulations controlling development within the shoreline jurisdiction;**
- **b. Acquisition of land and easements by purchase, lease, or gift, either alone or in concert with other local governments;**
- **c. Accepting grants, contributions, and appropriations from any public or private agency or individuals;**
- **d. Public facility and park planning;**
- **e. Watershed planning;**

f. Voluntary salmon recovery projects; and

g. Incentive programs, such as the transfer of development rights or the public benefit rating system.

IV. Shoreline Element Policy Goals

A. Need for shoreline elements

The SMA requires local master programs to include a number of elements that range from use of shorelines for economic benefit and accommodating necessary infrastructure to protecting both cultural and natural resources. These elements are addressed separately throughout this chapter and are based on the following overarching King County Shoreline Master Program element policy goals.

B. Economic Development Element

King County's economy is the largest and most significant in the Puget Sound Region and in Washington State. With almost half of the state's nonagricultural jobs and almost 83,900 businesses, it is essential that the King County accommodate the industries and infrastructure to support a healthy and vibrant economy. Most of the county's industry and infrastructure lies within the incorporated cities and is not subject to the King County Shoreline Master Program. However, there are some portions of the shoreline jurisdiction in unincorporated King County that provide for economic development of the region.

S-301 **King County should plan for the location and design of industries, transportation facilities, port facilities, tourist facilities, commerce and other developments that are particularly dependent on their location on or use of the shorelines of the state.**

C. Public Access Element

King County believes the shoreline should be accessible to the general public to enjoy and use within the limitations of private property rights and ecological considerations. Since a significant amount of shoreline property is in private ownership, the responsibility to maintain and provide public access falls primarily on public projects. Not all sites are appropriate for use by the public and must be evaluated carefully to ensure that public access can be safely provided without harm. Provisions should also be retained and sought to provide opportunities for the public to enjoy views of the water and shoreline.

S-302 **King County shall:**

a. **Support the public interest with regard to rights to access waters held in public trust by the state, while protecting private property rights and public safety, as well as considering impacts on shoreline ecological processes and functions.**

b. Protect the rights of navigation and the space necessary for water-dependent uses.

c. To the greatest extent feasible consistent with the overall best interest of the state and the people generally, protect the public's opportunity to enjoy the physical and aesthetic qualities of shorelines of the state, including views of the water.

e. Regulate the design, construction, and operation of permitted uses in the shorelines of the state to minimize, insofar as practical, interference with the public's use of the water.

When planning shoreline public access, King County should try to achieve an integrated system that can supplement, and be coordinated with, multimodal transportation planning. King County has identified areas of potential public access that will be assessed in more detail through shoreline permits and public projects. The King County Shoreline Public Access Plan (July 2009) provides details on the analysis of existing shoreline public access in King County, identified public access gaps and opportunities, and the resulting shoreline Public Access Plan.

S-303 **The King County Shoreline Master Program should increase the amount and diversity of public access to the shoreline jurisdiction in areas identified within a shoreline public access gap. New public access should minimize impacts to shoreline ecological processes and functions, preserve natural shoreline character as much as possible, protect private property rights and consider public safety.**

S-304 **Public agencies, including local governments, port districts, state agencies, and public utility districts, should include public access in their development proposals if public access is compatible with the activity and can be provided safely. An assessment of the impact of public access on the shoreline and constructed features should also be conducted.**

S-305 **King County shall require public access to shorelines of the state for water-enjoyment, water-related, and nonwater-dependent non-residential uses and for subdivisions of land into more than four parcels unless:**

a. The development proposal is not compatible with public access;

b. There is a safety or security concern;

c. Inclusion of public access will have an environmental impact that cannot be mitigated; or

d. There are legal limitations on allowing public access.

S-306 **King County shall adopt development regulations that establish maximum building height limits, setbacks, and view corridors to minimize the impact to existing views from public property or a substantial number of residences. Where providing direct public access or allowing for water dependent shoreline uses conflicts with maintaining existing views, the direct public access or water dependent shoreline uses shall have priority.**

D. Recreational Element

Shorelines provide many opportunities for recreation, such as boating, swimming, beach combing, hiking, and nature viewing. Since much of the shoreline jurisdiction is in private ownership, using public lands for recreation will become increasingly important. Opportunities should be sought through public projects to protect and enhance recreational opportunities.

S-307 **King County should protect and, when possible, expand recreational opportunities, including but not limited to parks, beaches, tidelands, swimming beaches and boat launches.**

S-308 **King County should evaluate opportunities to acquire shoreline property for purposes of public recreation from willing sellers of private property.**

E. Circulation Element

Circulation and transportation planning is conducted at many levels in King County. The overarching transportation planning agency in the Puget Sound region is the Puget Sound Regional Council, an association of cities, towns, counties, ports, and state agencies that serves as a forum for developing policies and making decisions about growth and transportation issues in the Puget Sound region. At the local level, cities and counties approve local circulation patterns for their individual jurisdictions. King County should consider the policy goals in this Shoreline Master Program when participating in regional and local transportation planning discussions.

S-309 **The King County Shoreline Master Program should guide the county's transportation plans and projects within the shoreline jurisdiction.**

F. Land Use Element

Land use in King County is established through implementation of the Washington State Growth Management Act (GMA). To implement the GMA, King County relies primarily on the King County Comprehensive Plan and functional plans that are adopted as part of this Comprehensive Plan for facilities and services. This Comprehensive Plan establishes an urban growth line and designates land use and zoning for the unincorporated portions of King County. It also delineates and protects agricultural production districts, forest production districts and mineral resource sites.

S-310 **The King County Comprehensive Plan should consider the policy goals of the King County Shoreline Master Program when designating land use and zoning on shorelines of the state and adjacent lands.**

G. Conservation Element

The SMA requires local master programs to include a conservation element for the preservation of natural resources, including critical areas, scenic vistas, aesthetics, and vital freshwater, saltwater and estuarine areas for fish and wildlife.

1. Critical areas

King County's critical areas ordinance is based on best available science and protects coal mine hazard areas; erosion hazard areas; flood hazard areas; seismic hazard areas; landslide hazard areas; volcanic hazard areas; steep slope hazard areas; critical aquifer recharge areas; wetlands; aquatic areas (including lakes, rivers and streams and marine areas); and wildlife habitat conservation areas. The GMA requires that a shoreline master program provide a level of protection for critical areas located within shorelines that assures no net loss of shoreline ecological functions necessary to sustain shoreline natural resources. Policy S-403 adopts this requirement.

Past development of the shorelines has degraded the habitat for many species by activities such as armoring banks against wave action and the erosive force of water flowing downstream; removal of vegetation; straightening channels; installing in-stream structures for flood control, hydroelectricity and water supply; and allowing stormwater runoff that degrades water quality. Degraded shorelines should be restored and shorelines that are in good condition should be preserved.

S-311 **King County shall protect shoreline critical areas and, where possible, should restore degraded habitat and critical area functions and values.**

2. Scenic vistas

The natural topography of King County provides numerous scenic vistas of the shoreline. King County should ensure that development occurring both within and outside the shorelines of the state avoids impacts on scenic vistas and protects view corridors while balancing other policy goals of this plan.

S-312 **King County should consider and, when possible, require protection of scenic vistas of the shoreline jurisdiction when reviewing public and private development proposals.**

3. Aesthetics

Natural shorelines are visually aesthetic in their natural state. When these shorelines are altered through development, the aesthetic value of the shoreline should be preserved as much as possible. In areas where shorelines have already been developed with little consideration of the aesthetics, restoration should return the shoreline to an aesthetically-pleasing environment.

S-313 **King County should ensure that public and private development proposals protect and restore the aesthetic quality of shorelines in the project design.**

H. Historic, Cultural, Scientific and Educational Element

The historic, cultural, scientific and educational element provides for protection and restoration of historic resources. Historic resources include historic building, sites, objects, districts and landscapes, prehistoric and historic archaeological resources and traditional cultural places.

S-314 **Historic resources in the shoreline jurisdiction should be protected to prevent the destruction of, or damage to, any site having archaeological, historic, cultural, or scientific value through coordination and consultation with the appropriate local, state and federal authorities, including affected Tribes.**

- **a. Sites should be protected in collaboration with appropriate Tribal, state, federal, and other local governments. Cooperation among public and private parties is to be encouraged in the identification, protection, and management of cultural resources.**
- **b. Where appropriate, access to such sites should be made available to parties of interest. Access to such sites must be designed and managed in a manner that gives maximum protection to the resource.**

c. Opportunities for education related to archaeological, historical and cultural features should be provided where appropriate and incorporated into public and private programs and development.

S-315 **King County should work with Tribal, state, federal and local governments to maintain an inventory of all known historic resources. King County shall protect these inventories from public disclosure to the extent permitted or required under applicable federal and state law. As appropriate, such sites should be preserved and restored for study, education and public enjoyment to the maximum possible extent.**

S-316 **Provisions for historic resource preservation, restoration and education should be incorporated with open space or recreation areas in site development plans whenever compatible and possible.**

S-317 **Cooperation among involved private and public parties should be encouraged to achieve these historic, cultural, scientific and educational objectives.**

S-318 **Private and public owners of historic resources should be encouraged to provide public access and educational opportunities at levels consistent with long term protection of both historic values and shoreline ecological processes and functions. Site-specific conditions may require public site access to be restricted at times, but educational means should be provided whenever possible.**

S-319 **Historic resource development should be planned and carried out so as to prevent impacts to the resource. Impacts to neighboring properties and other shoreline uses should be limited to temporary or reasonable levels.**

S-320 **Owners of historic resource are encouraged to make substantial development plans known well in advance of application so that appropriate agencies, such as the Washington State Department of Archaeology and Historic Preservation, Tribes and others, may have ample time to assess the site and make arrangements to preserve historic, cultural, scientific and educational values as applicable.**

S-321 **If development is proposed adjacent to an historic resource, the proposed development should be designed and operated so as to be compatible with continued protection of the historic, cultural or archaeological resource.**

V. Shoreline Plan Relationship to Other Laws

A. Washington's Growth Management Act (Chapter 36.70A RCW)

The GMA, passed by the Washington State Legislature in 1990 and 1991, seeks to further protect the quality of life in Washington State. The GMA requires that the state's most populous and fastest growing counties and their cities prepare comprehensive land use plans that anticipate growth for a 20-year horizon. Smaller communities and those communities that are experiencing a slow rate of growth may choose to plan under the GMA, but are not required to do so. Comprehensive plans adopted in accordance with GMA must manage growth so that development is directed to designated urban areas and away from the Rural Area. The GMA also requires local governments to designate and protect critical areas and to identify and protect natural resource lands, which include commercially significant forestry, agriculture, and mining areas. In 1997, the Washington State Legislature amended both the GMA and the SMA in an effort to achieve consistency between the two statutes. Among the amendments to the GMA was a provision that makes the policies and goals of the SMA also policies and goals of the GMA. See RCW 36.70A.480.

S-401 **The King County Shoreline Master Program must be consistent with the Washington State Growth Management Act.**

B. King County Countywide Planning Policies

King County, along with the City of Seattle, City of Bellevue, and suburban cities established the Growth Management Planning Council (GMPC) to prepare a coordinated policy framework for future development in King County. In July 1992, the GMPC adopted Phase 1 of the Countywide Planning Policies. Phase 2 was adopted in 1994. The King County Countywide Planning Policies have been ratified by a majority of the jurisdictions in King County and therefore apply to all jurisdictions. The Countywide Planning Policies address critical areas, land use patterns, transportation, community character and open space, affordable housing, development and provision of urban services, siting of public capital facilities, economic development, and regional financing and governance.

S-402 **The King County Shoreline Master Program must be consistent with and coordinated with the King County Countywide Planning Policies.**

C. Critical Areas Regulations

Critical areas located within shorelines are regulated under the SMA and implemented through local shoreline master programs. The GMA requires that shoreline master programs provide a level of protection for shoreline critical areas that assures no net loss of shoreline ecological functions necessary to sustain shoreline natural resources.

S-403 **The King County Shoreline Master Program and implementing regulations shall provide a level of protection for critical areas in the shoreline jurisdiction that assures no net loss of shoreline ecological functions necessary to sustain shoreline natural resources.**

The SMA provides options for assuring consistency with the GMA protection of critical areas. These options range from including the GMA critical areas regulations in the SMP to preparing a discrete set of shoreline regulations.

S-404 **The King County Shoreline Master Program includes by reference portions of the King County critical areas regulations into the Shoreline Master Program to meet the requirements of RCW 90.58.090(3) and 90.58.090(4).**

D. Zoning, Clearing and Grading, and Stormwater Regulations

King County has adopted a wide array of development regulations that protect various aspects of the environment and implement other King County policies. These regulations generally include King County's surface water management regulations, clearing and grading regulations, and zoning. In the shoreline jurisdiction, the Shoreline Master Program may impose additional requirements. Shoreline development regulations must:

1. Be sufficient in scope and detail to ensure implementation of the SMA statewide shoreline management policies, this chapter, and the King County Comprehensive Plan and functional plans adopted to implement the Comprehensive Plan;
2. Include regulations that apply to the environmental designations classified under WAC 173-26-211;
3. Include general regulations, specific use regulations that address issues of concern in regard to specific uses, and modification regulations;
4. Include clearing and grading and stormwater regulations that protect the ecological processes and functions of the shorelines; and

5. Design and implement regulations and mitigation standards in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property. (RCW 90.58.100)

However, to the extent that it can, consistent with requirements of the SMA, King County will rely on its existing regulations to meet the requirements of the SMA.

S-405 **To the maximum extent practical, King County's Shoreline Master Program shall rely on King County's existing regulations, including critical areas regulations, surface water management regulations, clearing and grading regulations, and zoning in order to comply with the Shoreline Management Act and the Ecology's guidelines.**

E. Flood Hazard Management Plan

The King County Flood Hazard Management Plan directs floodplain management within King County. This plan was developed in coordination with incorporated cities within King County as directed by RCW 86.12.210 and is binding on each jurisdiction located within King County. The goals of the King County Flood Hazard Management Plan are:

1. To reduce the risks from flood and channel migration hazards.
2. To avoid or minimize the environmental impacts of flood hazard management.
3. To reduce the long-term costs of flood hazard management.

Flood hazard regulations are implemented within unincorporated King County. Each jurisdiction within King County is required under the Flood Hazard Management Plan to adopt flood hazard management regulations that meet the minimum requirements of the National Flood Insurance Program.

In 2007, the King County Council approved the formation of a countywide flood control zone district under the authority in RCW 86.15.025. The overarching countywide strategies and objectives include:

1. Improving levee protection through major commercial, industrial and residential areas;
2. Improving flood water conveyance and capacity;
3. Reducing hazards by removing flood, erosion, and landslide prone residential structures;
4. Providing safe access to homes and businesses by protecting key transportation routes;
5. Minimizing creation of new risks to public safety from development pressure.

The King County Flood Control Zone District (FCZD) is governed by a District Board of Supervisors that consists of the members of the King County Council. An advisory committee advises the board of supervisors of the FCZD on regional flood protection issues by providing recommendations to the board

of supervisors on the district's work program and budget, including capital improvement program projects. King County will rely on the Flood Hazard Management Plan and the FCZD to meet the general shoreline master program provisions for flood hazard reduction in WAC 173-26-221(3).

S-406 **The King County Shoreline Master Program will rely on the policies and programs established in the King County Flood Hazard Management Plan and flood hazard regulations to meet the requirements of the Shoreline Management Act and the Department of Ecology's guidelines for flood hazard reduction.**

VI. Shoreline Environment Designations

A. Introduction to shoreline environment designations

Shoreline management addresses a wide range of physical conditions and development settings. The SMP classifies shoreline reaches into defined environment designations, based on the existing use pattern, the current biological and physical character of the shoreline, and the goals and aspirations of the community. King County prescribes environmental protection measures, allowable use provisions, and development standards for each shoreline environment designation.

King County has established eight shoreline environment designations:

A. High Intensity Shoreline
B. Residential Shoreline
C. Rural Shoreline
D. Conservancy Shoreline
E. Resource Shoreline
F. Forestry Shoreline
G. Natural Shoreline
H. Aquatic

This section sets forth the purpose, criteria and management policies for each shoreline environment. The Shoreline Environment Designation maps at the end of this chapter show how the environment designations apply to shoreline reaches within the shoreline jurisdiction in unincorporated King County. Shoreline areas that meet the jurisdictional criteria, but that are not mapped or designated, are assigned a Conservancy designation until the SMP is amended to assign a shoreline environment to that shoreline reach.

Environment Designation Criteria

King County has a long history of comprehensive planning and basin planning. Beginning in the 1980s, basin plans were developed throughout the county and helped identify fragile aquatic resources. Relying on these plans, King County has assigned zoning that is appropriate given the nature of the resources that need protection. As a result, fragile resources generally have zoning classifications that permit only low intensity development. King County's zoning regulations limit high intensity development to urban areas designated under the County-Wide Planning Policies and the King County Comprehensive Plan.

King County recognizes, however, that zoning by itself is insufficient to determine the shoreline environment designations. Other factors are also important in assuring that the shoreline environment designations help King County achieve the goals of the SMA. These factors include, for a given shoreline:

- Existing development patterns together with zoning, the King County Comprehensive Plan land use designations and other officially adopted plans;
- Existing shoreline ecological processes and functions and the degree of human alteration;
- Whether the reach has a restoration priority that demonstrates it has both basin conditions and existing shoreline condition that support extra efforts to maintain shoreline ecological processes and functions and the length of such reaches;
- Federal, State, County, Tribal and municipal watershed ownership status;
- The goals of King County citizens for their shorelines as set forth in this chapter;
- Pursuant to RCW 90.58.100(4), for state-owned shorelines the public demand for wilderness beaches and other recreational activities and for ecological study areas; and
- Other state policies in the SMA and the Ecology's guidelines (RCW 90.58.020 and WAC 173-26, respectively).

Figure S-1 depicts the decision making process that is used to determine the appropriate shoreline environment designation for a given shoreline.

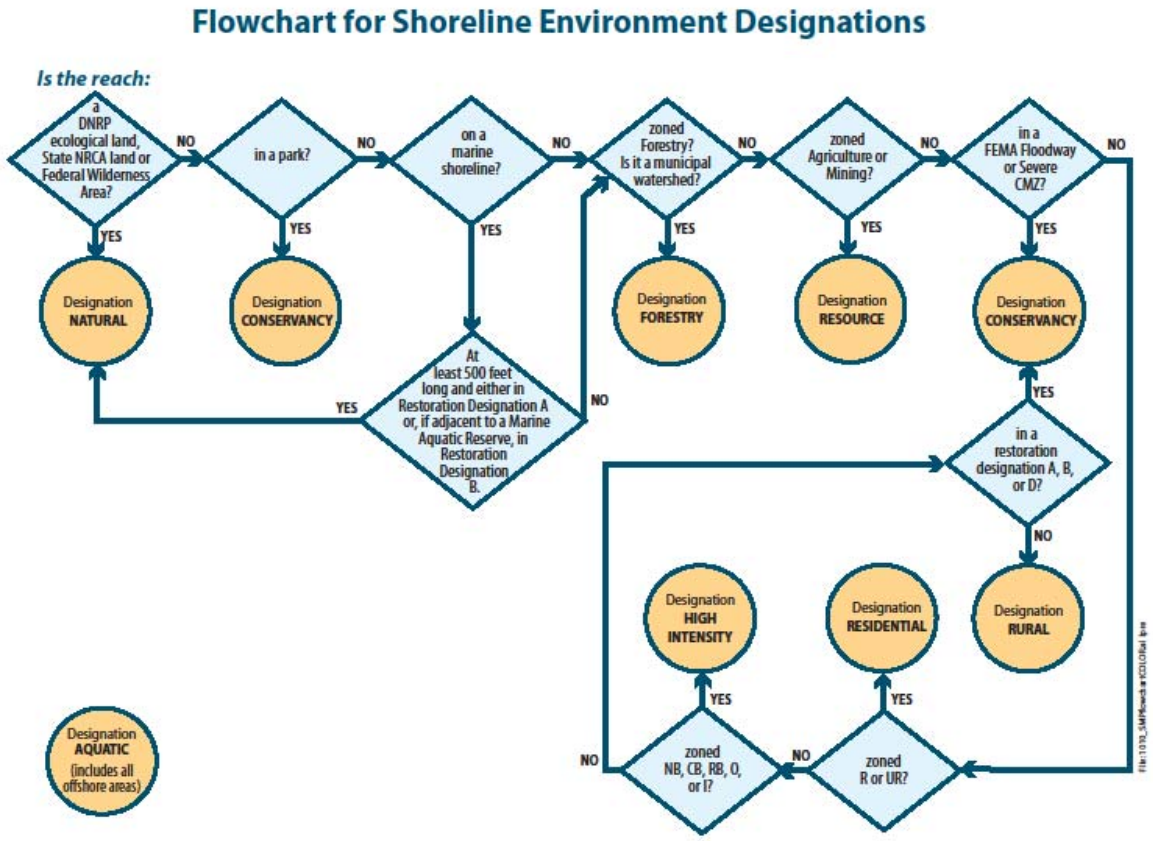


Figure S-1. Pathway of decisions in applying criteria to produce shoreline designations.

The shoreline environment designations take into account several elements. Areas currently meeting the criteria for high levels of protection are given greater levels of protection. The determination of whether an area deserves a greater level of protection is based either on its current ownership and condition, e.g. publicly owned natural areas or wilderness areas, or on its restoration rating. The restoration rating is discussed in more detail below. Zoning is also an important criterion. King County has for years implemented zoning as a means to protect more sensitive areas from intense development. Shoreline environment designations also take into account whether a reach is located within a floodway and severe channel migration hazard area and gives greater protection to these areas due to their importance in maintaining shoreline ecological processes and functions and because of public health and safety concerns.

The restoration rating (see King County Shoreline Protection and Restoration Plan (July 2009) is included in the designation as a way to incorporate more strongly the current degree of alteration along the shoreline, the biological importance of the reach in a watershed context, and the restoration priorities

associated with the combination of the two analyses. The restoration designations are largely concerned with whether it is most appropriate to implement measures to protect or conserve a site, restore it to a previous condition, or undertake projects to enhance its current condition or to create new features with shoreline ecological processes and functions. These ratings also provide guidance on areas where it is important to protect existing shoreline ecological processes and functions.

Restoration ratings combine the reach characterization based on the results from an alterations analysis with the context of basin analyses (See Table S-2). The reach or drift cell characterization is an assessment of the extent to which ecosystem structure, processes, and, ultimately, functions for a reach or drift cell are affected by anthropogenic factors. Scores resulting from this assessment are indicative of the degree to which shoreline ecological processes have been altered and impaired. The reach characterizations are found in King County Shoreline Inventory and Characterization: Methodology and Results (May 2007). The basin analysis is based on the Basin Condition Map adopted by the King County Council in K.C.C. 21A.24.065.

Restoration Score	Basin Condition	Reach Condition	Actions
A	High	High	Conserve, Preserve
B	High	Moderate	Conserve, Preserve, Restore, Enhance
C	High	Low	Restore, Enhance
D	Moderate	High	Conserve, Enhance, Restore, Preserve
E	Moderate	Moderate	Conserve, Enhance, Restore
F	Moderate	Low	Enhance, Restore
G	Low	High	Enhance, Conserve
H	Low	Moderate	Enhance, Create
I	Low	Low	Enhance, Create

Table S-2. Restoration scores and associated actions.

Each designation has specific restoration goals associated with it, based on the conditions observed onsite and in the basin. Depending on condition, as indicated by the degree of alteration, reaches and drift cells were placed into one of nine categories of preferred actions. These range from preservation

and conservation under the highest conditions (high basin and reach conditions, i.e., the least altered from natural) to enhancement and creation under the poorest condition (low basin and reach conditions, the most altered from natural).

The various actions are defined as follows:

- **Preserve** – To protect intact processes, often through acquiring lands or easements to exclude activities that may negatively affect the environment.
- **Conserve** – To maintain biodiversity by protecting or increasing the natural potential of landscapes to support multiple native species. Typically, this is accomplished through financial incentives for landowners intended to offset any economic loss resulting from managing the land for conservation.
- **Restore** – To transform degraded conditions to a close approximation of historical conditions. Restoration generally involves more intense and extensive modification and manipulation of site conditions than would occur with enhancement projects. Example actions include levee breaching, removal, or setback.
- **Enhance** – To improve a targeted ecological attribute and/or process. Example actions may include culvert replacement, riparian plantings and fencing, invasive species removal, and streambank stabilization.
- **Create** – To construct or place habitat features where they did not previously exist in order to foster development of a functioning ecosystem. Examples include tidal channel excavation and the placement of dredge material intended to create marsh or other habitat. Creation represents the most experimental approach and, therefore, may have a lower degree of success, particularly when landscape-scale ecological processes are not sufficient to support the created habitat type.

The marine shoreline, which in unincorporated King County occurs only around Vashon/Maury Island, is treated a little differently than freshwater shorelines in the designation strategy. This is in recognition of both the differing character of marine shorelines, which are subject to tidal influences, wakes from large commercial vessels, and some variation in the ecological processes affecting them, as well as the creation of the Maury Island Environmental Aquatic Reserve along Maury Island and Quartermaster Harbor shorelines by the Washington state Department of Natural Resources. More protection by shoreline designation was afforded to marine shorelines with active feeder bluffs and little alteration to processes. As a result, in these areas, areas with a restoration rating of A or B were designated natural in recognition of the importance of conserving existing shoreline ecological functions and processes in this area.

B. High Intensity Shoreline Environment

Purpose

The purpose of the High Intensity Shoreline Environment is to provide for high intensity water-oriented commercial and industrial uses.

High Intensity Designation Criteria

S-501 **A shoreline may be designated High Intensity if the shoreland is characterized by high intensity development or uses or is zoned Neighborhood Business (NB), Commercial Business (CB), Regional Business (RB), Office (O), or Industrial (I), and:**

a. The shoreland does not contain limitations on urban uses, such as geological hazards or flood hazards; and

b. The shoreline does not provide important shoreline ecological processes and functions that would be significantly compromised by high intensity residential, commercial, or industrial use.

High Intensity Management Policies:

S-502 **In the High Intensity Shoreline Environment, King County shall give priority to non-residential land uses that are water-dependent or water-related.**

S-503 **King County shall discourage non-water-oriented, non-residential land uses in the High Intensity Shoreline Environment. Shoreline mixed-use developments that include and support water dependent uses may be allowed. King County should allow non-water-oriented land uses in the High Intensity Shoreline Environment only in limited situations and only if they do not conflict with or limit opportunities for water-dependent uses or are located on sites where there is no direct access to the shoreline.**

S-504 **Prior to allowing expansion of a high intensity non-water-oriented use in the shoreline environment, King County shall determine that there is no feasible alternative for locating the expansion outside of the shoreline jurisdiction.**

S-505 **King County should require visual or physical public shoreline access to be provided whenever feasible in the High Intensity Shoreline Environment.**

S-506 **King County shall protect the aesthetic character of the shoreline in the High Intensity Shoreline Environment through development regulations, including sign controls, development siting criteria, screening requirements and architectural standards, landscaping requirements and maintenance of natural vegetation.**

S-507 **King County shall require that the scale and intensity of new uses and development within the High Intensity Environment is compatible with, and protects or enhances, the existing character of the area.**

C. Residential Shoreline Environment

Purpose

The purpose of the residential shoreline environment is to accommodate residential and commercial uses on a scale appropriate with urban residential zones.

Residential Shoreline Designation Criteria

S-508 **A shoreline may be designated Residential Shoreline if the shoreland is characterized by urban levels of residential development or uses or is zoned Urban Residential (R) or Urban Reserve (UR) and:**

- **a. The shoreland does not contain limitations on urban uses, such as geological hazards or flood hazards; and**
- **b. The shoreline not provide important shoreline ecological processes and functions that would be significantly compromised by urban levels of residential development.**

Residential Shoreline Environment Management Policies:

S-509 **King County shall require that the scale and intensity of new uses and development within the Residential Shoreline Environment is compatible with, and protects or enhances the existing character of the area.**

S-510 **King County should encourage public or private outdoor recreation facilities that are compatible with the character of the area in the Residential Shoreline Environment. Water-dependent and water-enjoyment recreation facilities that provide opportunities for people to access and enjoy the shoreline are preferred uses in the Residential Shoreline Environment.**

S-511 **King County should discourage non-water-oriented commercial uses in the Residential Shoreline Environment. A non-water-oriented commercial use may be allowed as part of a shoreline mixed-use development or if the non-water-oriented use provides a substantial benefit with respect to the goals and policies of this Program, such as providing public access or restoring degraded shorelines.**

D. Rural Shoreline Environment

Purpose

The purpose of the Rural Shoreline Environment is to accommodate land uses normally associated with rural levels of development while providing appropriate public access and recreational uses to the maximum extent practicable.

Rural Shoreline Environment Designation Criteria

S-512 **A shoreline may be designated Rural Shoreline if the shoreland is characterized by rural levels of development or if the shoreland is zoned Rural Area (RA) and:**

a. The shoreland does not contain limitations on rural residential uses, such as geological hazards or flood hazards; and

b. The shoreline does not provide important shoreline ecological processes and functions that would be significantly compromised by rural levels of residential development.

Rural Shoreline Environment Management Policies:

S-513 **King County should limit uses in the Rural Shoreline Environment to those rural development activities and associated services that sustain the shoreline's physical and biological resources and that protect options for restoration to maximum extent practicable given the nature of rural development.**

S-514 **King County should require that multi-family and multi-lot residential and recreational developments in the Rural Shoreline Environment provide public access and joint use for community recreational facilities.**

E. Conservancy Shoreline Environment

Purpose

The purpose of the Conservancy Shoreline Environment is to conserve areas that are a high priority for restoration, include valuable historic properties or provide recreational opportunities.

Conservancy Shoreline Environment Designation Criteria

S-515 **A shoreline may be designated Conservancy Shoreline if it is in an area where important shoreline ecological processes have not been substantially degraded by human activities, where important shoreline ecological processes would be degraded by development or present a public health or safety risk, or where the shoreline is in public ownership and is managed for public access or recreation. Areas that may be included in Conservancy Shoreline are:**

- **a. Shoreline reaches primarily within an identified FEMA floodway or severe channel migration hazard zone;**
- **b. Lake shorelines or river shorelines with a restoration plan rating of A, B, or D;**
- **c. Marine shorelines with a restoration plan rating of A, B, or D; and**
- **d. Shorelines in public ownership and managed for public access or recreation.**

Conservancy Shoreline Environment Management Policies:

S-516 **King County should limit uses in the Conservancy Shoreline Environment to those that sustain the shoreline area's physical and biological resources or to uses of a nonpermanent nature that do not substantially degrade the rural or natural character of the shoreline area or disturb historic and cultural resources. King County should discourage non-residential uses in the Conservancy Shoreline except as follows:**

- **a. King County should allow aquaculture, forestry and agriculture in the Conservancy Shoreline Environment; and**
- **b. King County should allow water-dependent and water-enjoyment recreation facilities as preferred uses if significant adverse impacts to the shoreline are mitigated.**

S-517 **King County shall require that new uses or development in the Conservancy Shoreline Environment preserve the existing character of the shoreline consistent with the purpose of the environment, including:**

a. Limiting the total effective impervious surface in the shoreline jurisdiction to no more than ten percent in order to maintain the existing hydrologic character of the site; and

b. Allowing more effective impervious surface coverage on lots legally created prior to the date of adoption of this update to King County's Shoreline Master Program. In these cases, effective impervious surface coverage shall be limited to the maximum extent practicable.

F. Resource Shoreline Environment

Purpose

The purpose of the Resource Shoreline Environment is to allow for mining and agricultural uses on lands that have been designated under the GMA as agricultural lands of long-term commercial significance or mineral resource lands where those lands do not provide significant shoreline ecological processes and functions.

Resource Shoreline Environment Designation Criteria

S-518 **A shoreline may be designated Resource Shoreline if the shoreland is zoned Agriculture or Mineral and the shoreline is not designated Natural Shoreline under Policy S-525.**

Resource Shoreline Environment Management Policies:

S-519 **King County should limit uses in the Resource Shoreline Environment to agricultural and mining activities.**

S-520 **King County shall adopt development standards for the Resource Shoreline Environment to preserve the existing character of the shoreline consistent with the purpose of the environment.**

G. Forestry Shoreline Environment

Purpose

The purpose of the Forestry Shoreline Environment is to allow for forestry uses in the Forest Production District and to protect municipal watersheds.

Forestry Shoreline Designation Criteria

S-521 **A shoreline may be designated Forestry Shoreline if the shoreland is within the Forest Production District and the shoreline is not designated as a Natural Shoreline or a Conservancy Shoreline.**

Forestry Shoreline Management Policies:

S-522 **King County shall require forest practices in the Forestry Shoreline Environment to comply with standards that provide protection for shoreline ecological processes and functions equal to or greater than the forest practice rules adopted by the Washington State Department of Natural Resources and in effect on January 1, 2007.**

S-523 **King County shall allow activities related to the direct management and delivery of municipal domestic water supplies in the Forestry Shoreline Environment only when consistent with municipal domestic water supply best management practices.**

S-524 **King County shall allow agricultural and aquaculture uses within the Forestry Shoreline Environment if the use is subject to appropriate limitations or conditions to ensure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.**

H. Natural Shoreline Environment

Purpose

The purpose of the Natural Shoreline Environment is to protect those shoreline areas that are relatively free of human influence and are of high ecological quality. This designation allows only very low intensity uses in order to maintain the existing high levels of ecological process and function.

Natural Shoreline Environment Designation Criteria

S-525 **A shoreline may be designated Natural Shoreline if the shoreline is:**

a. **Of high ecological quality and is performing an important, irreplaceable ecological process or function that would be damaged by human activity;**

b. **Unable to support new development or uses without significant adverse impacts to shoreline ecological processes and functions or risk to human safety;**

c. **A federally designated wilderness area or in an area managed by the King County Department of Natural Resources and Parks as natural lands; or**

d. **A marine shoreline reach that extends at least five hundred feet along the ordinary high water mark and either has a restoration plan rating of A or has a restoration plan rating of B and is located adjacent to the Maury Island Marine Aquatic Reserve.**

Natural Shoreline Environment Management Policies:

S-526 **King County shall not allow new shoreline armoring in the Natural Shoreline Environment.**

S-527 **King County shall not allow the following new uses in the Natural Shoreline Environment:**

a. **Commercial uses;**

b. **Industrial uses;**

c. **Nonwater-oriented recreation uses that require shoreline modification in order to provide shoreline access;**

d. **Mining and associated facilities, such as docks, piers, and loading facilities; and**

e. **Transportation facilities, utility corridors, and parking areas that can be located outside of the Natural Shoreline Environment.**

S-528 **King County may allow single-family residential development in the Natural Shoreline Environment as a shoreline conditional use if the scale and intensity of the use is limited to protect shoreline ecological processes and functions and is consistent with the purpose of the environment. King County shall require new subdivisions and short-subdivisions in the Natural Shoreline**

Environment to locate new structures and impervious surfaces outside of the shoreline jurisdiction to the maximum extent practicable.

S-529 **King County shall allow scientific, historical, cultural, and educational research uses in the Natural Shoreline Environment if no significant ecological impact on the area will result.**

S-530 **Except for removal of noxious weeds or invasive vegetation as provided for in S-645, King County shall not allow vegetation removal in the Natural Shoreline Environment that will reduce the capability of vegetation to perform normal ecological processes and functions.**

S-531 **King County shall allow agricultural and aquaculture uses of a very low intensity nature within the Natural Shoreline Environment if the use is subject to appropriate limitations or conditions to ensure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.**

S-532 **King County shall allow passive and low-impact recreational activities in the Natural Shoreline Environment. New passive and low impact recreation activities shall use designs that avoid or minimize impacts to shoreline processes and functions. Maintenance of trails and campsites shall minimize disturbance and restoration of impacted areas is encouraged.**

S-533 **King County should use tax incentives, easements, and buyouts to protect shorelines in the Natural Shoreline Environment with important fish and wildlife habitat at risk from moderate to high intensity development.**

I. Aquatic Environment

Purpose

The purpose of the aquatic environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the ordinary high water mark.

Aquatic Shoreline Environment Designation Criteria

S-534 **A shoreline shall be designated Aquatic if it is waterward of the ordinary high water mark of the shoreline.**

Aquatic Shoreline Environment Management Policies:

S-535 **King County shall allow new in-water and over-water structures in the Aquatic Shoreline Environment only for water-dependent uses, public access, or ecological restoration.**

S-536 **King County shall limit the size of new over-water structures in the Aquatic Shoreline Environment to the minimum necessary to support the structure's intended use.**

S-537 **King County shall encourage multiple uses of over-water facilities in the Aquatic Shoreline Environment in order to reduce the impacts of shoreline development and increase the effective use of water resources.**

S-538 **King County shall require all developments and uses on navigable waters or their beds in the Aquatic Shoreline Environment to be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife and materials necessary to create or sustain their habitat, particularly those species dependent on migration.**

S-539 **King County shall not allow uses in the Aquatic Shoreline Environment that adversely impact the ecological processes and functions of critical saltwater and freshwater habitats, except when necessary to achieve the objectives of RCW 90.58.020, and then only when the adverse impacts are mitigated according to the sequence described in WAC 173-26-201(2)(e) as necessary to assure no net loss of shoreline ecological processes and functions.**

S-540 **King County shall consider the guidance in the Maury Island Aquatic Reserve Management Plan in making decisions about permitted uses in the shoreline jurisdiction.**

VII. Environment Protection Policies

A. General Environmental Protection Policy Goals

The Ecology's guidelines recognize that shoreline ecological processes and functions may be impaired not only by shoreline developments that are required to obtain shoreline substantial development permits, but also by past actions, unregulated activities, and developments that are exempt from the shoreline substantial development permit requirements. The loss or degradation of shoreline ecological processes and functions from any of these activities can significantly impact shoreline natural resources and may also adversely impact human health and safety.

The concept of ecological processes and functions recognizes that any ecological system is composed of a wide variety of interacting physical, chemical, and biological processes. These processes are interdependent in varying degrees and at different scales, and that result in the landscape, habitats and species as they exist at any time. Ecological functions are the work performed or roles played individually or collectively within ecosystems by these processes.

1. Cumulative Impacts and "No Net Loss" of Ecological Processes and Functions

Nearly all shoreline areas, even substantially developed or degraded areas, retain important ecological processes and functions that contribute to the survival and successful reproduction of plants and animals. For example, an intensely developed harbor area may also have an important function as a fish migration corridor and feeding area critical to species survival. In addition, ecosystems are interconnected and many species may depend on the functioning of multiple systems for critical resources. As examples, anadromous fish depend upon the viability of freshwater, marine, and terrestrial shoreline ecosystems, and many wildlife species associated with shorelines depend on the functioning of both terrestrial and aquatic environments. Therefore, the policies for protecting and restoring ecological processes and functions should apply to the maximum extent practical to all shoreline areas, not just those that remain relatively unaltered.

The SMA requires that King County's Shoreline Master Program achieve no net loss of shoreline ecological processes and functions from new uses or development, and that it address the cumulative impacts on shoreline ecology that would result from future shoreline development. The SMA also requires local governments to plan for restoration of shoreline ecological processes and functions where they have been impaired, thus working towards actual improvement in shoreline ecological processes and functions. The following policies ensure that King County will address cumulative impacts of existing

and proposed shoreline development and work towards improving shoreline ecological processes and functions.

S-601 **King County shall ensure that new uses, development and redevelopment within the shoreline jurisdiction do not cause a net loss of shoreline ecological processes and functions.**

S-602 **King County should protect shorelines and conduct restoration in areas that have been previously degraded.**

S-603 **King County shall require shoreline uses and modifications to be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions to the maximum extent practical.**

S-604 **King County's Shoreline Master Program shall include regulations and mitigation standards to ensure that permitted and exempt developments in the aggregate will not cause a net loss of shoreline ecological processes and functions.**

S-605 **King County's Shoreline Master Program goals and policies will promote restoration of impaired shoreline ecological processes and functions. Policies and programs and non-regulatory actions that contribute to restoration goals will be identified. King County should consider the direct and indirect effects of regulatory or non-regulatory programs of other local, state, and federal governments, as well as any restoration effects that may result from shoreline development regulations and mitigation standards.**

S-606 **The King County Shoreline Master Program identifies restoration opportunities and planning elements that together should improve the overall condition of habitat and resources within the shoreline jurisdiction.**

S-607 **King County should provide options for property-specific technical assistance and tailored applications of shoreline management regulations through Rural Stewardship Plans for single family residential uses in the upland areas of the Rural, Conservancy and Natural Shoreline Environments. Rural Stewardship Plans must be consistent with the goals of the Shoreline Management Act and**

King County Shoreline Protection and Restoration Plan, and ensure no net loss of shoreline ecological processes and functions.

S-608 **The King County Shoreline Master Program shall consider the cumulative impacts of reasonably foreseeable future development to ensure no net loss of shoreline ecological processes and functions.**

S-609 **The Shoreline Master Program is intended to fairly allocate the burden of addressing cumulative impacts. King County should adopt policies and regulations that are designed to avoid the need for individualized cumulative impacts analysis for commonly occurring and planned development.**

S-610 **King County shall prefer and provide special permitting considerations for docks and piers that are shared among multiple landowners.**

S-611 **When updating the Shoreline Master Program, King County should analyze proposed policies and regulations to determine whether they will cause cumulative adverse impacts to the shoreline and consider how such impacts may be avoided. The evaluation of cumulative impacts should consider:**

- **a. Current condition of the shorelines and associated natural processes;**
- **b. Reasonably foreseeable future development and shoreline uses;**
- **c. An appropriate evaluation of the effect on shoreline ecological processes and functions caused by unregulated activities, development exempt from permitting, and effects such as the incremental impact of residential bulkheads, residential piers, or runoff from newly developed properties; and**
- **d. Beneficial effects of any established regulatory programs under other local, state, and federal laws.**

S-612 **King County should use the shoreline permitting or shoreline conditional use permitting processes for development proposals that may have impacts that cannot be anticipated or uncommon impacts that have not been considered or identified at time of adoption of the King County Shoreline Master Program to ensure that all impacts are addressed and that there is no net loss of ecological function of the shoreline after mitigation.**

S-613 **King County shall consider and address cumulative impacts of shoreline development on shoreline ecological processes and functions and on shoreline uses given priority under RCW Chapter 90.58.**

2. Ongoing Evaluation, Review of Cumulative Impacts and Duty to Update

King County will periodically review the Shoreline Master Program and make amendments that it determines are necessary to reflect changing local circumstances, new information and improved data, and to meet the requirements of RCW 90.58.080 and applicable guidelines. King County will also monitor actions taken to implement the Shoreline Master Program and the shoreline conditions to inform updates of Shoreline Master Program provisions and improve shoreline management over time.

S-614 **King County shall periodically review and amend its Shoreline Master Program using a process that inventories and ensures meaningful understanding of current and potential ecological processes and functions provided by affected shorelines.**

B. Shoreline Critical Areas

1. Standard for protection under the SMA

The GMA requires King County to protect the functions and values of critical areas, which are defined as wetlands, critical aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas. Critical areas located within the shoreline jurisdiction are protected under the SMP rather than the GMA. The SMP provides a level of protection for critical areas to assure no net loss of shoreline ecological functions. In addition, the SMA requires King County to give optimum protection of shorelines of state-wide significance. The King County Comprehensive Plan and functional plans adopted as elements of the King County Comprehensive Plan also guide the protection of critical areas within the shoreline jurisdiction.

2. Use of scientific and technical information

The Shoreline Management Act requires local governments to use scientific and technical information when establishing protection measures for critical areas. To achieve this requirement, King County has, to the extent feasible:

1. Used a systematic interdisciplinary approach that ensures the integrated use of the natural and social sciences and the environmental design arts;

2. Consulted with and obtained the comments of any federal, state, regional, or local agency having any special expertise with respect to environmental impacts;
3. Considered all plans, studies, surveys, inventories, and systems of classification made or being made by federal, state, regional, or local agencies, by private individuals, or by organizations dealing with King County shorelines;
4. Used all available information regarding hydrology, geography, topography, ecology, economics, and other pertinent data;
5. Employed, when possible, all appropriate, modern scientific data processing and computer techniques to store, index, analyze, and manage the information gathered.

King County has reviewed and synthesized a wide range of scientific information resulting in regulatory standards based on the best available science for the protection of critical areas. In addition, King County considered state, Tribal and federal programs to provide a full spectrum of planning and regulatory measures to guide critical areas protection in shorelines.

S-615 **In considering development regulations to protect shoreline ecological processes and functions, King County shall consider the scientific and technical information contained in functional plans adopted to implement the Comprehensive Plan, adopted watershed plans, King County critical areas regulations and state, Tribal and federal programs.**

In order to ensure no net loss of shoreline ecological processes and functions resulting from development proposed in shoreline critical areas, the King County SMP requires that development proposals analyze the environmental impacts of the proposal and consider measures to avoid, if possible, and then mitigate for the adverse environmental impacts.

S-616 **King County shall apply the following sequence of steps listed in order of priority in evaluating the impacts of development and redevelopment on critical areas within the shoreline jurisdiction:**

a. Avoid the impacts altogether;

b. Minimize impacts;

c. Rectify impacts by repairing, rehabilitating or restoring the affected environment;

d. Reduce or eliminate the impacts over time;

e. Compensate for impacts by replacing, enhancing or providing substitute resources; and

f. Monitor the impact and taking appropriate corrective measures.

3. Wetlands

When determining allowed uses within wetlands and their buffers in shorelines of the state, consideration should be given to those uses that would result in no net loss of wetland area and wetland function. Consideration should be given to specific uses that are likely to positively impact the physical, chemical, and biological processes that create and sustain wetlands.

S-617 **King County wetland regulations shall address the following uses to achieve, at a minimum, no net loss of wetland area and functions:**

- **a. Removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;**
- **b. Dumping, discharging, or filling with any material, including discharges of stormwater and domestic, commercial, or industrial wastewater;**
- **c. Draining, flooding, or disturbing of the open water level, duration of inundation, or groundwater table;**
- **d. Driving of pilings;**
- **e. Placing of obstructions;**
- **f. Construction, reconstruction, demolition, or expansion of any structure;**
- **g. Significant vegetation removal, except for non-conversion forest practices regulated under RCW chapter 76.09;**
- **h. Other uses or development that results in a significant ecological impact to the physical, chemical or biological characteristics of wetlands; and**
- **i. Activities reducing the functions of buffers.**

Wetlands shall be categorized based on rarity, irreplaceability, or sensitivity to disturbance, as well as the functions the wetland provides. The SMA provides the option of using specified wetland rating systems or developing a regionally specific system, provided the system is scientifically based and provides a method to distinguish wetland quality and function. King County adopted the Washington State Wetland Rating System for Western Washington for use in categorizing wetlands under the GMA critical areas development standards.

S-618 **King County shall categorize wetlands within shorelines of the state as provided for in Chapter 4, Environment, of the King County Comprehensive Plan.**

The King County SMP provisions that would allow limited alterations to wetlands shall be consistent with the policy of no net loss of wetland area and functions, wetland rating, and scientific and technical information.

S-619 King County should allow alterations to wetlands only if there is no net loss of wetland functions and values.

The King County SMP requires buffers be delineated and protected around wetlands. The size of the wetland buffer is based on the classification of the wetland and its characteristics and whether the wetland is located within or outside of the Urban Growth Area. Mitigation measures have been established to obtain a reduced buffer width in return for added measures to address light, noise, toxic runoff, change in water regime, pets and human disturbance, dust, and degraded buffer condition. Other modifications to buffer widths are allowed through buffer averaging. Circumstances, such as the presence of threatened or endangered species or proximity to steep slopes, may authorize increased buffer widths.

S-620 King County shall delineate buffers around wetlands to protect and maintain wetland functions. Buffer widths shall be based on ecological function, characteristics and setting, potential impacts with adjacent land use, and other relevant factors.

The King County SMP requires that mitigation measures achieve equivalent or greater wetland functions including, but not limited to, habitat complexity, connectivity and other biological functions, and seasonal hydrological dynamics. Preferential consideration is given to measures that replace the impacted functions directly and in the immediate vicinity of the impact.

S-621 In determining appropriate mitigation measures applicable to shoreline development, the mitigation sequencing requirements described in WAC 173-26-202(d)(e) require that lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

King County may authorize alternative compensatory mitigation within the watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans applicable to the area of impact. Authorization of compensatory mitigation measures may require appropriate safeguards, terms, or conditions as necessary to ensure no net loss of shoreline ecological processes and functions.

S-622 **King County may allow compensatory mitigation only after a mitigation sequence is applied (see Policy S-616) and higher priority means of mitigation are determined to be infeasible.**

a. **Compensatory mitigation replacement ratios or other mitigation provisions shall consider:**

1. **The risk of failure of the compensatory mitigation action;**

2. **The length of time the compensatory mitigation action will take to replace adequately the impacted wetland functions and values; and**

3. **The gain or loss of the type, quality, and quantity of the ecological functions of the compensation.**

b. **Performance standards shall be established to evaluate the success of compensatory mitigation.**

c. **Long-term monitoring shall be required to determine if performance standards are met.**

d. **Long-term protection and management shall be required for compensatory mitigation sites.**

4. Critical Aquifer Recharge Areas

King County has classified and mapped critical aquifer recharge areas according to the vulnerability of the aquifer. Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute contamination that may degrade groundwater and by hydrogeologic conditions that facilitate degradation. Low vulnerability is indicated by land uses that do not contribute contaminants that will degrade groundwater and by hydrogeologic conditions that do not facilitate degradation. Critical aquifer recharge areas are required to be protected under the GMA as a critical area.

S-623 **The King County Shoreline Master Program shall protect critical aquifer recharge areas consistent with the King County Comprehensive Plan and critical areas regulations.**

5. Geologically Hazardous Areas

Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological processes and events. They pose a threat to the health and safety of citizens when

incompatible commercial, residential, or industrial development is sited in areas of significant hazard. Some geological hazards can be reduced or mitigated by engineering, design, or modified construction or mining practices, so that risks to health and safety are acceptable. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided. Under the King County SMP, geologically hazardous areas include:

1. Erosion hazard areas;
2. Landslide hazard areas;
3. Seismic hazard areas;
4. Coal mine hazard areas;
5. Volcanic hazard areas; and
6. Steep slope hazard areas.

The following policies to protect health and safety and also to reduce the loss of shoreline ecological processes and functions apply to geological hazardous areas located within the shoreline jurisdiction.

S-624 **Development regulations for geologically hazardous areas shall meet the minimum requirements in WAC 365-190-080(4).**

S-625 **King County shall prohibit development and new lot creation in geologically hazardous areas if it would result in increased risk of injury to people or property damage, consistent with K.C.C. chapter 21A.24.**

S-626 **King County shall prohibit new development that requires structural stabilization in geologically hazardous areas. Stabilization will be allowed in these areas only if the stabilization is necessary to protect existing allowed uses, there is no alternative location available, and no net loss of shoreline ecological processes and functions will result. Stabilization measures shall conform to WAC 173-26-231.**

S-627 **King County may allow stabilization structures or measures in geologically hazardous areas to protect existing primary residential structures, if there are no alternatives, including relocation or reconstruction of the residential structure, the stabilization is in conformance with WAC 173-26-231, and no net loss of shoreline ecological processes and functions will result.**

6. Fish and Wildlife Habitat Conservation Areas

King County is required by the GMA to protect fish and wildlife habitat conservation areas as critical area. The Washington Department of Community, Trade, and Economic Commerce (Commerce) adopted guidelines to assist local governments in designating critical areas, including fish and wildlife habitat conservation areas. The Commerce guidelines are designed to define and protect areas necessary to maintain species in suitable habitats within their natural geographic distribution, at least in part so that isolated subpopulations are not created. Commerce identifies the following areas as being suitable for fish and wildlife habitat conservation areas:

1. Areas with which endangered, threatened, and sensitive species have a primary association; areas critical for habitat connectivity;
2. Habitats and species of local importance;
3. Commercial and recreational shellfish areas;
4. Kelp and eelgrass beds; herring, smelt and sand lance spawning areas;
5. Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;
6. Waters of the state;
7. Lakes, ponds, streams, and rivers planted with game fish by a governmental or Tribal entity; or
8. State natural area preserves and natural resource conservation areas.

The King County Comprehensive Plan and its development regulations protect the functions and values of fish and wildlife habitat conservation areas through its provisions governing aquatic areas and wildlife habitat conservation areas.

Ecology's guidelines divide fish and wildlife habitat conservation areas into critical saltwater and critical freshwater habitats.

a. Critical saltwater habitat

Critical saltwater habitats include all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as herring, smelt and sand lance; subsistence, commercial and recreational shellfish beds; mudflats, spits, intertidal habitats with vascular plants, and areas with which priority species have a primary association. Critical saltwater habitats include both the shorelines and the adjacent submerged areas.

S-628 **King County shall provide a high level of protection to critical saltwater habitats due to the important ecological functions they provide.**

S-629 **Protection and restoration of critical saltwater habitats should integrate management of shorelands as well as submerged areas.**

Comprehensive planning for the protection and restoration of critical saltwater habitat should include state resource agencies, local and regional government entities including, but not limited to the Port of Seattle and Sound Transit, and affected Tribes. To reverse the impacts from development on critical saltwater habitats, the King County Shoreline Master Program should look for opportunities to restore critical saltwater shorelines and protect them from further degradation. All resources should be reviewed and considered.

S-630 **As part of its management planning for critical saltwater habitats, King County should include an evaluation of current data and trends regarding:**

- **a. Available inventory and collection of necessary data regarding physical characteristics of the habitat, including upland conditions, and any information on species population trends;**
- **b. Terrestrial and aquatic vegetation;**
- **c. The level of human activity in such areas, including the presence of roads and level of recreational types. Passive or active recreation may be appropriate for certain areas and habitats;**
- **d. Restoration potential;**
- **e. Tributaries and small streams flowing into marine waters;**
- **f. Dock and bulkhead construction, including an inventory of bulkheads serving no protective purpose;**
- **g. Conditions and ecological function in the near-shore area;**
- **h. Uses surrounding the critical saltwater habitat areas that may negatively impact those areas, including permanent or occasional upland, beach, or over-water uses;**
- **i. Potential Tribal uses of critical saltwater habitats to ensure that these uses are protected and restored when possible; and**
- **j. An analysis of what data gaps exist and a strategy for gaining this information.**

Because of the need for a higher level of protection for critical saltwater habitat, allowed uses should be carefully limited and only allowed to meet other policy goals of the SMA.

S-631 Docks, bulkheads, bridges, fill, floats, jetties, utility crossings, and other human-made structures shall not intrude into or over critical saltwater habitats except when all of the conditions below are met:

a. The public's need for such an action or structure is clearly demonstrated, and the proposal is consistent with protection of the public trust, as embodied in RCW 90.58.020;

b. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible or would result in unreasonable and disproportionate cost to accomplish the same general purpose;

c. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat; and

d. The project is consistent with state and Tribal interests in resource protection and species recovery.

S-632 Public or private noncommercial docks for public, individual residential or community use may be authorized provided that:

a. Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible; and

b. The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.

b. Critical freshwater habitat

Critical freshwater habitats are equally important to saltwater areas as fish and wildlife habitat conservation areas along shorelines of the state. Critical freshwater habitats include streams and rivers, with their associated channel migration zones, floodplains, wetlands, and lakes. Shorelines along these freshwater habitats often have been highly developed and are currently adversely impacted by improper stormwater, sewer, or industrial outfalls; unmanaged clearing and grading; and surface water runoff from buildings and parking lots. Some impacts include altered quality and quantity of runoff, as well as destruction or alteration of vegetation. Potential impacts from vegetation changes can include increased water temperatures and altered hydrographic conditions. All of these changes create inhospitable conditions in water bodies for priority species and, in addition, make them more susceptible to problems stemming from catastrophic flooding, droughts, landslides and channel changes.

Some freshwater habitats, particularly rivers and floodplains, often are considered as hazardous areas that can threaten life and property during catastrophic events, such as flooding. Development can exacerbate such conditions.

As with critical saltwater habitats, comprehensive planning for the protection and restoration of critical freshwater habitat should include state resource agencies, local and regional government entities including, but not limited to the Port of Seattle and Sound Transit, and affected Tribes. To reverse the impacts from development on critical freshwater habitats, the King County SMP should look for opportunities to restore critical freshwater shorelines and protect them from further degradation. All resources should be reviewed and considered.

S-633 **King County shall provide a high level of protection to critical freshwater habitats due to the important ecological functions they provide.**

S-634 **King County should establish priorities for protection and restoration, where appropriate, along unincorporated river corridors and lake shorelines.**

S-635 **King County should regulate uses and development as necessary within and along stream channels, associated channel migration zones, wetlands, lake shorelines, and floodplains within the shoreline jurisdiction, to assure that no net loss of shoreline ecological processes and functions results from new development near freshwaters of the state, including associated hyporheic zones.**

S-636 **King County shall protect ecological functions associated with critical freshwater habitat as necessary to assure no net loss from shoreline activities and associated changes.**

S-637 **King County should facilitate authorization of appropriate restoration projects.**

C. Frequently Flooded Areas and Channel Migration Hazard Areas

The King County 2006 Flood Hazard Management Plan was adopted as a functional plan of the King County Comprehensive Plan. The Flood Plan outlines the policies, programs, and projects that King County uses to reduce the risk from flooding and channel migration. The King County 2006 Flood Hazard Management Plan was reviewed for consistency with the SMA and determined to be consistent with it. King County maps Channel Migration Hazard Areas and applies critical areas regulations to assure that channel migration can be accommodated.

S-638 **The policies contained within the King County Flood Hazard Management Plan, or its successor, constitute the policies for the protection of frequently flooded areas and channel migration within shorelines. Provisions implementing these policies are included in the critical areas regulations.**

S-639 **King County shall continue mapping channel migration zones on all of its rivers and streams within shoreline jurisdiction where channel migration zones have not already been mapped.**

D. Shoreline Vegetation Conservation

A major intent of vegetation conservation is to protect and restore the ecological processes and functions performed by stands of vegetation along shorelines. Vegetation conservation can also be undertaken to protect human safety and property, to increase the stability of river banks and coastal bluffs, to reduce the need for structural shoreline stabilization measures, to improve the visual and aesthetic qualities of the shoreline, to protect particular plant and animal species and their habitats, and to enhance shoreline uses.

In King County, aquatic environments, as well as their associated upland and wetland vegetated areas, provide significant habitat for a wide variety of fish and wildlife species. Healthy environments for aquatic species are inseparably linked with the ecological integrity of the surrounding terrestrial ecosystems. For example, nearly continuous stretches of mature forest characterize the natural riparian conditions of the Pacific Northwest. Riparian areas along marine shorelines provide the same or similar functions as their freshwater counterparts. The most commonly recognized functions of the shoreline vegetation include, but are not limited to:

- Providing shade necessary to maintain cool water temperatures required by salmonids, spawning forage fish, and other aquatic biota.
- Providing external organic inputs critical for some aquatic life.
- Providing food for various insects and other benthic macro invertebrates, which are in turn food sources for fish, birds, and other wildlife.
- Stabilizing banks, minimizing erosion, and reducing the occurrence of landslides. The roots of trees and other riparian vegetation provide the bulk of this function.
- Reducing fine sediment input into the aquatic environment through stormwater retention and vegetative filtering.
- Filtering and vegetative uptake of nutrients and pollutants from groundwater and surface runoff.
- Providing a source of large woody debris for introduction into the aquatic system. Large woody debris is a primary structural component in streams that functions as a hydraulic roughness element to moderate flows and store sediment. Large woody debris also serves a pool-forming

function, providing critical salmonid rearing and refuge habitat. Abundant large woody debris increases aquatic diversity and stabilizes systems.

- Regulating microclimates in the lake and stream-riparian and intertidal corridors.
- Providing critical wildlife habitat, including migration corridors and feeding, watering, rearing, and refuge areas.

The length, width, and species composition of a shoreline vegetation community all contribute substantively to aquatic ecological functions. Likewise, the biological communities of the aquatic environment are essential to ecological functions of the adjacent upland vegetation. The ability of vegetated areas to provide critical ecological functions diminishes as the length and width of the vegetated area along shorelines is reduced. When shoreline vegetation is removed, there is a greater risk that important ecological functions will not be provided.

Sustaining different ecological functions requires varying widths, compositions, and densities of vegetation. The importance of the different functions, in turn, varies with the type of shoreline setting. For example, in forested shoreline settings, periodic introduction of fallen trees, especially conifers, into the stream channel is an important attribute that is critical to natural stream channel maintenance.

Vegetation conservation includes activities to protect and restore vegetation that contributes to the ecological functions of shoreline areas along or near marine and freshwater shorelines.[1] Vegetation conservation provisions generally include the prohibiting or limiting plant clearing and earth grading, restoring vegetation, and controlling invasive weeds and nonnative species.

S-640 **King County shall adopt planning provisions to address vegetation conservation and restoration and regulatory provisions to address conservation of vegetation, as necessary, to assure no net loss of shoreline ecological processes and functions, to avoid adverse impacts to soil hydrology, and to reduce the hazard of slope failures or accelerated erosion.**

S-641 **Vegetation conservation provisions apply to all shoreline uses and developments, whether or not the use or development requires a shoreline substantial development permit.**

[1] Vegetation conservation does not include those activities covered under the Washington State Forest Practices Act, except for conversion to other uses and those other forest practice activities over which local governments have authority.

S-642 **Vegetation conservation standards shall not apply retroactively to existing uses and structures, such as existing agricultural practices.**

S-643 **King County should identify which ecological processes and functions are important to the local aquatic and terrestrial ecology, and then conserve sufficient vegetation to maintain these functions. Vegetation conservation areas are not necessarily intended to be closed to use and development, but should provide for management of vegetation in a manner adequate to assure no net loss of shoreline ecological processes and functions.**

S-644 **King County should adopt development regulations for vegetated areas along streams, which once supported or could in the future support mature trees, that include buffers of sufficient width to facilitate the growth of mature trees and periodic recruitment of woody vegetation into the water body to support vegetation-related shoreline functions.**

S-645 **King County should adopt mechanisms to implement the vegetation conservation policies of this chapter. These mechanisms may include setback or buffer requirements, clearing and grading standards, regulatory incentives, environment designation standards, or other provisions. Selective pruning of trees for safety and view protection may be allowed. Removal of noxious weeds and invasive vegetation should be allowed as long as appropriate best management practices are followed.**

E. Water Quality, Stormwater and Non-Point Pollution

The Shoreline Master Program must protect against adverse impacts to the public health, to the land with its vegetation and wildlife, and to the waters of the state and their aquatic life. The intent of water quality, stormwater and non-point pollution policies is to provide shoreline protection by preventing adverse impacts to shoreline ecological processes and functions, aquatic habitats, and water dependent uses such as aquaculture and fishing.

S-646 **Shoreline Master Program water quality, stormwater, and non-point pollution policies apply to all development and uses in the shoreline jurisdiction that affect water quality.**

S-647 **King County should work to prevent impacts to water quality and stormwater quantity that would result in a net loss of shoreline ecological functions, degraded aesthetic qualities, loss of recreational opportunities or reduction in water-dependent uses, such as aquaculture and fishing.**

S-648 **King County should ensure mutual consistency between shoreline management provisions and other regulations that address water quality and stormwater quantity, including Public Health—Seattle & King County standards, the King County Surface Water Design Manual, and King County surface water management regulations. The regulations that are most protective of ecological functions shall apply.**

S-649 **The Shoreline Master Program shall include provisions to implement the water quality, stormwater and non-point pollution policies in this chapter.**

F. Preparing for Climate Change

As discussed in Chapter 4 of the King County Comprehensive Plan, climate change has the potential for significant impacts on shorelines and shoreline habitats. Sea-level rise and storm surges may place at risk infrastructure, habitat restoration projects, and other development, including residential development. New development and maintenance or replacement of existing development should take into account the potential for harm that may result from sea-level rise.

S-650 **King County shall ensure that new projects for and major maintenance or replacement of utilities, roads, and other public infrastructure consider the impacts of sea-level rise in the location, design, and operation of the projects.**

S-651 **Habitat protection and restoration projects in the shoreline jurisdiction shall consider implications of sea-level rise and other climate change impacts to promote resiliency of habitats and species.**

VIII. Shoreline Use & Shoreline Modification

A. Shoreline Use versus Shoreline Modification

The SMA makes a distinction between a shoreline use and a shoreline modification. A shoreline use is an activity that is allowed within the shorelines jurisdiction. In most cases in order to engage in an activity, the shoreline must be modified. Shoreline modifications often involve construction of a physical element, such as a dike, breakwater, dredged basin, or fill, as well as other actions such as clearing, grading, application of chemicals, or significant vegetation removal. This means that shoreline modifications are often undertaken in support of or in preparation for an activity along shorelines.

B. Shoreline Use

1. Generally

Land uses in King County are based on federal, state, and county policies and regulations. The baseline permitted uses are established in zoning regulations. Land uses that would be allowed in zoning may be further limited by the King County Shoreline Master Program and shoreline management regulations.

S-701 **King County shall give preference to uses in the shoreline that are consistent with the control of pollution and prevention of damage to the natural environment or are unique to or dependent upon the shoreline.**

S-702 **Development within the shoreline jurisdiction shall protect the public's health, safety, and welfare, as well as the land, including its vegetation and wildlife, and protect property rights while implementing the policies of the Shoreline Management Act.**

S-703 **Where there is a conflict between the uses permitted in the land use zone and the Shoreline Master Program for a site, the Shoreline Master Program shall control and preference shall be given first to water-dependent uses, then to water-related uses, and finally to water-enjoyment uses.**

S-704 **Shoreline Master Program development regulations shall ensure no net loss of shoreline ecological processes and functions.**

S-705 **King County shall adopt use policies and development regulations to achieve consistency among and between shorelands and adjacent lands as required by RCW 90.58.340.**

2. Shoreline Conditional Uses

For the purposes of the King County SMP, a shoreline conditional use may be appropriate in order to:

1. Effectively address unanticipated uses that are not classified in the SMP;
2. Address cumulative impacts; or
3. Provide the opportunity to require specially tailored environmental analysis or design criteria for types of use or development that may otherwise be inconsistent with a specific designation within the SMP or with the SMA policies.

S-706 **The following types of uses and development should require a shoreline conditional use permit:**

1. Uses and development that may significantly impair or alter the public's use of the waters of the state;

2. Uses and development which, by their intrinsic nature, may have a significant impact on shoreline ecological processes and functions depending on location, design, and site conditions; and

3. Development in critical saltwater habitats.

3. Agriculture

The SMA defines agricultural activities as:

> "agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation".

The SMA prohibits shoreline master programs from requiring modification to or limiting existing agricultural activities on agricultural lands in the shoreline jurisdiction. This limitation does not apply to new agricultural activities.

S-707 **The King County Shoreline Master Program shall not require modification of or limit existing agricultural activities in the shoreline jurisdiction. Existing agricultural activities in the shoreline jurisdiction shall be governed by existing provisions of the King County Comprehensive Plan and the King County Code.**

S-708 **New agricultural activities in the shoreline jurisdiction shall comply with the critical areas regulations incorporated into the shoreline master program as they apply to agricultural activities.**

As required by the GMA, King County has designated agricultural lands of long-term commercial significance. These lands have been included in Agricultural Production Districts under the King County Comprehensive Plan. Land uses meeting the definition of "agricultural activities" also occur outside the designated Agricultural Production Districts. The King County SMP encourages agricultural uses, but they must be compatible with the shoreline designation in which they are proposed. In addition, under the rare circumstances when land is removed from the Agricultural Production Districts, any development occurring on that land must be consistent with the shoreline designation where it is located.

S-709 **New agricultural activities within the shoreline jurisdiction and outside the Agricultural Production Districts shall be consistent with the shoreline designation where the land is located.**

S-710 **New agricultural activities within the shoreline jurisdiction and outside the Agricultural Production Districts shall be located and designed to ensure no net loss of shoreline ecological processes and functions and shall not result in an adverse impact on other shoreline resources and ecological values.**

S-711 **Development and uses on land removed from the Agricultural Production Districts shall be consistent with the shoreline designation where the land is located.**

4. Forestry

In general, Ecology's guidelines require local shoreline master programs to rely on the Forest Practices Act and the rules implementing that Act and the *Forest and Fish Report* as adequate management of commercial forest uses within the shoreline jurisdiction. When a property owner chooses to convert commercial timber land to a use other than timber production, the regulations for commercial forestry no longer apply.

S-712 **If land is being converted to a non-forest use through Class IV-General forest practice, the provisions of the King County Shoreline Management Program that apply to development activities governs the proposed land use.**

Because shorelines of statewide significance require a higher level of protection, special provisions apply to forestry within shorelines of statewide significance.

S-713 **Within shorelines of statewide significance, selective commercial timber cutting shall be used for timber harvest within two hundred feet abutting landward of the ordinary high water mark so that no more than thirty percent of the merchantable trees may be harvested in any ten year period of time. Through a shoreline conditional use permit, King County may approve:**

a. Other timber harvesting methods in those limited instances where the topography, soil conditions, or silviculture practices necessary for regeneration render selective logging ecologically detrimental; and

b. Clear cutting of timber that is solely incidental to the preparation of land for other uses authorized by the King County Shoreline Master Program.

S-714 **For forest practice conversions and other Class IV-General forest practices, where there is a likelihood of conversion to nonforest uses, King County shall ensure that there is no net loss of shoreline ecological processes and functions and that there are no significant adverse impacts to other shoreline uses, resources, and values such as navigation, recreation, and public access.**

5. Surface Drilling for Oil and Gas

The SMA prohibits surface drilling in the waters of Puget Sound north to the Canadian boundary and the Straight of Juan de Fuca seaward from the ordinary high water mark and on all lands within one thousand feet landward from that line.

S-715 **Surface drilling for oil or gas shall be prohibited in Puget Sound seaward from the ordinary high water mark and on all lands within one thousand feet landward from the ordinary high water mark on Puget Sound.**

6. Aquaculture

Aquaculture is the culture or farming of food fish, shellfish, or other aquatic plants and animals. Aquaculture is dependent on the use of the water area and, when consistent with goals for aesthetics, public access, control of pollution and prevention of damage to the environment, is a preferred use of the water area. Aquaculture is a growing industry of statewide significance. Aquaculture should be accommodated so long as it does not result in a net loss of shoreline ecological processes and functions. The visual and aesthetic impacts of aquaculture should not overwhelm adjacent land uses.

S-716 **Aquaculture is a water-dependent use and is a preferred use of the shoreline when consistent with control of pollution and avoidance of adverse impacts to the environment and preservation of habitat for native species, (WAC 173-26-241(3)(b)).**

S-717 **Potential locations for aquaculture activities are relatively restricted because of specific requirements related to water quality, temperature, oxygen content, currents, adjacent land use, wind protection, commercial navigation, and salinity. The technology associated with some forms of aquaculture is still experimental and in formative states. Therefore, when implementing development regulations related to aquaculture, King County should provide flexibility in its development regulations governing the siting of aquaculture facilities. Those regulations shall require avoidance of adverse impacts to existing uses, to the maximum extent practical, and no net loss in shoreline ecological functions and processes.**

S-718 **Aquaculture activities shall be designed, located and operated in a manner that supports long-term beneficial use of the shoreline and protects and maintains shoreline ecological processes and functions. Aquaculture shall not be permitted where it would result in net loss of shoreline ecological functions; net loss of habitat for native species including eelgrass, kelp, and other macroalgae; adverse impacts to other habitat conservation areas; or interference with navigation or other water-dependent uses.**

S-719 **Aquaculture facilities shall be designed, operated and located so as not to spread disease to native aquatic life, establish new nonnative species that cause significant ecological impacts, or substantially impact the aesthetic qualities and public access of the shoreline.**

S-720 **Preference should be given to those forms of aquaculture that involve lesser environmental and visual impacts and lesser impacts to native plant and animal species. In general, projects that require no structures, submerged structures or intertidal structures are preferred over those that involve substantial floating structures. Projects that involve little or no substrate modification are preferred over those that involve substantial modification, recognizing that in some circumstances that the importation of sand or pea gravel on rocky or cobble substrates may result in more diverse habitat. Projects that involve little or no supplemental food sources, pesticides, herbicides or antibiotic application are preferred over those that involve such practices.**

S-721 **Aquaculture shall not be permitted if it involves significant risk of cumulative adverse effects on water quality, sediment quality, benthic and pelagic organisms, or wild fish populations through potential contribution of antibiotic resistant bacteria, or escapement of non-native species, or other adverse effects on native species or threatened or endangered species and their habitats.**

S-722 **King County shall consider the potential beneficial impacts and the potential adverse impacts of new aquaculture development on the physical environment; on other existing and approved land and water uses, including navigation; and on the aesthetic qualities of a project area.**

S-723 **Legally established aquaculture uses, including authorized experimental projects, should be protected from incompatible uses that may seek to locate nearby. King County may deny uses or developments that have a high probability of damaging or destroying a legally established existing aquaculture.**

S-724 **King County should review and make permit decisions on restoration projects associated with aquaculture in a timely manner.**

S-725 **Experimental aquaculture projects in water bodies should be limited in scale and should be approved for a limited period of time. Experimental aquaculture means an aquaculture activity that uses methods or technologies that are unprecedented or unproven in the State of Washington.**

S-726 **King County should actively seek substantive comment regarding potential adverse impacts of any shoreline permit application for aquaculture from all appropriate Federal, State and local agencies; the Muckleshoot Tribe, the Puyallup Tribe of Indians, the Tulalip Tribes and other Tribes with treaty fishing rights; and the general public. Comments of nearby residents or property owners directly affected by an aquaculture proposal should be considered and evaluated, especially in regard to use compatibility and aesthetics.**

S-727 **The rights of treaty Tribes to aquatic resources within their usual and accustomed areas should be addressed through the permit review process. Direct and early coordination between the applicant or proponent and the tribe should be encouraged.**

7. Boating Facilities

Boating facilities provide the boating public recreational opportunities on waters of the state, but should be sited carefully to assure no net loss of shoreline ecological processes and functions and to maintain the aesthetic quality of the shoreline. For purposes of the King County Shoreline Master Program, "boating facilities" do not include docks serving four or fewer single-family residences.

S-728 **Boating facilities shall be located only at sites with suitable environmental conditions, shoreline configuration, access, and neighboring uses, and:**

- **a. Meet health, safety and welfare requirements;**
- **b. Mitigate aesthetic impacts;**
- **c. Provide public access in new marinas, unless there is a safety or security concern;**
- **d. Prevent the impacts to shoreline resources from boaters living on their vessels;**
- **e. Restrict vessels should be restricted from extended mooring on waters of the state unless authorization is obtained from the Washington**

Department of Natural Resources and impacts to navigation and public access are mitigated;

f. Assure no net loss of shoreline ecological processes and functions or other significant adverse impacts; and

g. Protect the rights of navigation.

8. Commercial Development

Some commercial uses within the shoreline jurisdiction may be required to incorporate appropriate design and operational elements to qualify as water-related or water-enjoyment. Public access and ecological restoration are considered appropriate mitigation for the impact to shorelines unless it is determined public access is infeasible or inappropriate. Most commercial land in unincorporated King County is located outside the shoreline jurisdiction.

S-729 King County shall require all commercial development on public land to provide public access, unless the use is incompatible with public access or there are public safety concerns.

S-730 King County shall permit non-water-oriented commercial uses in the shoreline jurisdiction only if:

a. The non-water-oriented commercial use is limited to the minimum size necessary for the use;

b. The use provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and ecological restoration; and

c. The use is part of a mixed-use project that includes water-dependent uses; or navigability is severely limited at the proposed site.

S-731 King County may allow nonwater-oriented commercial development in the shoreline jurisdiction if the site is physically separated from the shoreline by another property or public right-of-way.

S-732 King County shall allow over-water nonwater-dependent commercial uses only in existing structures or if the use is auxiliary to and necessary to support a water-dependent use. The area of any over-water structure shall be limited to the maximum extent practical.

S-733 **King County shall prohibit commercial development that will have significant adverse impact to other shoreline uses, resources and values, such as navigation, recreation and public access. King County shall require mitigation for all commercial development in the shoreline jurisdiction to ensure that it does not cause a net loss of shoreline ecological processes and functions.**

9. Industry

The King County Shoreline Master Program establishes a hierarchy for industrial development within the shoreline jurisdiction. Most industrial land in King County is located within cities rather than within unincorporated King County.

S-734 **In the shoreline jurisdiction, King County shall give preference to industrial uses in the following order: first, water-dependent industrial uses; second, water-related industrial uses; and third, non-water-oriented industrial uses.**

S-735 **To mitigate for the impacts of industrial development within the shoreline jurisdiction, King County should require ecological restoration and public access, unless it determines that public access is infeasible or inappropriate.**

S-736 **King County shall require industrial uses located on public land in the shoreline jurisdiction to provide public access, unless the use is incompatible with public access or there are public safety concerns.**

S-737 **King County should encourage Industrial development and redevelopment to be located where environmental cleanup and restoration of the shoreline can be incorporated.**

S-738 **King County shall permit new nonwater-oriented industrial development in the shoreline jurisdiction only if:**

a. **The use is part of a mixed-use project that includes water-dependent uses or navigability is severely limited; and**

b. **The use provides a significant public benefit with respect to the Shoreline Management Act's objectives, such as providing public access and ecological restoration.**

S-739 **King County may allow nonwater-oriented industrial uses in the shoreline jurisdiction if the site is physically separated from the shoreline by another property or public right-of-way.**

10. In-Water Structures

"In-water structure" means a structure placed by humans within a stream, river, or lake waterward of the ordinary high-water mark that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-water structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish collection weir, or other purposes.

S-740 **In-water structures shall provide for the protection and preservation of shoreline ecological processes and functions, and cultural resources, including, but not limited to, fish and fish passage, wildlife and water resources, shoreline critical areas, hydro-geological processes, and natural scenic vistas.**

S-741 **The location and planning of in-water structures shall give due consideration to the full range of public interests and shoreline ecological processes and functions, with special emphasis on protecting and restoring habitat for threatened or endangered species.**

11. Mining

King County has identified and designated land that is appropriate for the removal of sand, gravel, soil, minerals and other extractable resources. In King County, gravel removal was a common method of flood control in the first half of the 20th century. However, mining within shorelines can have significant impacts, particularly to habitat for threatened and endangered aquatic and riparian species.

S-742 **Mining may be allowed within the shoreline jurisdiction if it is:**

- **a. Consistent with the environment designation policies of the King County Shoreline Master Program and provisions of the Shoreline Management Act; and**
- **b. Located within mineral resource lands designated by the King County Comprehensive Plan.**

S-743 **New mining and associated activities shall be designed and conducted to comply with the regulations of the environment designation where the activity occurs and the provisions applicable to critical areas where relevant. Accordingly, meeting the standard of no net loss of ecological function shall include avoidance and mitigation of adverse impacts during the course of mining and reclamation. It is appropriate, however, to determine whether there will be no net loss of ecological function based on evaluation of final reclamation required for the site. Preference shall be given to mining proposals that result in the restoration, creation, or enhancement of habitat for threatened or endangered species.**

S-744 **The King County Shoreline Master Program provisions and permit requirements for mining should be coordinated with the requirements of Chapter 78.44 RCW.**

S-745 **The proposed subsequent use of mined property shall be consistent with the provisions of the shoreline environment designation in which the property is located.**

S-746 **King County shall permit mining within the active channel of a river only as follows:**

a. **Removal of specified quantities of sand and gravel or other materials at specific locations will not adversely affect the natural processes of gravel transportation for the river system as a whole;**

b. **The mining and any associated permitted activities will not have significant adverse impacts to habitat for threatened or endangered species nor cause a net loss of shoreline ecological processes and functions;**

c. **The determinations required by items 1 and 2 of this policy shall be consistent with RCW 90.58.100(1) and WAC 173-26-201(2)(a). Such evaluation of impacts should be appropriately integrated with relevant environmental review requirements of the State Environmental Policy Act and the Ecology guidelines;**

d. **In considering renewal, extension, or reauthorization of gravel bar and other in-channel mining operations in locations where they have previously been conducted, King County shall require compliance with this policy if no such review has previously been conducted. Where there has been prior review, King County shall review the previous**

determinations in order to ensure that current site conditions comply with the Program; and

e. These requirements do not apply to dredging of authorized navigation channels when conducted in accordance with WAC 173-26-231(3)(f).

S-747 King County shall require a shoreline conditional use permit for mining activity within a severe channel migration hazard zone located within the shoreline jurisdiction.

12. Recreational Development

Recreational development includes uses and activities designed to allow public enjoyment and use of the water and shoreline. King County recreational planning provides for parks, trails, open space, and opportunities for both active and passive recreational use in King County.

S-748 Recreational development is allowed in the shoreline jurisdiction and must be consistent with the shoreline environment designation in which the property is located.

S-749 King County shall plan to provide public recreational uses on county-owned shoreline, consistent with the goals of this chapter.

13. Residential Development

The SMA recognizes single-family residential development as a priority use within shorelines of the state. The term “residential development” also includes attached and multifamily dwelling units as well as subdivision of shoreline land into new residential lots. In King County, single detached dwelling units are the most common shoreline development. Residential development is often fairly high density to maximize water frontage. Care must be taken to assure that shoreline residential development and the related impacts from shoreline armoring, stormwater runoff, on-site sewage disposal systems, introduction of pollutants, and vegetation modification and removal do not result in significant damage to the shoreline.

S-750 Single-family residential development is a priority use in the shoreline jurisdiction in King County.

S-751 **King County shall require a conditional use permit for construction or expansion of a single-family residence that is located within an aquatic area buffer in the Forestry or Natural Shoreline Environment.**

S-752 **Shoreline residential development, including accessory structures and uses, should be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bluff walls and other stabilization structures, are not required to protect these structures and uses.**

S-753 **New over-water residences, including floating homes, are not a preferred use and shall be prohibited in the shoreline jurisdiction. Existing communities of floating or over-water homes should be reasonably accommodated to allow improvements associated with life-safety matters and to ensure protection of private property rights. King County shall limit the expansion of existing floating homes, including over-water and underwater footprint, and over-water communities to the minimum necessary to ensure consistency with constitutional and other legal limitations that protect private property.**

S-754 **King County should require multi-family residential development and subdivisions within the shoreline jurisdiction creating more than four lots to provide public access.**

S-755 **King County shall require subdivisions and short subdivisions to:**

- **a. Be designed, configured and developed in a manner that ensures no net loss of shoreline ecological processes and functions at full build-out of all lots;**
- **b. Prevent the need for new shoreline stabilization or flood risk reduction measures that would cause significant impacts to other properties or public improvements, a net loss of shoreline ecological processes and functions, or interfere with channel migration; and**
- **c. Implement the provisions and policies for shoreline designations and the general policy goals of this chapter.**

14. Transportation and Parking

Providing for transportation and parking is necessary to support water-dependent uses, to support the regional economy, and for access to privately owned property. However, transportation facilities should

be located and designed to have the least impact on the ecological processes and functions of the shoreline. Transportation planning in shorelines should not be focused totally on automobiles, but should consider a wide range of options, including buses, light rail, commuter rail, bicycle, equestrian, and pedestrian facilities. Transportation planning can be a tool for finding opportunities to provide public access to the shorelines.

S-756 **King County shall require transportation and parking plans and projects located in the shoreline jurisdiction to be consistent with the public access policies in this chapter and environmental protection provisions.**

S-757 **Where appropriate, circulation system planning in the shoreline jurisdiction shall include systems for pedestrian, bicycle and public transportation and combining transportation uses to minimize the footprint of transportation facilities. Circulation planning and projects should support existing and proposed shoreline uses that are consistent with the King County Shoreline Master Program.**

S-758 **Transportation and parking facilities located in the shoreline jurisdiction shall be planned, located and designed to have the least possible adverse impact on unique or fragile shoreline features, not result in a net loss of shoreline ecological processes and functions or adversely impact existing or planned water-dependent uses. Where other options are available and feasible, new transportation facilities or transportation facility expansions should not be constructed within the shoreline jurisdiction.**

S-759 **Parking facilities in the shoreline jurisdiction are not a preferred use. King County shall allow parking facilities in the shoreline jurisdiction only when necessary to support an authorized use and when an alternatives analysis shows there are no feasible alternatives outside of the 200-ft shoreline jurisdiction. Parking facilities in the shoreline jurisdiction shall use Low Impact Designs, such as porous concrete and vegetated swales, and be planned, located and designed to minimize the environmental and visual impacts.**

15. Utilities

Utilities include services and facilities that produce, convey, store, or process power, gas, water, sewage, stormwater, communications, oil, or waste. Utilities that are classified as on-site utilities serving only one primary use are considered "accessory utilities" and are considered part of the primary use.

S-760 **Utility facilities shall be designed and located to assure no net loss of shoreline ecological processes and functions, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses, while meeting the needs of future populations in areas planned to accommodate growth.**

S-761 **King County shall allow modification of existing utility facilities and the location of new water-oriented portions of utility facilities in the shoreline jurisdiction provided that a mitigation sequence is applied (see policy S-616) and there is no net loss of shoreline ecological processes and functions. To the maximum extent practical, those parts of utility production and processing facilities that are not water-oriented, such as power plants and sewage treatment plants, shall be located outside of the shoreline jurisdiction.**

S-762 **Transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, shall be located outside of the shoreline jurisdiction where feasible. Transmission facilities located within the shoreline jurisdiction shall assure no net loss of shoreline ecological processes and functions.**

S-763 **Utilities should be located in existing developed rights-of-way and corridors to the maximum extent practical.**

S-764 **Unless no other feasible alternative location exists, King County should discourage:**

- **a. Locating pipelines and cables in water, on tidelands or roughly parallel to the shoreline; and**
- **b. The development of facilities that may require periodic maintenance that disrupts shoreline ecological processes and functions.**

King County shall ensure that any utility facilities that are allowed do not result in a net loss of shoreline ecological processes and functions or significant adverse impacts to other shoreline resources and values.

C. Shoreline Modifications

1. General Policies Governing Shoreline Modifications

A shoreline modification is construction of a physical element, such as a dike, breakwater, dredged basin, or fill, as well as other actions such as clearing, grading, application of chemicals, or significant vegetation removal to support or prepare for a shoreline use. These activities should be directly related to a legal shoreline use and should not be conducted for other purposes.

S-765 **King County should allow structural shoreline modifications only when necessary to support or protect a legally established structure or a legally existing shoreline use that is in danger of loss or substantial damage, or when a modification is necessary for reconfiguration of the shoreline for mitigation or enhancement purposes.**

S-766 **In order to reduce the adverse effects of shoreline modifications, King County should limit shoreline modifications in number and extent to the maximum extent practicable.**

S-767 **King County shall only allow shoreline modifications that are appropriate to the specific type of shoreline and environmental conditions for which they are proposed.**

S-768 **King County shall ensure that shoreline modifications individually and cumulatively do not result in a net loss of shoreline ecological processes and functions. In order to achieve this goal, King County shall give preference to those types of shoreline modifications that have a lesser impact on the shoreline and by requiring mitigation of identified impacts resulting from shoreline modifications.**

S-769 **Where applicable, King County shall develop regulations and impose conditions based on scientific and technical information and a comprehensive**

analysis of shoreline conditions for drift cells for marine waters or reaches for lakes and river and stream systems.

S-770 **King County should plan for the enhancement of impaired shoreline ecological processes and functions where feasible and appropriate, while accommodating permitted uses. To the maximum extent practical, King County should incorporate appropriate measures to protect shoreline ecological processes and functions from the impacts of shoreline modifications.**

2. Shoreline Stabilization

Shorelines are impacted by wind and wave action, currents, tides, and flood waters, resulting in erosion of banks and shifts in channels. These impacts are natural processes that support shoreline ecological processes and functions, but they also impact human use of shorelines.

These natural processes are likely to be affected by climate change. Lowland rivers may see higher flows in the autumn and winter and mid-elevation rivers may see higher winter flows. In both cases, these changes could lead to more frequent flooding. The marine shorelines around Vashon and Maury Islands and the Duwamish Estuary may also see effects due to sea-level rise. Increased sea elevations will make development and infrastructure in low-lying areas more susceptible to flooding due to high tides and storms. Waves will encroach further onto low-lying beaches and cause greater beach erosion, threatening or damaging low-lying structures. At the same time steep slopes may receive increased moisture due to predicted changes in precipitation patterns, potentially resulting in an increase in landslides that may cause property destruction and threaten human safety.

Humans have long desired to "control" these natural processes by constructing shoreline stabilization structures. The negative side of structural solutions includes the high cost of construction, long-term cost of maintenance and repair, the false sense of security for humans relying on these structures, and the high impact to the shoreline environment. These negative impacts are likely to increase as the effects of climate change become more apparent. These impacts include:

1. Beach starvation where sediment is prevented from supplying the beach, thus impeding a dynamic process.
2. Habitat degradation, particularly through removal of shoreline vegetation.
3. Sediment impoundment where the sources of sediment are lost and longshore transport is diminished, resulting in lowering of down-drift beaches, narrowing of the high tide beach, and the coarsening of beach sediment.

4. Exacerbation of erosion as wave energy is reflected back from hard surfaces onto the beach, increasing erosion.
5. Groundwater impacts that can lead to a rise of the water table on the landward side of an erosion control structure, which results in increased pore pressures in the beach material and accelerated erosion of sand-sized material from the beach.
6. Hydraulic impacts where wave energy is reflected back onto the beach, resulting in scour lowering the beach elevation, or coarsening the beach, resulting in failure of the structure.
7. Loss of shoreline vegetation and the loss of erosion control that the vegetation provided, as well as loss of the habitat function provided by vegetation.
8. Loss of large woody debris, which plays an important role in biological diversity and habitat as well as stabilizing the shoreline.
9. Restriction of channel movement and creation of side channels, impacting recruitment of large woody debris and gravel for spawning.

As alternatives to constructing a hard-surfaced structural facility, nonstructural methods that have lesser impacts on shoreline ecological processes and functions are available. These nonstructural methods may also allow for adaptation to the effects of climate change. For example, if buildings are constructed further away from the existing water edge, beyond the range of sea-level rise, shoreline protection would be unnecessary. For most projects, a range of options is available. These include “soft” measures, such as revegetation to stabilize banks, which provide a variety of other ecological processes and functions, and "hard" measures, such as bulkheads, which often detract from or provide only limited ecological function. Shoreline stabilization options include, but are not limited to:

1. Vegetation enhancement;
2. Upland drainage control;
3. Biotechnical measures;
4. Beach enhancement;
5. Anchor trees;
6. Gravel placement;
7. Rock revetments;
8. Gabions;
9. Concrete groins;
10. Retaining walls and bluff walls;
11. Bulkheads; and
12. Seawalls.

S-771 **King County shall require shoreline stabilization to be consistent with WAC 173-26-221(5) for vegetation retention and WAC 173-26-221(2) for protection of critical areas.**

S-772 **King County shall adopt standards to first avoid then mitigate the impact to shoreline ecological processes and functions when alteration of the shoreline is allowed for the construction of single detached dwelling units and accessory structures. These standards shall address the design and type of protective measures and devices that are allowed.**

When structural shoreline stabilization is proposed to protect existing development, the following measures apply:

S-773 **King County may allow construction of new or replaced structural shoreline stabilization and flood control works to protect an existing structure if King County determines there is a documented need, including a geotechnical analysis that the structure is in danger from shoreline erosion caused by tidal action, currents or waves.**

When new development occurs within the shoreline jurisdiction, the following measures apply:

S-774 **King County shall require new shoreline development to be located and designed to avoid the need for future shoreline stabilization to the maximum extent practicable.**

S-775 **King County shall require that lots in new subdivisions and short subdivisions to be created so that shoreline stabilization will not be necessary in order for reasonable development to occur, using geotechnical analysis of the site and shoreline characteristics.**

S-776 **King County shall require new development on steep slopes or bluffs to be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated by a geotechnical analysis.**

S-777 **King County shall not allow new development that requires shoreline stabilization that will cause significant adverse impacts to adjacent or down-current properties and shoreline areas.**

S-778 **King County should notify all prospective developers of new development along Vashon and Maury Islands that their development may be impacted by sea-level rise and should encourage all such new development to be set back a sufficient distance to avoid the need for shoreline protection during the expected life of the development.**

New "hard" structural stabilization measures should be used as a last resort after exploring and evaluating other soft measures.

S-779 **King County shall require the use of soft methods of shoreline stabilization to the maximum extent practicable. King County shall allow new hard structural stabilization measures only as follows:**

a. To protect existing nonwater-dependent development and structures, including single-family residences, if:

1. The erosion is not the result of upland conditions, such as the loss of vegetation and drainage;

2. Nonstructural measures, such as locating the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient;

3. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report submitted by a qualified specialist. The damage must be caused by natural processes, such as tidal action, currents and waves; and

4. Mitigation is provided such that the erosion control structure will not result in a net loss of shoreline ecological processes and functions.

b. To protect water-dependent development if:

1. The erosion is not the result of upland conditions, such as the loss of vegetation and drainage;

2. Nonstructural measures, planting vegetation or installing on-site drainage improvements are not feasible or not sufficient;

3. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report submitted by a qualified specialist; and

4. The erosion control structure will not result in a net loss of shoreline ecological processes and functions.

c. To protect shoreline restoration projects or hazardous substance remediation projects pursuant to RCW chapter 70.105D if:

1. Nonstructural measures, planting vegetation or installing on-site drainage improvements are not feasible or not sufficient; and

2. The erosion control structure will not result in a net loss of shoreline ecological processes and functions.

The King County shoreline jurisdiction includes a large number of shoreline stabilization structures, many of which were constructed years ago with little or no consideration of the impact on shoreline ecological processes and functions.

S-780 An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents, tidal action, or waves.

S-781 King County shall require replaced shoreline protection structures to be designed, located, sized, and constructed to assure no net loss of shoreline ecological processes and functions.

S-782 Replacement walls or bulkheads to protect a residence shall not encroach waterward as measured at an elevation of two-feet above the current ordinary high-water mark, unless:

a. The residence was occupied prior to January 1, 1972;

b. There are overriding safety or environmental concerns; and

c. The replacement structure shall abut the existing shoreline stabilization structure and be located on the landward side of the existing structure.

S-783 If a net loss of ecological processes and functions associated with critical saltwater habitats will result from leaving an existing shoreline protection structure that is proposed for replacement, King County shall require the structure to be removed as part of the replacement measure.

S-784 King County shall encourage the use soft shoreline stabilization measures that use placement or growth of natural materials that closely resemble natural

scales and configurations and that provide restoration of shoreline ecological processes and functions waterward of the ordinary high-water mark.

S-785 **King County should encourage replaced structural shoreline stabilization located on Vashon and Maury Islands to be relocated outside of the 100-year floodplain whenever possible. The edge of the 100-year floodplain is consistent with a two-foot sea-level rise.**

King County should make decisions on shoreline stabilization measures based on technical studies and reports that objectively analyze the current conditions and the impact of the proposed stabilization measure. A geotechnical report addressing geologic and habitat conditions developed by a qualified geologist or geotechnical engineer and habitat specialist should be a requirement of a development proposal application that includes shoreline stabilization as part of the development.

S-786 **When shoreline stabilization is proposed, King County shall require a geotechnical report to address the need to prevent potential damage to a primary structure. The report shall estimate time frames and rates of erosion and the urgency associated with the specific situation. King County should not allow hard armoring solutions, unless a geotechnical report confirms that there is a significant possibility that the structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is immediate would foreclose the opportunity to use measures that avoid impacts on shoreline ecological processes and functions. If the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as the three years, the report may still be used to justify more immediate authorization to protect against erosion using soft measures.**

The construction of shoreline stabilization measures results in impacts to the ecological processes and functions of the shoreline. The following measures should be considered to mitigate the impacts of shoreline stabilization projects.

S-788 **If structural shoreline stabilization measures are demonstrated to be necessary, King County shall:**

1. Limit the size of stabilization measures to the minimum necessary;

2. Require the use of measures designed to assure no net loss of shoreline ecological processes and functions;

3. Require the use of soft approaches, unless they are demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.

S-789 **King County shall ensure that publicly financed or subsidized shoreline erosion control measures do not restrict appropriate public access to the shoreline, except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to shoreline ecological processes and functions. Where feasible, King County shall require ecological restoration and public access improvements to be incorporated into the project.**

S-790 **King County shall discourage new development and redevelopment on feeder bluffs. Where a legal building lot exists and the landowner has no option to locate new development or redevelopment away from feeder bluffs and other areas that affect beach sediment-producing areas, King County shall require that they avoid, to the maximum extent practicable, and then minimize the adverse impacts to sediment conveyance systems from erosion control measures.**

S-791 **King County should prioritize feeder bluffs as areas for protection using acquisition, easement, transfer of development rights and other programs that eliminate or reduce development threats.**

Erosion is the breakdown of soil, mud, rock, and other particles by the agents of wind, water, or ice or by living organisms. These materials are moved downward or down-slope in response to gravity. Upland conditions may contribute to this on-going natural physical process and may impact the ability of people to use the shoreline. Mass wasting is the geomorphic process by which soil, mud, rock, and other particles move downslope under the force of gravity. Types of mass wasting include creep, slides, flows, topples, and falls, each with its own characteristic features. Mass wasting may occur at a very slow rate, particularly in areas that are very dry or those areas that receive sufficient rainfall such that vegetation has stabilized the surface. It may also occur at very high speed, such as in rock slides or landslides, with disastrous consequences. The desire to protect shoreline development from these impacts leads to proposals for shoreline stabilization.

S-792 **The impacts of erosion and mass wasting should be mitigated through protection of geological hazardous areas.**

3. Piers and Docks

Piers and docks are some of the most commonly requested modifications to the shorelines. Because they extend over the water, piers and docks can have a significant impact on the shoreline ecological processes and functions. Careful consideration should be given to the construction of new piers and docks, and how they are constructed in order to minimize their impacts.

S-793 **King County shall allow new piers and docks only for water-dependent uses or public access. If it is designed and intended as a facility for access to watercraft, a dock associated with a single-family residence is considered a water-dependent use. As an alternative to individual private moorage for residential development: mooring buoys are preferred over floats or docks and shared moorage facilities are preferred over single use moorage, where feasible or where water use conflicts exist or are predictable.**

S-794 **King County shall require pier and dock construction to be limited to the minimum size necessary to meet the needs of the proposed water-dependent use.**

S-795 **King County may allow water-related and water-enjoyment uses as part of a shoreline mixed-use development on over-water structures where they are clearly auxiliary to and in support of water-dependent uses, provided the minimum size requirement needed to meet the water-dependent use is not violated.**

S-796 **King County shall allow new pier or dock construction, excluding docks accessory to single-family residences, only when the applicant has demonstrated that a specific need exists to support the intended water-dependent uses.**

S-797 **If new piers or docks are allowed, King County shall require new residential development of two or more dwelling units, subdivisions and short subdivisions to provide joint use or community dock facilities, when feasible, rather than individual docks for each dwelling unit or lot. King County shall allow only one pier or dock associated with residential development on a parcel.**

S-798 **King County shall require piers and docks, including those accessory to single-family residences, to be designed and constructed to avoid and then minimize and mitigate the impacts to shoreline ecological processes and functions. King County shall require piers and docks to be constructed of non-toxic materials. Where toxic materials, such as treated wood, are proposed, the proponent must show that no non-toxic alternative exists.**

4. Fill

Fill means the addition of soil, sand, rock, gravel, sediment, earth retaining structures, or other material to an area waterward of the ordinary high water mark, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land. Fill is not permitted within the 100-year floodplain without providing compensatory flood storage to prevent a rise in the base flood, which is a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "100-year flood." Fill can impact shoreline ecological processes and functions, including channel migration.

S-799 **King County shall require fill to be located, designed, and constructed to protect shoreline ecological processes and functions and ecosystem-wide processes, including channel migration and side channels.**

S-800 **King County shall allow fill waterward of the ordinary high-water mark only when necessary to support:**

1. **Water-dependent use;**
2. **Public access;**
3. **Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan;**
4. **Disposal of dredged material considered suitable under, and conducted in accordance with, the dredged material management program of the Washington Department of Natural Resources;**
5. **Expansion or alteration of transportation facilities of statewide significance currently located on the shoreline and then only upon a demonstration that alternatives to fill are not feasible; or**
6. **Mitigation actions, environmental restoration, beach nourishment, enhancement projects; or**
7. **Flood risk reduction projects implemented consistent with the goals, policies and objectives of the King County Flood Hazard Management Plan where no reasonable alternative exists.**

S-801 **King County shall require a shoreline conditional use permit for fill waterward of the ordinary high-water mark for any use, except for projects for ecological restoration or for the maintenance, repair or replacement of flood protection facilities.**

5. Breakwaters, Jetties, Groins and Weirs

Breakwaters, jetties, groins, and weirs are all structural elements that are constructed to absorb or deflect wave action or to control excess sediment. A breakwater is an off-shore structure, either floating or not, which may or may not be connected to the shore and is designed to absorb and reflect back into the water body the energy of the waves. A jetty is an artificial barrier used to change the natural littoral drift to protect inlet entrances from clogging by transported sediment. A groin is a barrier-type structure extending from the backshore into the water across the beach, which is constructed to interrupt sediment movement along the shore. A weir is a small dam in a stream or river to control the flow of water. Although each of these structural elements may sometimes be appropriate, they should be allowed only under limited circumstances.

S-802 **King County shall allow breakwaters, jetties, and weirs located waterward of the ordinary high-water mark only where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose.**

S-803 **Groins are prohibited except as a component of a publicly-sponsored project to protect or restore shoreline ecological processes and functions.**

S-804 **King County shall require a shoreline conditional use permit for the construction of breakwaters, jetties, groins, weirs, and similar structures, except for those structures installed to protect or restore shoreline ecological processes and functions, such as woody debris installed in streams.**

S-805 **Breakwaters, jetties, groins, and weirs shall be designed to protect critical areas and shall provide for mitigation according to the sequence in policy S-616 and defined in WAC 173-26-201 (2)(e).**

6. Beach and Dunes Management

Washington's beaches and their associated dunes lie along the Pacific Ocean coast between Point Grenville and Cape Disappointment and, as shorelines of statewide significance, are mandated to be managed from a statewide perspective by the SMA. There are no beaches and associated dunes in King County.

7. Dredging and Dredge Material Disposal

Dredging is the removal, displacement, or disposal of unconsolidated earth material such as sand, silt, gravel, or other submerged materials, from the bottom of water bodies, ditches, or natural wetlands. Long-term maintenance and support activities are also considered dredging. Dredging can cause significant ecological damage, which cannot always be avoided. Mitigation measures should be required to assure no net loss of shoreline ecological processes and functions.

King County has a channel monitoring program for King County rivers, which can be used to inform decisions on dredging activities. While only certain reaches of these rivers have been surveyed, King County recognizes the need to continue and enhance the channel monitoring program. In addition, King County should avoid development of shorelines that would require new or maintenance dredging.

S-806 **King County shall require that new development should be sited and designed to avoid, to the maximum extent practical, and then to minimize the need for new or maintenance dredging.**

S-807 **King County shall allow dredging for the purpose of establishing, expanding, or relocating or reconfiguring navigation channels and basins when necessary to assure safe and efficient accommodation of existing navigational uses. Significant adverse ecological impacts shall be minimized and mitigation shall be provided to ensure that there is no net loss of shoreline ecological processes and functions. Maintenance dredging of established navigation channels and basins should be restricted to maintaining previously dredged or existing authorized location, depth, and width.**

S-808 **King County shall not allow dredging waterward of the ordinary high-water mark for the primary purpose of obtaining fill material, except when the material is necessary for the restoration of shoreline ecological processes and functions. When allowed, the site where the fill is to be placed shall be located waterward of the ordinary high-water mark. The project must be either**

associated with a habitat restoration project under the Model Toxics Control Act or the Comprehensive Environmental Response, Compensation, and Liability Act, or, if approved through a shoreline conditional use permit, any other significant habitat enhancement project.

S-809 **King County shall not allow disposal of dredge material on shorelands and in side channels within a river's channel migration zone. King County shall not allow disposal of dredge material in wetlands located within the shoreline jurisdiction. In the limited instances where it is allowed, such disposal shall require a shoreline conditional use permit.**

S-810 **King County shall require dredging to be conducted consistent with Policy RCM-3 of the 2006 King County Flood Hazard Management Plan.**

8. Shoreline Habitat and Natural Systems Enhancement Projects

Shoreline habitat and natural systems enhancement projects should be supported and coordinated with other planning processes, such as salmon conservation plans and the 2006 King Count Flood Hazard Management Plan.

S-811 **King County should allow for habitat and natural systems enhancement projects that include, but are not limited to:**

- **a. Modification of vegetation;**
- **b. Removal of nonnative or invasive plants;**
- **c. Shoreline stabilization using soft or non-structural techniques; and**
- **d. Dredging, and filling, provided that the primary purpose of such actions is clearly restoration of the natural character and shoreline ecological processes and functions of the shoreline.**

S-812 **Habitat and natural systems enhancement projects should assure that the projects address legitimate restoration needs and priorities.**

IX. Primary & Administrative Policies

A. Reservation of Right to Appeal Department of Ecology Decisions

By law, King County's Shoreline Master Program must be approved by Ecology, which has the power to reject or modify part or all of King County's SMP elements.

1. Reservation of right to submit alternate proposal to Ecology

If Ecology recommends a change to some or all of the elements in King County's SMP, King County reserves the right to submit an alternate proposal for approval.

S-901 **If the Department of Ecology recommends changes to any elements of the King County Shoreline Master Program, King County reserves the right to submit an alternate proposal to the Department for its review and approval.**

2. Appeal of Ecology's decision to reject or modify King County Shoreline Master Program.

If Ecology rejects or modifies part or all of the elements of in King County's SMP, King County reserves the right to appeal this decision, in whole or part, to the Growth Management Hearings Board and the courts.

S-902 **If the Department of Ecology rejects part or all of King County's Shoreline Master Program, or if the Department of Ecology recommends changes that are unacceptable to King County, King County reserves the right to appeal the Department's decision to the Shoreline Management Hearings Board.**

B. Posting Notice of Effective Date of King County's Shoreline Master Program and Shoreline Regulations

The King County SMP and any amendments to the SMP take effect only after approval by the Washington State Department of Ecology.

S-903 **Upon receipt of the letter from the Department of Ecology approving the King County Shoreline Master Program (SMP) or any amendments to the SMP, King County will promptly post on its website a notice that the Department of**

Ecology has taken final action and approved the SMP or SMP amendments. The notice will indicate the effective date.

C. Treaty Rights Not Affected by Shoreline Master Program

King County has sought the input of and consulted with Tribes located in and adjacent to King County when developing the SMP. However, the Shoreline Master Plan and associated shoreline regulations shall not be construed to affect any treaty rights established between the United States and the individual Tribes.

S-904 **Nothing in the King County Shoreline Master Program nor in any action taken under the Shoreline Master Program shall be construed to affect any treaty right to which the United States is a party.**

D. Power to Abate Nuisance Retained by King County and the State Of Washington

Adoption of the SMP is a requirement of the SMA. King County's compliance with this state law should not be construed in any way to limit or modify all other powers possessed by King County.

S-905 **Nothing in the King County Shoreline Master Program shall be construed to limit the power of King County or the State of Washington to abate nuisances within the shoreline jurisdiction.**

S-906 **King County specifically reserves all rights, power, and authority granted to it by law. Nothing in the King County Shoreline Master Program shall be construed in any way to limit any power or authority possessed by King County.**

CHAPTER 6
PARKS, OPEN SPACE AND CULTURAL RESOURCES

The quality of life in King County is directly linked to the quality of our region's environment, with its diverse landscapes reaching from Puget Sound to the Cascade Mountains, scenic beauty and the variety of cultural and recreational opportunities that enrich our lives. These vital natural and cultural resources contribute to the physical, mental, and emotional well-being of county residents and are integral to attracting employment and business activity.

The policies in this chapter focus on the county's role as a regional leader in acquiring and protecting its system of county-owned parks and other open spaces and in supporting cultural opportunities such as music, theater, ethnic heritage museums, literary activities, public art collections, urban historic districts, and rural landmarks.

I. Parks, Recreation and Open Space

The Growth Management Act (GMA) requires cities and counties to identify open space corridors within and between Urban Growth Areas, including lands useful for recreation, wildlife habitat, trails, and connection of critical areas. The county's designation of open space includes those lands that are part of the King County open space system as well as state parks and natural resource conservation areas and federal wilderness areas in unincorporated King County. See the Land Use Map is located at the end of Chapter 1. The GMA states that counties are the providers of regional services and local rural services, while cities are the appropriate providers of local urban services. As the regional government, King County manages a regional open space system of parks, trails, natural or ecological areas and working resource lands. While the cities are the managers of local parks, trails and open space lands in the Urban Growth Area, King County will continue to be the provider of local parks, trails and open space lands in the Rural Area.

Population growth and associated development continue to transform the county's landscape as forested and open lands have been converted to urban uses resulting in the fragmentation of wildlife corridors, riparian habitat and the depletion of working resource lands and open vistas. The policies in this section provide guidance for the open space system of lands the county owns and manages to protect and restore the health of natural systems, provide recreational opportunities, shape community character, and help sustain agriculture and forestry economics. Additional benefits of the open space and trail systems include providing transportation alternatives as well as health benefits from physical activity and access to the outdoors for those who are mobility disabled. Large forested parks and natural areas help maintain air quality, water quality and quantity, and help mitigate the effects of climate change. Parks and green spaces also provide stress relief, rest and relaxation and contribute to improved mental health and well-being. The policies also reinforce the county's focus on linking components of the open space system with an emphasis on the regional trail system.

Regional active and multiuse parks serve a countywide population and provide high-quality, highly developed facilities to support multiple events, large group gatherings and special events. Passive parks serve less formal, organized or intense activities. Local rural park sites provide for active and passive recreation close to home. The Regional Trail System forms the backbone for county and other trails that reach broadly throughout the county from the north to south and east to west linking with trails of cities, other counties and the state. The Regional Trail System is also an essential part of King County's multimodal transportation system. Local trails provide recreation, circulation within the local community and access to the regional trail system.

Natural areas and some parks contain undeveloped or un-developable acreage that remains in a natural or near natural state and supports habitat and other ecologically significant attributes. Natural areas provide ecological benefits, contribute to biodiversity, and enable access for solitude and the appreciation of the county's environmental resources. Together these sites enhance environmental and visual quality and meet regional and local rural recreation needs.

P-101 **For the purposes of the King County open space system: "regional parks" shall mean sites and facilities that are large in size, have unique features or characteristics or significant ecological value, and serve communities from many jurisdictions; and "local parks" shall mean sites and facilities that serve unincorporated communities predominately in the rural area.**

A. The Regional Open Space System of Parks, Trails, Natural Areas and Working Resource Lands

The policies in this chapter provide the basis to develop a contiguous and functional open space system, connecting and including active and passive parks, trails, natural areas and forest resource lands. The components of this vital system contribute to the physical, mental and emotional well-being of county residents. Other publicly-owned lands such as Farmland Preservation and Flood Hazard Management properties also contribute to the system and its environmental benefits. The Open Space System Map shows these publicly-owned open space lands and provides the basis for identifying the linkages necessary to strengthen the physical and functional connectivity of the county's open space system. The following policies reinforce the importance of the county's open space system, and guide planning and management of appropriate recreational opportunities that best meet regional and local rural needs, preserve ecologically significant resources and protect working resource lands.

P-102 **King County shall be a regional leader in the provision of a regional open space system consisting of parks, trails, natural areas, working resource lands, and flood hazard management lands. The regional network of open spaces provides benefits to all county residents including: recreation facilities, conservation of natural and working resource lands, improving air and water quality, flood hazard management and related programs and services, thereby contributing to the physical, mental and emotional well-being of county residents.**

P-103 **King County will preserve wildlife corridors and riparian habitat, as well as open space areas separating Urban and Rural Areas as part of its open space system.**

B. Components of the Regional Open Space System

King County's regional open space system contains lands with many functions including: active and passive recreation; special purpose sites such as pools and trails; natural areas, including waterways, greenways, and forested areas with educational, scientific, wildlife habitat, cultural or scenic values; working resource lands including agriculture and forest lands; and community-defining systems, including physical and or visual buffers between areas of urban and rural development. Many sites within the open space system serve more than one function, but each site generally serves a primary role within the system.

1. Regional Recreation Sites, Multiuse Sites and Trails

King County's regional parks and facilities accommodate a wide range of active and passive recreational activities. Recreation sites that make up a functional system include: highly developed sites with organized, scheduled activities such as soccer and softball; passive or low impact recreation sites that include both physical activities and less intense activities such as informal play, trail use, and picnicking; and multiuse sites that include a combination of active recreation and passive recreation with less intensely developed facilities and natural areas.

Regional active and multi-use parks serve a broad spectrum of users. These parks and their facilities include those not generally viable for individual communities due to site or specialized facility requirements or the unique nature of the offering requiring a broader user base to support them.

P-104 **King County shall provide regional parks and recreational facilities that serve users from multiple neighborhoods and communities. Regional parks include unique sites and facilities that should be equitably and geographically distributed.**

Educational and interpretive programming promotes appropriate and enjoyable use of the park system, public awareness of the park system's resources and values, and builds support and stewardship for the system and its resources. Programming and special events provide activities and entertainment that attract people to the parks.

P-105 **King County should facilitate educational, interpretive and aquatic programs on county-owned properties that further the enjoyment, understanding and appreciation of the natural, cultural and recreational resources of the park system and the region.**

P-106 **King County should facilitate and seek regional and national programs and special events at regional sites and facilities.**

The Regional Trail System is a major element of the county's greater open space system that provides opportunities for recreation and nonmotorized transportation, as well as corridors often used by wildlife. This system contributes to the health and well-being of both county residents and the environment.

P-107 **King County shall complete a regional trail system, linking trail corridors to form a countywide network. King County will continue to primarily own the land necessary for the operation and management of the trail system.**

Backcountry trails allow users to directly experience the county's beautiful natural environment as found in its forests, meadows, and marine and fresh water shoreline. These trails are intended for passive recreation and appreciation and enjoyment of a natural experience with forest and trees, streams and wetlands, and birds and wildlife. Where backcountry trails are developed on lands containing fishery and wildlife resources, development and management of such trails is undertaken so as to minimize the impacts on those resources.

P-108 **King County will continue to provide and manage a backcountry trail system on its lands in collaboration with other public and private landholders.**

2. Local Parks

In the Rural Area, the large geographic area and dispersed populations, individual lots, low residential density and economies of site management dictate fewer individual park sites. Nearby regional parks and other open spaces also provide recreational opportunities in the Rural Area. King County's role in the Rural Area will reflect rural levels of service. These vital local parks, trails, recreational facilities and natural resources contribute to the physical, mental and emotional well-being of county residents.

P-109 **King County shall provide local parks, trails and other open spaces in the Rural Area. Local parks, trails and other open spaces that complement the regional**

system should be provided in each community in Rural Areas to enhance environmental and visual quality and meet local recreation needs.

P-110 **King County should provide local parks within rural communities with fields and other facilities that provide opportunities for active sports. These facilities shall be in addition to and compatible with King County's regional parks.**

3. Natural Area Parks (Ecological Sites)

The King County open space system includes many sites whose primary purpose is to conserve and restore ecological value. These sites may allow varying types of public use that do not harm the ecological resources of the site. These sites include many scenic and environmental features of King County's landscape, which play a role in protecting a diversity of vegetation and fish and wildlife important to the beauty and character of the region. King County will focus on linking natural areas to create regional open space corridors of greenways and waterways along the major natural systems such as rivers and shorelines.

Preserving these areas in partnership with other agencies, private groups and individuals will provide multiple values including environmental and economic benefits of air and water quality, surface water management, aquifer recharge, and fish and wildlife habitat preservation and enhancement.

P-111 **King County will manage its natural areas to protect, preserve and enhance important natural resource habitat, biological diversity, and the ecological integrity of natural systems.**

P-112 **King County shall recognize and protect the natural character and ecological value of its natural areas. These areas are important for preserving fish and wildlife and their habitat, native vegetation, and features of scientific and educational value. Development and public use may be limited to preserve the natural state and reduce disturbance of the natural resources. Site improvements should be focused on providing educational and interpretive opportunities. Public access should be directed to the less fragile portions of a site to ensure continued protection of the ecological resources.**

4. Working Resource Lands

The county's open space system includes lands that are managed as working farms and forests. The county has purchased these properties in fee or less than fee ownership with the intention of conserving the resource use on the site. County ownership and management of these lands conserves the resource land base, allowing the resource activity to continue, while contributing to the local rural economy, providing healthy foods, reducing carbon emissions associated with importing food into the region, providing education about agriculture and forestry, and providing passive recreational opportunities on some properties. The county's policies to conserve farmland and encourage agriculture are discussed in Chapter 3.

Farmland

The Farmland Preservation Program (FPP) is a county program that preserves farmland through the purchase of development rights. The farms in the FPP generally remain in private ownership. The county has purchased a farm outright in a few cases, with the intention of reselling the land without the development rights to a private farmer. The county has developed a program to lease farms to small-scale farmers until such time that the property can be resold.

P-113 **Farmland owned by King County shall contribute to the preservation of contiguous tracts of agricultural land and make affordable farmland available for use by small-scale and new farmers.**

P-114 **Farmers leasing properties owned by King County shall use Agricultural Best Management practices, Integrated Pest Management and other sustainable farming methods.**

P-115 **The use and management of farmlands owned by King County shall be consistent with any requirements imposed by the funding program used to purchase each property and shall serve to meet and enhance the objectives of the King County Agriculture Program.**

Forestland

One element of the King County Forestry Program is the conservation of forestland through acquisition to allow continued forest management on the property. The working forests owned by King County are generally very large parcels of land (several hundred acres or more) that support sustainable forest

management practices and contribute to the retention of a contiguous forest. These properties contribute to environmental protection, high-quality passive recreation, the public understanding of forestry, and scenic vistas.

P-116 **Forest land owned by King County shall provide large tracts of forested property in the Rural Forest Focus Areas and the Forest Production District (FPD) that will remain in active forestry, protect areas from development or provide a buffer between commercial forestland and adjacent residential development.**

P-117 **Forest land owned by King County shall be used to sustain and enhance environmental benefits, demonstrate progressive forest management and research, and provide revenue for the management of the working forest lands.**

P-118 **Forest land owned by King County shall provide a balance between sustainable timber production, conservation and restoration of resources, and appropriate public use.**

5. Other Open Spaces

Preservation of open space in the county reaches beyond the county owned system. Large areas of the county are owned and managed by federal agencies, the state, and other local jurisdictions that manage the land for environmental protection, resource production, or a wide range of recreational opportunities. Additionally, open space benefits are often provided by private land owners managing their land in ways that protect the environment, conserve natural resources, or provide scenic vistas. King County acquires property for other reasons, such as flood hazards or providing needed public facilities. These lands can also provide open space conservation benefits.

King County has acquired lands and manages facilities along major river and stream systems for the primary purpose of floodplain management and flood hazard management. Major streams and rivers are vital components of the county's open space system, therefore the flood hazard management lands contribute critical links in the county's open space network. The King County Flood District will continue to maintain flood hazard management land and facilities within available funding levels. The county will also seek innovative measures for maintaining and improving flood hazard management, reducing maintenance costs, integrating flood hazard management and recreational opportunities, and achieving wildlife habitat protection and salmon recovery.

C. Achieving the Open Space System

Parks and other county-owned open space lands ensure a quality of life today and a legacy to future generations. In King County, many types of open spaces and fish and wildlife habitat remain in private ownership and may be subject to future development. To ensure that these lands and resources are protected and to offer an alternative to acquisition, the county offers landowners a wide variety of tools to preserve their property. Policies outlining strategies for using these tools can be found in Chapters 3, 4, and 7.

Cooperation, coordination and partnerships with public agencies, private groups and individuals are necessary to develop the regional parks and open space system, to meet existing needs for park and recreation facilities and to accommodate the needs of growth. The Mountains-to-Sound Greenway, along the I-90 corridor, is a successful model for coordination of efforts by public and private entities to protect the backbone of the county's open space system.

King County will achieve the multiple benefits of resource protection and recreation by building partnerships and coordinating with providers and user groups of the parks and open space system. Working together, stewardship can be fostered and these lands and facilities can be enhanced, restored and operated more economically and efficiently to benefit all county residents.

Priorities

P-119 **Open space lands should be acquired to expand and enhance the open space system as identified in the King County Open Space Plan: Parks, Trails and Natural Areas, or when needed to meet adopted local park and recreation guidelines, or to protect contiguous tracts of working resource lands or ecological resources under the Acquisition Criteria in the King County Open Space Plan.**

P-120 **Trails should be acquired when identified in King County Trails Plans, the Regional Trails Needs Report or when identified as part of a regional community trail network.**

P-121 **King County shall consider equity in the location, development and acquisition of its open space system to help in the reduction of health disparities and in the promotion of social and environmental justice.**

Criteria

P-122 **Lands preserved for public parks, trails or other open space should provide multiple benefits whenever possible.**

P-123 **Decisions on acquisition and development of park, trail, and other open space sites should consider funding needs for long term maintenance and operations.**

P-124 **A variety of measures should be used to acquire, protect, manage and develop regional and local parks, trails and open space. Measures can include: county funding and other funding mechanisms, grants, partnerships, incentives, regulations, dedications and contributions from residential and commercial development based on their service impacts and trades of lands and shared development activities.**

Managing the System

As the caretaker of 200 parks, 175 miles of regional trails, more than 200 miles of backcountry trails, 26,000 acres of open space, and 145,000 acres of conservation easements King County is one of the region's important providers and managers of public lands. As such, the principles and policies that guide stewardship and management of these lands and resources are critical to ensure these assets continue to contribute to the region’s quality of life now and for future generations.

P-125 **Management of the regional open space system of parks, trails, natural areas and working resource lands is guided by the King County Open Space Plan: Parks, Trails and Natural Areas. That plan includes policies on the management of parks and trails, natural areas, and working resource lands.**

P-126 **Development and management of parks, trails and open space sites should be consistent with the purposes of their acquisition and in consideration of their funding sources.**

P-127 **Open space lands shall be classified to identify their role in the open space system and the purpose of the acquisition as recreation site, trail, natural area park, multiuse site, or working resource land. They will also be classified as regional or local open space land.**

P-128 **King County will adopt an entrepreneurial approach to managing and operating the open space system and work aggressively to implement multiple and appropriate strategies to sustain fiscally the open space system.**

Coordination and Partnerships

P-129 **King County shall be a leader in establishing partnerships with cities, adjacent counties, tribes, state and federal agencies, school and special purpose districts, community organizations, non-profit organizations, land owners and other citizens. The county and these partnerships should work to promote and protect all aspects of environmental quality and complete the regional parks and open space system, linking local and regional lands and facilities.**

P-130 **In the Urban Area, King County shall work in partnership with other jurisdictions to facilitate annexation and transfer of local parks, trails and other open spaces to cities or other providers to ensure continued service to the community.**

P-131 **King County should work with cities to share operational and maintenance costs of parks and other open spaces in unincorporated areas in which a substantial portion of the users are from incorporated areas.**

P-132 **King County will encourage and support volunteer efforts to maintain and enhance programs, sites and facilities.**

II. Cultural Resources

Cultural resources make a significant contribution to the quality of life in King County. Arts and heritage organizations, public art and historic and archaeological properties contribute to the region's economic vitality, play an essential role in cultural tourism, and contribute significantly to the county's overall quality of life. As King County grows, the need to protect, support and enhance cultural opportunities and resources is essential in order to sustain livability.

King County plays an important role in supporting the region's cultural life.

4Culture, a County-chartered Public Development Authority serves as the county's cultural services agency. Created by the county as a county-chartered Public Development Authority, 4Culture has operational responsibility for advancing the work of the cultural community in King County by advocating for, supporting, promoting, and enhancing:

- arts;
- heritage;
- preservation; and
- public art.

4Culture's historic preservation program provides funding, advocacy, assistance and support in preserving and conserving the county's historical and archeological resources through projects and programs including: interpretation, community education and outreach, cultural tourism, and rehabilitation of historical resources. The King County Historic Preservation Program (HPP), housed in the County's Department of Parks and Natural Resources, also plays an important role ensuring that historic properties throughout King County are protected and enhanced.

King County government can lead by example through stewardship and wise management of its own cultural resources. Historic public buildings and facilities, such as bridges and roads, can be preserved and continue to be used; other historic resources can be converted to public use. As set by policy ED-106, found in Chapter 9, in order to enhance the region's quality of life and economic vitality, the county will engage in programs and projects to protect cultural resources and promote expanded cultural opportunities for the county's residents and visitors.

P-201 **King County shall be a steward of cultural resources under its control. It shall identify and evaluate cultural resources, preserve public art works and significant historic properties, and interpret and provide public access to them**

whenever appropriate. County departments and divisions shall collaborate with the Historic Preservation Program to nominate eligible properties for landmark designation.

P-202 **King County shall consider equity and social and environmental justice in its promotion and protection of cultural resources.**

P-203 **King County shall encourage preserving, reusing and recycling historic buildings in its facilities planning and other relevant actions.**

A. Relationships

County residents need arts and heritage opportunities. These include both attendance- driven programs and projects, as well as more localized, community-orientated opportunities of hands-on participation and education. The county's cultural system is comprised of regional and local arts and heritage organizations, individuals and venues. It also involves relationships with both public and private entities to preserve the region's history, as well as to enhance placement of art in public places. As such, cultural resource management crosses jurisdictional boundaries and involves countless public and private entities and artists throughout the region. The range and complexity of cultural activity in the region requires coordination and cooperation. King County, through its creation of 4Culture, provides this regional coordination and leadership.

While 4Culture is not a county department, the county and 4Culture maintain a unique cooperative relationship. Historically over 95% of 4Culture's budget has been funded by King County resources from either dedicated tax revenue or capital improvement project budgets. The council approves the executive's nominations for membership on 4Culture's board. Three councilmembers serve on 4Culture's board. The council annually receives briefings from 4Culture on its work program and to discuss plans for the coming year. Therefore, it is through 4Culture that King County maintains its regional role with regard to cultural resource management.

P-204 **King County shall support the retention and promotion of the region's cultural legacy, promote cultural education, and encourage the preservation and celebration of cultural diversity and creativity.**

P-205 **King County shall support and encourage development of regional cultural organizations, facilities, and services that address a countywide audience or are dedicated to unique and significant cultural themes or disciplines.**

P-206 **King County shall support and encourage community cultural organizations, facilities, and services to provide opportunities for local access and participation by all residents throughout the county.**

P-207 **King County shall encourage excellence and vitality in the arts by supporting opportunities for attendance at and participation in diverse arts and cultural activities throughout the county.**

P-208 **King County shall pursue its cultural resource goals by working with residents, property owners, cultural organizations, public agencies, tribes, schools and school districts, and others.**

P-209 **King County shall provide leadership in pursuing its cultural resource goals by actively advancing the protection, enhancement, and ongoing use of county-owned and other cultural resources, and by promoting intergovernmental cooperation and partnerships for the preservation and use of cultural resources.**

P-210 **King County shall partner with cities to protect and enhance historic resources and public art located within city boundaries and annexation areas.**

B. Arts, Heritage and Public Art

The region's artistic environment parallels its natural features in variety and richness. Its arts organizations, artists and opportunities are widely known and valued for their diversity and excellence in music, theater, dance, literary activity, and visual arts.

Museums, historical societies, heritage groups, historians, archivists, folklorists and other heritage specialists enrich community life and provide rich cultural experiences for county residents and visitors. Without preservation and stewardship of local history by these groups, the county's rich history would be lost.

P-211 **King County shall support, preserve and enhance its heritage by encouraging opportunities for public attendance and participation in diverse heritage activities throughout the county.**

P-212 **The King County executive and the King County council shall regularly seek advice from 4Culture on programs, policies and regulations that support, enrich and increase access to the arts, public art and King County's heritage.**

Public art means art for shared public space in King County, including King County buildings and infrastructure. King County's public art collection includes portable, permanently sited and architecturally integrated artworks that help define county buildings as cultural spaces. Public art also includes art installed or incorporated in places developed by others, but accessible to the public. Public art enhances community character and diversity, sparks imagination, and provides a direct cultural experience for county residents and visitors every day. For new or changing communities, public art is a powerful contributor to local character, sense of place and belonging. Public art can also help mitigate the adverse effects of new development.

P-213 **King County shall incorporate public art in its construction and mitigation projects, as well as its undertakings involving public-private partnerships, and development authorities that include public funds or resources or have publicly accessible components.**

P-214 **Maintenance and conservation shall be a consideration in the development and management of public art.**

C. Historic Preservation

Preservation of historic properties provides multiple benefits. Historic properties maintain a tangible connection with the past and contribute to community understanding, character, and diversity. Preservation saves energy, conserves existing housing and commercial buildings, and retains historically significant open space. Historic properties also play a major role in attracting tourists.

The mission of the King County Historic Preservation Program (HPP), housed in the County's Department of Parks and Natural Resources, is to conserve existing historic housing, commercial buildings and other significant properties and foster heritage tourism throughout county. It provides technical and other assistance to cities lacking preservation programs. It also supports the work of the King County Landmarks Commission.

P-215 **The King County executive and the King County council shall regularly seek advice from the Landmarks Commission on programs, policies and regulations**

that support and enhance preservation and protection of significant historic properties.

Many municipalities do not have sufficient resources to administer an historic preservation program. As a result, the history of the region is endangered. Comprehensive and coordinated protection of significant historic properties is necessary in order to ensure that King County's history is preserved.

P-216 **King County shall administer a historic preservation program to identify, protect and enhance historic properties throughout the region.**

Historic preservation is an ongoing process that requires identification, evaluation, designation and protection of significant properties, and attention to long-term enhancement and interpretation. Historic properties are often destroyed through neglect. Regular maintenance and other management practices that protect historic properties are critical to long-term preservation. King County government can lead by example through stewardship and wise management of its own historic properties.

P-217 **King County shall acquire and preserve historic properties for use by county and other public agencies and shall give priority to occupying historic buildings whenever feasible.**

Review of development proposals and other actions affecting historic properties resources is necessary in order to eliminate or minimize adverse effects of development or changing land use. Archaeological sites are particularly sensitive and endangered because they are not visible and may be unexpectedly encountered. King County government can also protect historic properties through careful planning and review of its own undertakings, both directly and in partnerships with private parties and other agencies.

P-218 **King County shall establish comprehensive review and protection procedures for historic properties affected by public and private projects.**

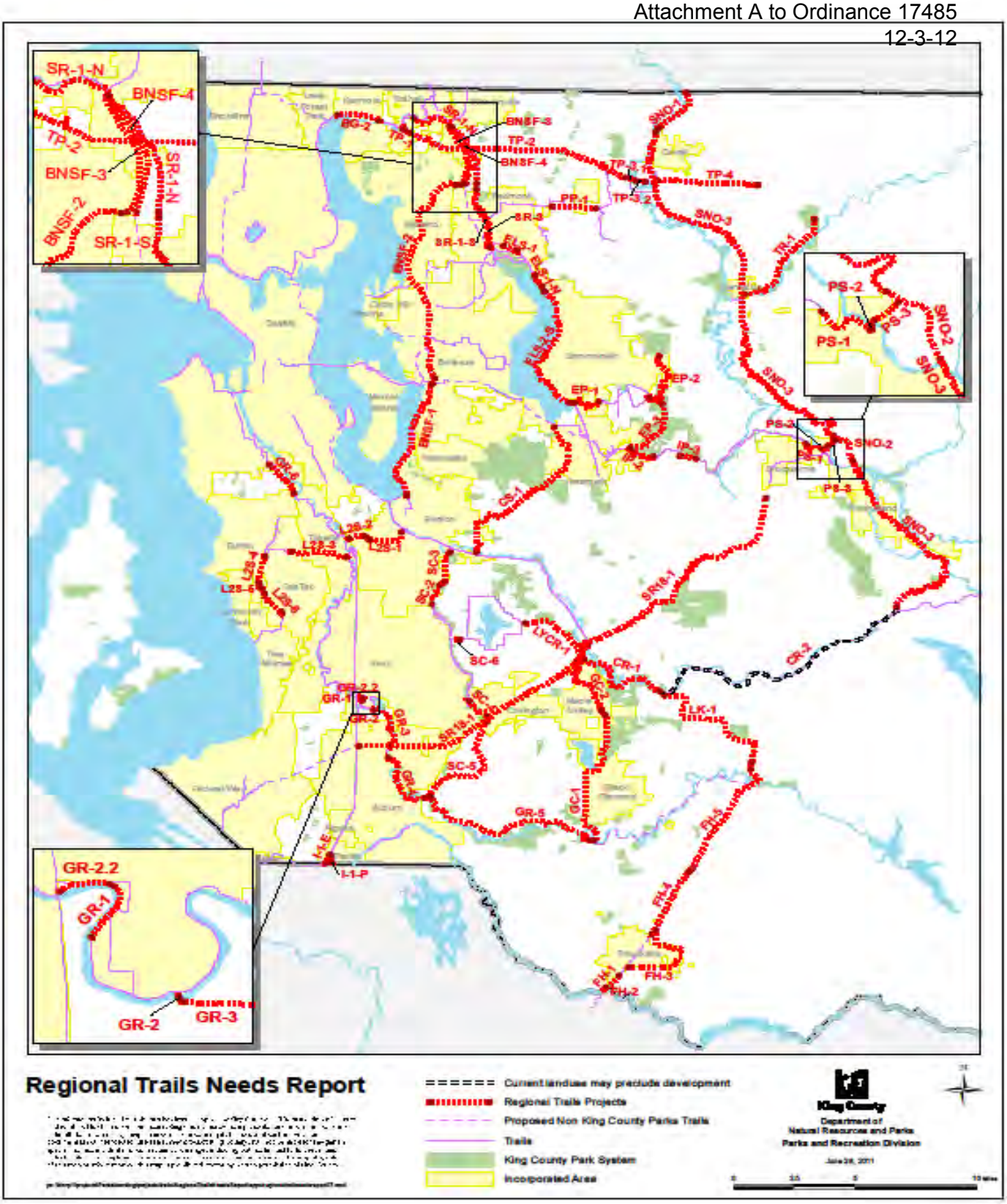
P-219 **King County may condition public and private projects in order to protect historic properties. King County agencies shall coordinate with the Historic Preservation Program to provide consistent review and mitigation for their projects and undertakings throughout the county.**

P-220 **King County shall encourage land uses and development that retain and enhance significant historic properties and sustain historic community character. County building and zoning codes and other regulations and**

standards should provide flexibility to accommodate preservation and reuse of historic properties. Zoning actions should take into account the effects of zoning on historic properties.

P-221 **King County shall maintain an inventory of historic properties in order to guide its historic preservation decision making.**

Preservation requires active support by governments and cooperation with property owners. Incentives such as tax reduction, revolving loans, transfer of development rights, expedited permitting, reduced permit fees, zoning flexibility, technical assistance and other measures can be used to encourage preservation. As set by policy ED-208, found in Chapter 9, the county shall assist businesses, property owners, and other jurisdictions in preserving and enhancing historic properties, including historic business districts, through a variety of incentives and economic development measures.


Regional Trails Needs Report
Current landuse may preclude development
Regional Trails Projects
Proposed Non King County Parks Trails
Trails
King County Park System
Incorporated Area
King County
Department of
Natural Resources and Parks
Parks and Recreation Division
SR-1-N
BNSF-4
TP-2
BNSF-3
SR-1-N
BNSF-2
SR-1-S
BG-2
TP-1
SR-1-N
BNSF-3
TP-2
BNSF-4
SNO-1
TP-3
TP-4
TP-3.2
PP-1
SR-3
SR-1-S
ELS-1
ELS-1-N
SNO-3
TR-1
PS-2
PS-3
SNO-2
PS-1
SNO-3
ELS-2-S
EP-1
EP-2
BNSF-1
PS-3
SNO-2
IP-3
PS-1
PS-3
GR-6
CS-1
SNO-3
L2S-2
L2S-1
L2S-3
L2S-4
L2S-5
L2S-6
SC-2
SC-3
SR18-1
LYCR-1
SC-6
CR-1
CR-2
GR-2.2
GR-1
GR-2
GR-3
SR18-1
LK-1
SC-5
GR-4
GR-5
GC-1
FH-5
I-1-E
I-1-P
FH-4
FH-3
FH-1
FH-2
GR-2.2
GR-1
GR-2
GR-3

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
Priority Category: Trails for which construction is funded and either underway or will be in near-term [2][3]							
1	BG-2	**Burke Gilman Trail Relocation/Landscaping (Partnership)**	Project(s) will redevelop paved trail through Kenmore concurrent w/phases of widening of SR522 - 2007-2013. Waiting on completion of initial phases by Kenmore. Last phase at west end near Logboom Park awaiting redevelopment	Inside UGA, connects urban centers (UW, Redmond)	2.1	Funded	Funded
2	GR-1	**Green River Trail, Phase 2**	Project will pave-extend trail on levee south of SE 259th Street in Kent. Use of levee for flood control has delayed construction	Inside UGA	0.5	Funded	Funded
Priority Category: Trails for which design is at least partially funded and/or underway and construction could be undertaken in near-term, based on available funding [2][3]							
3	ELS-2-N	**East Lake Sammamish Trail MP - Construct North Edge Sammamish Segment w/Amenities**	Project would develop a segment of paved master planned trail in Sammamish from 187th Ave NE to NE 40th St near Sammamish Landing Park. Design underway	Inside UGA, connects to urban center (Redmond)	0.5	$0.8	$1.8

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
4	ELS-2-S	**East Lake Sammamish Trail -MP Construct South Sammamish segment including trail w/Amenities**	Continues development of paved masterplanned ELST through Sammamish s/o 40th Ave NE and Sammamish Landing Park; may be completed in additional phases. Design underway	Inside UGA, connects to urban center (Redmond)	6.7	$10.1	$23.5
5	SC-2	**Soos Creek Trail Phase 5 (192nd - Petro)**	Project would extend paved trail from SE 192nd St to Petrovitsky Road within Soos Creek Valley. Acquisitions and schematic design underway. May include at-grade signalize intersection improvements at NE 192nd at 124th Ave SE and grade-separated crossing at Petrovitsky Rd	Inside UGA	1.2	$1.8	$4.2
6	SC-3	**Soos Creek Trail Phase 6 (Petro - CRT)**	Project would extend paved trail between Petrovitsky Road and Cedar River Trail near SR-169. Acquisitions and schematic design underway	Inside UGA	1.7	$2.6	$6.0

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)							
Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
7	L2S-2	**Lake-to-Sound - Black River Forest (Segment A) (Partnership)**	Segment A of L2S linking Renton with Tukwila. Project would create paved trail between Naches Ave in Renton and Green River Trail in Tukwila around Black River Forest. Would include at-grade crossing of Monster Road. Design development and permitting underway	Inside UGA, connects urban centers (Tukwila, Renton)	1.1	$1.7	$3.9
8	L2S-4	**Lake-to-Sound - Des Moines Memorial Drive - S 156th St to S Normandy (Segment B) (Partnership)**	Segment B along DMMD in Des Moines and SeaTac. Project would create a sidepath along DMMD from 156th Street to Normandy Road. Design development and permitting underway	Inside UGA, connects to between urban centers (Burien, SeaTac)	1.5	$2.2	$5.1

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
9	FH-1	**Foothills (Enumclaw Plateau) Trail - South**	Project would develop and paved and soft surface trail between Enumclaw and White River along historic RR corridor. Design underway, interim trail improvements completed	Connects UGAs within King and Pierce Counties (Enumclaw, Buckley)	1.1	$1.7	$3.9
Priority Category: High priority trails projects awaiting funding[2][3]							
10	SNO-1	**Snoqualmie Trail Phase 4 (North Extension)**	Project would extend soft surface Snoq. Valley Trail from Duvall to Sno Co to link with Snohomish Co regional trails. Deadline for development is 2019.	Outside UGA	3.2	$4.8	$11.2
11	IP-3	**Issaquah-Preston Trail - High Point to Preston (Partnership)[4]**	Project would extend trail from east end of High Point segment to Preston along High Point Way. Trail would be located within road ROW and possibly road and would continue the Mountains to Sound trail system east. Work with WSDOT and KC Roads	Connects UGAs in Mountains to Sound corridor	1.1	$0.1	$0.6

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
12	IP-2	**Issaquah-Preston Trail - Sunset Interchange to High Point (Partnership)[5]**	Project would include assumption of maintenance responsibility for trail and limited improvements to soft surface trail to complete trails link in Mountains to Sound trail along I-90. Work with WSDOT.	Connects UGAs in Mountains to Sound corridor	2.0	$0.2	$1.0
13	SR-1	**W Sammamish River Trail (Soft-Surface) South Phase - Leary Way to NE 124th Street [5]**	Project would formalize a soft surface trail for equestrians along the west side of the Sammamish R. parallel with existing paved trail. Trail development would require coordination with Redmond, initial improvement, signage, and ongoing maintenance	Part inside UGA, connects to urban center (Redmond)	3.1	$0.3	$1.6
14	L2S-1	**Lake-to-Sound - Renton Segment (Partnership)**	Project would develop trail through downtown Renton as a segment of the L2S. Assumes preferred route along BNSF RR and at least some full trail segments as well as in-road alignments. Alternative may be cycletrack-like trail using all existing streets.	Inside UGA, connects urban centers (Tukwila, Renton)	1.7	$2.6	$6.0

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
15	L2S-3	**Lake-to-Sound - Green R. Trail to 24th Ave S (Partnership)[4]**	Project would designate and improve in-road segment of L2S between Green R. Trail in Tukwila and existing trail at north end of SeaTac Airport. Assumes most or all in-road facility and possible modification of roadways or vehicle roadway use (e.g., cycletracks, road diets, etc.)	Inside UGA, connects urban centers (Tukwila, SeaTac, Burien)	2.6	$0.3	$1.3
16	L2S-5	**Lake-to-Sound - S. Normandy to 8th Ave (Partnership)**	Project extends L2S as a sidepath along DMMDS. 188th Way between Normandy Road and 8th Ave. S.	Inside UGA. Connects between centers	0.3	$0.5	$1.2
17	L2S-6	**Lake-to-Sound - 8th Ave S. to Des Moines Creek Park (Partnership)**	Project would extend L2S trail from 8th Ave S to existing Des Moines Creek segment along new alignment concurrent with south extension of SR509. Alternative may use in-road route and street segments in cycletrack-like or other in-road facility.	Inside UGA. Connects between centers	1.6	$2.4	$5.6
18	SNO-2	**Snoqualmie Valley Trail (Snoqualmie Gap)[6]**	Project would develop soft surface trail through historic Snoqualmie Mill Site to fill gap in Snoqualmie Valley Trail. Awaiting acquisition	Inside UGA	2.2	$2.8	$6.1

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
19	PS-3	**Snoqualmie Regional Connector**	Project would develop a paved and soft surface regional trail link between Preston-Snoqualmie and Snoqualmie Valley trails by constructing trail between trail at Tokul Tunnel and SR-202/SE Stearns Road	Inside UGA	0.8	$1.1	$2.6
20	EP-1	**Laughing Jacobs Creek Trail Segment**	Project fills an important missing link in trail system along Laughing Jacobs Creek near SE 43rd Way through Providence Point area. Paved trail would link ELST with East Plateau Trails and Klahanie	Inside UGA	0.5	$0.8	$1.8
21	GC-1	**Green-to-Cedar Rivers Trail - Paved and Equestrian Trail - Kent Kangley Rd to Flaming Geyser**	Project would develop a paved and soft surface trail from Kent-Kangley Road south to Flaming Geyser State Park along RR corridor and other alignments. Feasibility studies underway	Part inside UGA, connects UGAs	5.2	$7.8	$18.2

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
22	GC-2	**Green-to-Cedar Rivers Trail - Retrofit: Paved and Equestrian Trail - Cedar River Trail to Kent-Kangley Rd** [7]	Project would redevelop a paved and soft surface trail along the existing Lake Wilderness segment of the G2CT to complete the trail and create a continuous commuting and recreational facility. Trail would be redevelopment between Cedar R. Trail and Kent-Kangley Road	Inside UGA	3.3	$5.0	$11.6
23	LK-1	**Landsburg-Kanaskat Trail**	Project would extend Cedar R. Trail corridor east from Landsburg to Kanaskat as a paved and soft surface trail. Acquisitions are underway.	Outside UGA	8.3	$12.5	$29.1
24	EP-2	**East Plateau Trail - Klahanie to Soaring Eagle Park**	Project would develop a paved trail from Klahanie at Issaquah-Beaver Lake Road to Soaring Eagle Park via Duthie Hill Park and Trossachs community.	Part in UGA	2.6	$3.9	$9.1
25	I-1-P	**Interurban Trail Extension - Pacific (Partnership)**	Project would complete missing connection to Pierce Co through City of Pacific (Partnership). Paved trail would link south end of existing Interurban Trail with City of Sumner.	Inside UGA	1.4	$2.0	$4.7

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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26	I-1-E	**Interurban Trail Extension - Edgewood (Partnership)**	Project would develop missing connection of paved trail to Pierce Co through City of Edgewood along historic Interurban route toward Milton (Partnership). Project would start at Interurban Trail at 3rd Ave SW and cross under SR167 in-road then southwest along abandoned rail line to Milton	Inside UGA	2.4	$3.6	$8.4
27	PP-1	**Puget Power Trail - East Segment**	Project would extend existing Puget Power Trail as a paved and soft surface trail to Redmond Ridge (Redmond-to-Redmond segment). Project would extend roughly from McWhirter Park to Novelty Hill Road along powerline.	Connects UGAs	2.0	$3.0	$7.0
28	GR-6	**Green River Trail - North** [4]	Project would complete an important urban link from Green R. Trail to Seattle and connect with Duwamish Trail. Trail would likely require in-road development such as a cycletrack-like facility or other in-road design due to highly constrained ROW. Feasibility underway	Inside UGA	1.8	$0.2	$0.9

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
29	PS-1	**Preston Snoqualmie Trail Extension [5]**	Project would extend existing trail to Snoqualmie past Snoqualmie Falls on historic RR line along north side of Snoqualmie Ridge using up to three trestles/bridges. Project is challenging from a design and engineering standpoint but has outstanding scenic value. Trail will co-locate with operating scenic RR near falls. Support from Snoqualmie Tribe will be crucial	Part inside UGA, connects UGAs	1.1	$9.5	$9.5
30	PS-2	**Snoqualmie River Bridge**	Project would construct a new trail bridge over Snoqualmie River east of Snoqualmie Falls near SR 202 Bridge at junction of PST and Snoqualmie Regional Connector. Bridge would likely be located at east end of Preston-Snoqualmie Trail adjacent to existing highway bridge.	Inside UGA	N/A	$1.6	$1.6

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
31	SR-3	**Sammamish River Trail Improvement (Widening/Overlay)**	Project provides a widening of the existing trail in Redmond from NE 116th Street to Marymoor Park. The project would continue and complete the previous SRT widening program	Inside UGA	1.0	$1.5	$3.5
32	GR-3	**Green River Trail Phase 3**	Project would extend the trail south between Kent and Auburn along the Green River. Design has been completed but river migration and recent flood control requirements have delayed the trail's development	Part inside UGA, Connects UGAs	2.7	$4.1	$9.5
33	GR-2	**Green River Bridge**	Project would construct a new river bridge between Central Place S and 86th Ave S to extend the trail. Design and permitting have been undertaken but river migration and recent flood control requirements have delayed the project	Inside UGA	N/A	$2.7	$2.7

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

Listing Number	Revised RTNR Identification Number	Regional Trails Project Title	Comment/Status	UGA Relationship	Approx. Distance (Miles)	Prelim. Total Cost Est. (Low) (2011 - $M)[1]	Prelim. Total Cost Est. (High) (2011 - $M)[1]
34	GR-2.2	**Green River 2.2 (259th St SE)** [8]	Project would fill a missing link in the trail along S 259th Street in Kent from the Interurban Trail to Green River Trail Phase 2 project. Road relocation may be required to develop trail. Development is contingent upon future flood control and levee strategies by the City of Kent	Inside UGA	0.3	$0.5	$1.1
35	SC-6	**Soos Creek Trail to Lake Youngs Trail** [4]	Project would be a short on-road and off-road link between Soos Creek Trail and Lake Youngs Trail at SE 148th Ave. via SE 216th Street and crossing a powerline corridor. Off-road segment would be soft surface. Trail would require in-road designation and limited improvements through powerline area	Outside UGA	0.7	$0.1	$0.4
Priority Category: Priority trails projects [2][3]							
36	FH-4	**Foothills (Enumclaw Plateau) Trail - Central**	Project would develop a paved and soft surface trail from north end of Enumclaw's paved trail north to Nolte State Park along historic RR corridor	Outside UGA	4.7	$7.1	$16.5

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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37	FH-5	**Foothills (Enumclaw Plateau) Trail - North**	Project would complete north end of trail from Nolte State Park to Kanaskat near Kanaskat-Palmer State Park. Trail would be paved and soft surface and use a historic RR corridor and bridge to cross the Green River.	Outside UGA	4.3	$6.5	$15.1
38	TP-1	**Tolt Pipeline Trail - Norway Hill (Partnership) [5]**	Project would develop trail to connect Bothell's Blyth Park to the Tolt-Pipeline Trail atop Norway Hill. Steep trail would likely use southeast corner of the Blyth Park and pipeline ROW. Intent would be to connect Tolt Pipeline Trail to Sammamish River Trail via the park. Work with City of Bothell	Inside UGA	1.0	$1.5	$3.5
39	LYCR-1	**Lake Youngs to Cedar River Trail (Soft-Surface)[6]**	Project would develop a soft surface trail from the east side of Lake Youngs Trail to Cedar River or Green-to-Cedar Rivers trails along a SPU water pipeline corridor roughly following Petrovitsky Rd	Outside UGA	4.1	$4.7	$11.3

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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40	SR-1	**W Sammamish River Trail (Soft-Surface) North Phase - NE 124th to 102nd Ave NE in Bothell[6]**	Project would develop a soft surface trail on west side of Sammamish R. between NE 124th Street at Redmond to 102nd Ave NE. Portion in Bothell uses abandoned RR corridor	Part inside UGA, connects UGAs	5.4	$6.8	$14.9
41	CR-1	**Cedar River Trail Retrofit: Paved and Equestrian Trail [7]**	Project would extend paved and soft surface trail along existing trail alignment from existing paved trail in Maple Valley to Landsburg Trailhead Park at Landsburg Rd SE. Equestrian component would be integral component	Part inside UGA	5.0	$7.5	$15.0
42	CS-1	**Cedar-Sammamish Trail**	Project would develop an important urban link between Cedar River Trail and City of Issaquah. Project would intersect Cedar River Trail at 154th Pl SE near Renton and continue north to existing trail at intersection of 17th Ave NW at Newport Way NW in Issaquah. Steep terrain	Part inside UGA, Connects UGAs	5.6	$8.4	$19.6

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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43	ELS-1	**East Lake Sammamish Trail - North**	Project would extend the paved trail from NE 70th St in Redmond to to Bear Creek Parkway through the SR-520 interchange and across Bear Creek. Preferred approach would be grade separated highway crossing and bridge over creek.	Inside UGA	1.0	$1.5	$3.5
44	FH-2	**Foothills (Enumclaw Plateau) Trail - White River Bridge**	Project would construct trail bridge over White River and elevated trail over Mud Mountain Rd and river floodplain extending from the south end of Foothills Trail. At south end bridge would connect to Foothills Trail in Buckley and provide a connection between King and Pierce Counties. Preliminary feasibility study has been completed	Connects UGAs	N/A	$6.0	$6.0
45	SC-4	**Soos Creek Trail Phase 7 (To SR18)**	Project would extend paved and soft surface trail from Soos Creek Park gateway near SE 266th St to Kent-Kangley Road at 156th Pl SE at Kent-Kangley Rd. near SR18	Inside UGA	0.8	$1.2	$2.8

REGIONAL TRAILS NEEDS REPORT

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46	SC-5	**Soos Creek Trail Phase 8 (SR18-GRT)[4]**	Project would extend trail as in-road facility (e.g., cycletrack or other in-road) and/or off-road trail from 156th Pl SE at Kent-Kangley Rd to Green Valley Trail near SE Green Valley Rd. Preferred alignment utilizes Soos Creek Valley. Interim alignment uses alternative in-road and off-road segments. Paved	Outside UGA	4.6	$0.5	$2.3
Priority Category: Trails projects of lesser priority [2][3]							
47	GR-4	**Green River Trail Phase 4**	Project would extend paved trail through central Auburn and may require bridging the Green River (not included in budget estimate)	Inside UGA	4.7	$7.1	$16.5
48	GR-5	**Green River Trail Phase 5 (Upper)**	Project would extend trail east within Green River Valley south of Auburn to Flaming Geyser State Park. Trail would intersect with future Soos Creek Trail (Phase 8) and Green-to-Cedar Rivers Trail. Paved and soft-surface	Outside UGA	8.1	$12.2	$28.4

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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49	TR-1	**Tolt River Trail**	Project would extend trail along the Tolt River northeast of Carnation to Moss Lake. Paved and soft-surface	Outside UGA	6.5	$9.8	$22.8
50	SR18-1	**SR 18 Trail (Partnership)**	Project would develop a paved and soft surface trail from the Interurban Trail in Auburn to the Snoqualmie Ridge Trail near the junction of I-90 at Snoqualmie Ridge Parkway. Assumes that trail would be located mostly within SR-18 ROW from Auburn to Snoqualmie and along a powerline corridor through the City of Auburn. May require additional grade-separate crossings and bridges not included in estimate. Partner with WSDOT and Auburn	Part inside UGA, connects UGAs	25.0	$37.5	$87.5
51	FH-3	**Foothills (Enumclaw Plateau) Trail - Enumclaw Boundary (Soft Surface)[6]**	Project would create a soft surface equestrian trail around the eastern perimeter of Enumclaw linking the Fairgrounds with the Foothills Trail	Outside UGA	4.6	$5.3	$12.7

REGIONAL TRAILS NEEDS REPORT

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52	TP-2	**Tolt Pipeline Trail - Trail Paving [7]**	Project would pave the existing Tolt Pipeline Trail alignment creating a paved and soft surface trail. Would be completed with approval from SPU. Project would likely be completed in phases from west to east starting at Norway Hill or in segments with greatest use potential	Part in UGA, connects UGAs	10.4	$15.6	$36.4
53	EP-3	**East Plateau Trails - Issaquah Highlands to Duthie Hill Park**	Project would develop a paved and soft surface trail from the East Plateau Trail near Duthie Hill Park on the Sammamish Plateau to the Issaquah-Preston Trail along I-90 in the Mountains to Sound corridor. Alignment already includes backcountry trail connection. Steep slopes at south end	Inside UGA	5.4	$8.1	$18.9
54	SNO-3	**Snoqualmie Valley Trail Paving - SnoCo boundary to Rattlesnake Lake [7]**	Project would create a paved and soft surface trail over the length of the existing Snoqualmie Valley Trail from Snohomish County line north of Duvall to Rattlesnale Lake southeast of North Bend to create a fully multi-use facility. Project may be completed in phases	Part in UGA	34.2	$51.3	$119.7

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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55	CR-2	**Cedar River Trail - Landsburg to Cedar Falls [9]**	Potential project would develop a new paved and soft surface trail between Cedar River Trail at Landsburg and Snoqualmie Valley Trail at Rattlesnake Lake. Project would enter SPU's Cedar River Watershed. As a result, a change in current land use would be necessary before project could be undertaken	Outside UGA	12.0	$18.0	$42.0
56	TP-3.1	**Tolt Pipeline Trail - West Valley Connector**	Project would create a paved and soft surface trail between the Tolt Pipeline Trail and W Snoqualmie Valley Rd. Steep terrain.	Outside UGA	0.9	$1.4	$3.2
57	TP-3.2	**Tolt Pipeline Trail Bridge - Snoqualmie River**	Project would develop a trail crossing of the Snoqualmie River and trail segment across the floodplain from W Snoqulamie Valley Rd to the Snoqualmie Valley Trail on the east side of the valley. Paved and soft-surface trail would follow pipeline alignment across river valley	Outside UGA	N/A	$3.9	$3.9

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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58	TP-4	**Tolt Pipeline East** [5]	Project would extend the existing trail east from Big Rock Rd to to Kelly Rd. Assumes limited improvements to existing pipeline route	Outside UGA	2.5	$0.3	$1.3
Eastside BNSF Trails - not prioritized [2][10]							
59	BNSF-1	**Eastside BNSF Trail - I-90 to Renton**	Project would develop a paved trail along the abandoned Eastside BNSF RR corridor from Renton near Gene Coulon Park to intersection with I-90 Trail at I-90. Development would require trail and grade-separated facilities. Planning and development within Executive's Office	Inside UGA, connects to urban center (Renton)	3.4	Undetermined	Undetermined
60	BNSF-2	**Eastside BNSF Trail - NE 124th St to I-90**	Project would develop a paved trail along the abandoned Eastside BNSF RR corridor from the I-90 Trail at I-90 to NE 124th St near Willows Rd in Kirkland. Development would require trail and grade-separated facilities. Planning and development within Executive's Office	Inside UGA, within and connecting urban centers (Bellevue and Kirkland)	10.4	Undetermined	Undetermined

REGIONAL TRAILS NEEDS REPORT

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61	BNSF-3	**Eastside BNSF Trail - NE 124th St to Sammamish River Trail Woodinville**	Project would extend a paved trail along the abandoned Eastside BNSF RR corridor from NE 124th St in Kirkland to the Sammamish River Trail in Woodinville. Development would require trail and grade-separated facilities. Planning and development within Executive's Office	Inside UGA, connects to urban center (Kirkland)	3.5	Undetermined	Undetermined
62	BNSF-4	**Eastside BNSF Trail - Woodinville to Redmond**	Project would extend trail along the abandoned Eastside BNSF Redmond Spur RR line between Woodinville and NE 124th St to connect to Redmond segment of Planning and development within Executive's Office	Inside UGA	3.6	Undetermined	Undetermined
Regional Trails Major Maintenance Projects							
63	MM-1	**Snoqualmie Valley Tokul Creek**	Major maintenance project to repair existing scenic trestle over Tokul Creek on Snoqualmie Valley Trail near Snoqualmie	Outside UGA		$2.0	$2.0
64	MM-2	**Snoqualmie Valley Trail - Griffin Creek**	Major maintenance project to repair existing scenic trestle over Griffen Creek on Snoqualmie Valley Trail between Carnation and Fall City	Outside UGA		$2.0	$2.0

REGIONAL TRAILS NEEDS REPORT

2012 Summary (July 2011)

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65	MM-3	**Cedar River Trail Bridge**	Major maintenance project to repair significant bridge on Cedar River Trail in Maple Valley			$2.0	$2.0

	Approx Distance	Low Estimate	High Estimate
Trails construction is funded and either underway or will be shortly:	2.6	Funded	Funded
Trails for which design is at least partially funded:	17.0	$20.6	$48.1
High priority trail projects:	48.6	$48.7	$115.6
Priority trail projects:	36.5	$149.1	$322.0
Trail projects of lesser priority:	114.3	$171.	$398.1
Eastside BNSF Trails - not prioritized:	20.9	Undetermined	Undetermined
Major Maintenance Projects:	NA	$6.0	$6.0
Total All Projects (Miles)($M)	**239.9**	**$396.3**	**$889.8**

Table Notes

1. Preliminary total project cost estimates range at $1.5M - $3.5M per unit mile completed. Does not cover costs of at-grade intersection improvements (e.g., signalization) or grade-separated facilities (e.g., bridges or tunnels). Cost estimates include construction plus design, permitting, mitigation, administration, and other soft costs. Estimates are subject to revision based on additional information.

1. Future projects have been grouped in categories of similar priority. Projects within each category are not ranked. Unexpected circumstances may subsequently influence project priority.

3. Project prioritization is based on Parks' understanding of each project's connectivity, aesthetics/scenic value, timing or relationship to other projects, social justice and geographical equity, public support, and urban center connections.

4. Assumes in-road ROW facility or road modification - cycletrack or other facility at $0.10M - $.5M per unit mile

5. Special case - project has known characteristics that preclude unit cost estimates. Estimate based on preliminary review.

6. Assumes total project cost of new soft-surface trail at $1.25M to $2.75M per mile.

7. Assumes total project cost of retrofitting paved and/or paved and soft-surface trail similar to new paved trail.

8. GR-2.2 added to address missing link along 259th Street SE in Kent.

9. The connection would utilize an alignment through Seattle's Cedar River Watershed and is not feasible at this time due to water resource security issues. A change in use by the City of Seattle would necessarily predate the development of such a regional trail facility.

10. Eastside BNSF Trails appear in this listing but have not been prioritized. No cost estimates have been determined.

King County Comprehensive Plan, 2012
Chapter Six, Parks and Open Space

King County's Open Space System 2012

King County Open Space System

- Recreation & Multi-Use Parks
- Working Resource Lands
- Natural Areas
- Flood Hazard Properties
- Regional Trail Properties
- Other Public Lands
- Incorporated Areas
- Urban Growth Boundary

Source: King County Department of Natural Resources and Parks
Water and Land Resources Division

Notes
The maps in the King County Comprehensive Plan and its technical appendices are produced with a computer geographic information system. They are reduced in size but available at a larger scale.

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

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Februrary 2012

King County
Department of Development and Environmental Services

Date: Februrary 15, 2012
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CHAPTER 7

TRANSPORTATION

I. Creating an Integrated, Sustainable Transportation System that Enhances Quality of Life

A. Introduction

Transportation is critically important to King County and the surrounding region and has profound effects on quality of life and the vitality of the economy. Transportation provides access to jobs, education, services, recreation, and other destinations throughout King County. King County plays a central role in the regional transportation sector, supporting a variety of motorized, nonmotorized, air and marine transportation needs and providing services and facilities ranging from local to international. The county has direct responsibility for the unincorporated area road network. It provides transit services and facilities throughout the county, including within cities, and also performs many of Sound Transit's services under contract. The King County International Airport (KCIA) is owned, operated and maintained by the county. King County operates passenger-only ferry service to Vashon Island and West Seattle on behalf of the King County Ferry District, a separate governmental entity. The county also provides requested road related services to over two dozen cities or other agencies though contractual agreements.

King County collaborates with the state and other local governments with the goal of providing an integrated, multi-modal transportation system for the Puget Sound region. These intergovernmental partnerships seek to ensure that the county's transportation system is designed, operated and maintained in a manner that provides mobility options for a wide range of users, contributes to safe communities for all, and helps to safeguard and enhance King County's natural resources and environment. It is important for the county's and the region's transportation system to apply the principle of "fair and just" to achieve equitable travel opportunities for all people and communities. It is also important for all jurisdictions, including King County, to exercise sound financial management in the provision of transportation services and infrastructure.

The King County Strategic Plan provides policy direction for transportation under its "What we deliver" Goal, "Economic and Built Environment: Encourage a growing and diverse King County economy and

vibrant, thriving and sustainable communities." While this is the King County Strategic Plan's primary reference point for the county's transportation activities, each "What we deliver" and "How we deliver" goal has some bearing on transportation. Transportation and mobility are further implemented at King County through the functional plans: the Strategic Plan for Public Transportation and the Strategic Plan for Road Services, discussed later in the chapter.

The following summarizes county priorities for responding to policy direction established and articulated in the King County Strategic Plan, the King County Comprehensive Plan, County transportation agencies' functional plans, and the associated state and regional laws and planning requirements:

- Coordinate and develop multimodal services and facilities for an integrated and seamless regional and local transportation system;
- Deliver transportation services that support density and growth in the urban area, and meet the transportation needs of rural areas without creating additional growth pressure;
- Maintain and preserve infrastructure that facilitates the efficient movement of freight and goods to support economic vitality and regional trade;
- Maintain safe and secure county-owned infrastructure, including roads, bridges, buses and transit facilities, and airport facilities;
- Provide transportation choices and support travel modes that use less energy, produce fewer pollutants and reduce greenhouse gases in the region;
- Provide opportunities for people to make active transportation choices by increasing the convenience, accessibility, and comfort of taking transit, walking and bicycling;
- Address the transportation needs of people of color, low-income communities, people with limited English proficiency, and others who may have limited transportation options;
- Identify and adapt to the impacts of climate change on transportation infrastructure and services;
- Incorporate sustainable development practices into the design, construction and operation of infrastructure and facilities;
- Establish and implement clear transportation service priorities and guidelines and use transportation resources wisely and efficiently;
- Develop sustainable funding sources to support the level of services needed by communities; and
- Monitor and measure system performance and use this feedback to continuously improve transportation products and services.

The current and projected economic climate, however, places severe constraints on the county's ability to meet these important goals. The strategic plans for both the Metro Transit and Road Services Divisions identify priorities, analyze available funding and constraints, and set targets to help reach these goals.

B. Components of the Transportation Element

The transportation element of this Comprehensive Plan is comprised of the following:

a. Transportation chapter, which includes the narrative and policy language;
b. Technical Appendix C of this plan, which contains the Land Use and Travel Forecast Summary, the Arterial Functional Classification Map, and a transportation inventory;
c. Transportation Needs Report (TNR), which contains a multi-year financial forecast and a multi-year list of road facility needs, and the roads Capital Improvement Program (CIP), both of which are adopted herein by reference;
d. The Strategic Plan for Public Transportation (SPPT), and the Transit CIP, which are adopted herein by reference; and
e. Concurrency regulation, which implements the concurrency requirements and is codified at King County Code Title 14.

C. Consistency with Plans

The framework and direction for the development of comprehensive plans are provided by growth management legislation. The transportation element of the King County Comprehensive Plan is consistent with and meets the requirements of regional and countywide plans and policies that respond to growth management legislation. The Countywide Planning Policies (CPP) have been used to guide the development of the transportation element and to ensure consistency with plans and programs developed by adjacent jurisdictions.

Regional direction for the transportation element is set by *Transportation 2040,* developed by the Puget Sound Regional Council (PSRC). *Transportation 2040* is consistent with the region's urban growth strategy, Vision 2040, also developed by the PSRC.

King County identifies improvements and strategies needed to carry out the land use vision and meet the Level of Service (LOS) requirements for transportation. Road improvements are guided by the Strategic Plan for Road Services (SPRS), prioritized in the TNR and funded in the Roads Capital Improvement Program (CIP). Public transportation investments are guided by the Strategic Plan for Public Transportation (SPPT) and are identified in the Transit CIP.

D. Transportation system, services, and county responsibilities

The region's transportation system is comprised of the following elements:

a. Highways, arterial streets and local/neighborhood streets;
b. Bridges;

c. Local and express bus transit and paratransit services and facilities, including Americans with Disabilities Act (ADA) service programs;
d. High-capacity transit;
e. High-occupancy-vehicle lanes and ridesharing facilities;
f. Facilities and programs for pedestrians, bicycle riders and equestrians;
g. Facilities to accommodate freight and goods movement, including railroads, intermodal yards and distribution centers;
h. Marine transportation services, facilities and navigable waterways;
i. Airports;
j. Transportation Demand Management programs, systems, facilities and technologies; and
k. Facilities to maintain the transportation system elements.

The specific responsibilities of King County government are described below.

1. Public Transportation

Public transportation is vitally important to the Puget Sound region. It provides connections to jobs, schools, and other destinations, and enables those with limited mobility options to travel. Public transportation enhances regional economic vitality by freeing up roadway capacity and improving the mobility of people, goods, and services. It saves the region time and money. It helps accommodate regional growth by making better use of the region's existing infrastructure and benefiting the environment. Public transportation improves the quality of life for residents and visitors to the Puget Sound region.

The King County Department of Transportation's Metro Transit Division (Metro) is the designated public transportation provider for King County. Metro's mission is to provide the best possible public transportation services and improve regional mobility and quality of life in King County. Metro provides more than 100 million fixed-route transit rides per year. Its fixed route system includes a network of all-day, two-way bus routes between residential, business and other transit activity centers; peak-period commuter service to major destinations from many neighborhoods and from a network of park-and-ride lots; and local bus services that connect people to the larger transportation system. In addition to bus service, Metro provides alternative services, such as commuter vanpools, Access paratransit service, Commute Trip Reduction programs, and Rideshare Online, as well as community programs such as In Motion and car-sharing.

Metro augments its own investments by developing partnerships with local jurisdictions, other agencies, employers, and institutions to increase public transportation services and improve service effectiveness. Metro enters into agreements with public and private entities to fund new or improved public

transportation services, where the partner contribution may be in the form of direct funding or investment that results in transit speed or reliability improvements. Metro also forms partnerships to develop and promote alternative commute programs and to manage parking and traffic to make public transportation more efficient and attractive. Metro works with WSDOT and local cities to provide services that help mitigate the impacts of major construction projects.

Metro is guided by its Strategic Plan for Public Transportation 2011-2021 (SPPT) and the King County Metro Service Guidelines. SPPT defines a vision and mission for public transportation services in King County and describes the strategies to implement that vision. It also defines desired outcomes and describes how progress will be measured. The Metro Service Guidelines augment the SPPT by identifying detailed methodologies for how Metro should measure the performance of Metro's overall transit network, as well as each individual bus route, and by providing clear guidance on how Metro should use transit resources to expand restructure or reduce service.

Increasing the use of transit plays an important role in King County's efforts to mitigate climate change and support livable, healthy communities. Public transit reduces greenhouse gas emissions by eliminating private vehicle trips, mitigating traffic congestion, and supporting efficient land use. Metro's use of green vehicles, such as electric trolleys and hybrid diesel-electric buses, and cleaner-burning fuels, such as Ultra Low Sulfur diesel, add to the environmental advantage of combining many riders in a single vehicle. Metro's wide range of transportation alternatives—including vanpools, carpools, and Access paratransit—and its support of choices such car-sharing, biking and walking make transit a powerful tool to help reduce pollution and support active, healthy lifestyles.

In addition to reducing single occupant vehicle (SOV) trips, Metro is also committed to being a leader in environmentally-friendly operating and maintenance practices and minimizing its energy use. Metro educates its employees about reducing energy consumption at work and using public transportation to commute. The agency also incorporates cost-effective green building and sustainable development practices in all capital projects that it plans, designs, constructs, remodels, renovates, and operates.

Bus, rail, and waterborne transit services cross county boundaries, providing the critical transportation links on which our regional economy depends. In addition, transit services depend on convenient connections to roads, highways, and nonmotorized systems. As the region grows, coordinating transit routes and schedules among agencies and modes will make transit a more viable and convenient option for people traveling in King County. King County seeks input from a broad spectrum of county residents and businesses to identify needs and provide services to meet those needs.

T-101 **The Strategic Plan for Public Transportation 2011-2021 and King County Metro Service Guidelines, or successor plans, shall guide the planning, development and implementation of the public transportation system and services operated by the King County Metro Transit Division.**

2. Road System

Travelers in King County use a system of interconnected roads that includes interstate highways, state highways, urban and rural arterials, local access roads, private roads and forest/logging roads. King County is responsible for all county-owned roads, bridges, and related infrastructure in the unincorporated areas of the county, and must meet the road-related transportation needs of a very large and geographically and demographically diverse service area. The county's many bridges are an integral part of the road system, as are other components such as sidewalks, shoulders and pathways, bike lanes, guardrails, drainage and water quality facilities, traffic control equipment, and traffic cameras. Interstate highways, state highways, city roads, and private roads are not under county jurisdiction; rather, they are the responsibility of other government agencies or property owners.

The Strategic Plan for Road Services (SPRS) defines the vision and mission for the King County Department of Transportation's Road Services Division (RSD). The SPRS provides detailed direction for the response to two trends that have accelerated since the 2008 update to the Comprehensive Plan. One is that annexations, consistent with the goals of the Growth Management Act, have reduced the urban unincorporated area. By 2016, when the next major Comprehensive Plan update is developed, RSD's responsibilities will likely focus almost entirely on the rural unincorporated area. A second trend is the decline in County road funding, described in greater detail in Section IV. The SPRS guides the RSD as it is faced with the consequences of a smaller service area and reduced funding and seeks to maintain, preserve, and improve, as funding permits, the unincorporated road and bridge system for the safe and efficient movement of people, goods, and services, and quickly respond to storms, floods, and other emergencies.

The county-owned unincorporated-area road system includes approximately (2011 inventory):

- 1,534 miles of roadway;
- 181 bridges, including several jointly owned with cities;
- 102 traffic signals;
- 39,000 traffic control signs;
- 72 traffic cameras; and
- 110 miles of protective guardrail.

The users of the county road system may travel on foot or by car, public transit, truck, or bicycle, or even

on horseback. They may live in an unincorporated area, in one of the county's 39 cities, or in another county. The unincorporated road system supports local trips close to home, commuter trips, the movement of freight and goods, and regional travel between jurisdictions. The system also provides access to outdoor recreational activities in King County, which has one of the largest concentrations of outdoor recreation enthusiasts in the state. Public service providers, such as police, fire, emergency medical responders, and Metro Transit are also key users. In total, approximately one million daily trips are taken on King County's unincorporated road network. During this time of tight budgets, changing communities, annexations, and increasing traffic on aging roads and bridges, the county must manage facilities and services with exceptional care and efficiency.

3. Air Transportation

The King County International Airport/Boeing Field (KCIA) is located in south Seattle in the Duwamish River Industrial Corridor. It operates on a 24/7 basis and in all weather. Established in 1928, the airport is supported by revenue generated by its operations, rather than relying on general tax revenues. King County plans, designs, and implements services, programs, and facilities for KCIA in compliance with Federal Aviation Administration (FAA) regulatory requirements to support a safe, secure, and efficient international aerospace system. The airport is also a significant employment center and supports more than 150 aviation-related businesses including The Boeing Company. The airport is a port of entry for international flights and serves regional air carriers, national and regional cargo carriers, corporate aviation, and general aviation.

KCIA is the 34th busiest airport in the United States and ranks 25th in cargo handling. The airport's air taxi carrier serves the San Juan Islands. It is also the largest corporate aircraft center in the Pacific Northwest. Airport business activities are estimated to support almost 5,000 direct jobs, plus more than 12,000 additional jobs in King County. The airport's total positive economic impact within the Puget Sound Region and Washington State is more than $3 billion in direct and induced economic activity, including the sale of goods and services, labor income, and tax revenues.

The King County Department of Transportation is developing a strategic plan for KCIA. This plan will be the result of a strategic planning process, which is being guided by an advisory committee comprised of Airport Roundtable members and staff from both the executive and legislative branches of King County. It is possible that the outcome of the strategic plan could be a shift in emphasis on the airport's lines of business or operating procedures. The new strategic plan will complement the FAA's mandated Airport Master Plan and Airport Layout Plan.

The Bandera and Skykomish Airports, located in eastern King County near the communities of North Bend and Skykomish, are state owned and operated. King County does not have operating or regulatory

authority over these airports, but does control land use activity adjacent to the facilities. All airports in the county should make every effort to minimize noise impacts to land uses that are especially sensitive to the effects of noise such as residential areas, hospitals and schools.

4. Marine Transportation

The King County Ferry District (KCFD) was established in 2007 as a separate government to provide broad funding support and policy direction to King County passenger-only ferry services. The King County Department of Transportation Marine Division (KCMD) currently operates the King County Water Taxi through an interlocal agreement between the KCFD and King County. The service is operated in full compliance with maritime regulations. The U.S. Coast Guard is the primary maritime regulator.

Currently, ferry services provide a mix of year-round and seasonal services between Vashon Island and Downtown Seattle and between West Seattle and Downtown Seattle.

Under contract with KCFD, King County strives to provide safe, reliable, efficient, environmentally sound, customer friendly and fiscally responsible passenger-only ferry services to the public and maintain waterborne transit as a viable alternative mode of transportation in support of regional mobility and a high quality of life. The county also plays a role in shaping regional waterborne transportation policy.

E. General Policy Guidance

T-102 **As a transportation provider and participant in regional transportation planning, King County should support, plan, design, and implement an integrated, coordinated and balanced multimodal transportation system that serves the growing travel needs of the county safely, effectively and efficiently and promotes a decrease in the share of trips made by single occupant vehicles.**

T-103 **In striving to meet the growing need for transportation services, King County shall seek to maximize the efficiency and effectiveness of its services, infrastructure and facilities.**

T-104 **King County should provide a system of transportation services and facilities that offers travel options to all members of the community, including people of color, low-income communities, people with limited English proficiency, and others who may have limited transportation options such as students, youth, seniors, and people with disabilities.**

T-105 **King County shall seek to protect its transportation system against disasters, to the extent possible, by developing prevention and recovery strategies in partnership with other jurisdictions and agencies, and planning for coordinated emergency response.**

II. Providing Services and Infrastructure that Support the County Land Use Vision

This section of Chapter 7 discusses county transportation services and policies as they support the county land use strategy, which seeks to concentrate development and services in urban areas, conserve and enhance rural areas, and create communities that have a positive effect on public health and climate change. One focus of this section is on issues related to the county's responsibilities in the unincorporated area, including Level of Service (LOS) standards for county roads, transportation concurrency management, mitigation of growth-related impacts, avoidance of road expansion in rural areas, prevention of airport/land use conflicts, and support for nonmotorized transportation options. Another focus is on county transportation activities that affect a broader region, notably the four-county region's policy of concentrating development in more densely populated urban areas. King County Metro operates a majority of the transit service in the region and provides transportation demand management services to cities and employers. Consequently, the region's success in achieving its development goals will depend to a great extent on King County's ability to provide appropriate transit services within King County.

A. Land Use and Growth Strategy

The transportation element of this plan is grounded in a firm understanding of the important relationship between land use and transportation. A thoughtfully designed transportation system that supports the county's long-term land use vision and regional growth strategy should provide improved mobility and greater accessibility for all users and contribute to vibrant, thriving communities. It should also facilitate more efficient travel that reduces energy consumption and greenhouse gas emissions and other forms of pollution.

Integrated transportation and land use planning is called for at the regional level in Vision 2040, Transportation 2040, and the Countywide Planning Policies (CPPs) regarding transportation, which outline and support a regional growth strategy built around the concept that additional infrastructure and services are to be provided in areas that accept an increased share of the region's growth. The Countywide Planning Policies - Housing and Employment Growth Targets (2006-2031) adopted by King County and its cities, represent each jurisdiction's agreed upon fair share of future growth and have been incorporated into the travel demand forecast developed for this plan.

Vision 2040, Transportation 2040, and the CPPs also promote the concept of maximizing mobility choices through a multimodal approach to moving people, goods and services efficiently within and beyond the

region. Travel to and within regional growth centers is emphasized, with a focus on the availability of transit and nonmotorized modes in centers. These urban centers are characterized by compact, pedestrian-oriented development, with a mix of different office, commercial, civic, entertainment, and residential uses and can be efficiently and cost-effectively served by transit and nonmotorized travel options. In addition, these regional plans and policies address the importance of protecting and preserving the rural area and avoiding construction of major new roads and capacity expansion on existing roads in rural and resource areas.

A multimodal transportation system supports healthful choices by providing greater access to housing, jobs, schools, medical care, healthy food, shopping, recreation, and other services-- all of which contribute to a high quality of life. Designing highly connected communities that support safe nonmotorized travel and facilitate nonmotorized access to the transit system reduces vehicle miles traveled (VMT), reduces air pollution, and leads to opportunities for greater levels of physical activity through walking and bicycling.

Regional and countywide guidance also encourages innovative approaches to transportation and land use management, including Transportation Demand Management (TDM) strategies designed to reduce vehicle miles traveled, single-occupant vehicle (SOV) trips, and greenhouse gas emissions.

Metro operates transit service throughout King County, including in cities, while the county's road system service area is limited to the unincorporated area. Due to annexations and incorporations, the unincorporated road system is transitioning to become primarily rural. In the rural area, protection of natural resources, agriculture and forestry, and the rural lifestyle and character are a high priority. At the same time, there is still a certain amount of growth within the rural area, as well as high growth in some adjacent rural cities or beyond the county's boundaries, that must be considered in managing the road system.

The county's urban and rural areas form a complex landscape, and the urban/rural boundary is not a simple straight line. As a result, the county's arterial network weaves through both urban and rural areas as it facilitates regional mobility. This complex urban/rural pattern presents challenges to planning for the region's mobility needs and providing safe and adequate roadways. Issues include regional arterial corridors that link designated urban areas by crossing rural lands, and roads located on the Urban Growth Boundary. High traffic volumes on these roads may necessitate road improvements to ensure safe and efficient travel. However, it is critical to ensure that appropriate development regulations and access management strategies are first in place in order to prevent unplanned and unwanted growth in rural areas.

Growth management envisions different landscapes and infrastructure for urban and rural communities. King County is committed to managing its transportation system consistent with that vision.

T-201 **Multimodal transportation options such as transit, bicycling and walking, are most effective in densely developed urban areas. As resources allow, King County's transportation investments in urban areas should emphasize transit and road services and facilities that support multiple modes and facilitate connections between them.**

T-202 **Rural densities and distances between travel destinations are less conducive to efficient use of alternative modes of transportation. As resources allow, King County's transportation investments in rural areas should emphasize maintaining and preserving safe road infrastructure that is compatible with the preservation of rural character and does not promote urban or unplanned growth.**

T-203 **King County should encourage transit-supportive land uses, development, facilities and policies that lead to communities that transit can serve efficiently and effectively. As funding permits, King County should partner with jurisdictions and the private sector to spur transit-supportive development that enhances opportunities for transit, pedestrians, bicyclists, car and van pools, and other alternatives to single occupant vehicles.**

B. Travel Forecasts

Travel demand forecasts are used to project transportation system needs. They provide one of the important links between land use and transportation. The travel forecasts used to identify transportation improvement needs are conducted on a schedule that coincides with major Comprehensive Plan updates. The regionally adopted growth targets for the year 2031 have been used to develop the travel demand forecasts for this plan and the Transportation Needs Report.

The travel forecasting process is based on the Puget Sound Regional Council's modeling and forecasting techniques. The land use vision and growth targets have been incorporated into the county's transportation zone system. These projections provide the level of detail needed to analyze future transportation system performance and to identify system improvement needs, within the framework of growth management and regional and county policy guidance regarding appropriate urban and rural levels of service.

C. Public transportation system

Metro plays an important role in achieving the region's growth strategy by focusing public transportation services in the urban growth area of King County and providing service to designated centers and other areas of concentrated activity. Centers and other communities that are compact and friendly to pedestrians and bicycles are most easily served by transit. Such communities foster healthier, more active lifestyles while reducing auto dependency and associated road investments. By the same token, transit service can support and encourage development that is more compact.

Metro supports municipal, agency and private development of transit-supportive, pedestrian-friendly communities through partnership, coordination and delivery of public transportation services. Metro also partners with jurisdictions and the private sector to spur transit-oriented development through redevelopment opportunities at or adjacent to park-and-rides.

T-204 **King County should support local and regional growth plans and policies by focusing transit services on centers and other areas of concentrated activity.**

T-205 **King County should support, encourage, and implement high-capacity transit facilities and services that are consistent with, and supportive of, the comprehensive plan and Metro's Strategic Plan for Public Transportation.**

D. Road System

T-206 **Except as provided in T-209, King County shall not construct and shall oppose the construction by other agencies of any new arterials or highways in the Rural Area or natural resource lands.**

T-207 **King County recognizes the importance to regional and local mobility of state highways that traverse the Rural Area and should advocate for state and federal agencies to improve performance of these facilities, consistent with the county's adopted Comprehensive Plan policies to prevent unplanned development in the Rural Area and preserve rural character.**

T-208 **King County shall not add any new arterial capacity in the Rural Area or natural resource lands, except for segments of rural regional corridors that pass through rural or resource lands to accommodate levels of traffic between urban**

areas. Rural regional corridors shall be identified in the Transportation Needs Report (Appendix C) and shall meet all of the following criteria:

a. Connects one urban area to another, or to a highway of statewide significance that provides such connection, by traversing the Rural Area;

b. Classified as a principal arterial;

c. Carries high traffic volumes (at least 15,000 ADT); and

d. At least half of P.M. peak trips on the corridor are traveling to cities or other counties.

T-209 **King County shall avoid construction of major roads and capacity expansion on existing roads in rural and resource areas. Where increased roadway capacity is warranted to support safe and efficient travel through rural areas, appropriate rural development regulations and strong commitments to access management should be in place prior to authorizing such capacity expansion in order to prevent unplanned growth in rural areas.**

T-210 **Any capacity increases to rural regional corridors shall be designed to accommodate levels of traffic between urban areas consistent with the county's adopted Comprehensive Plan policies regarding development in the surrounding Rural Area or natural resource lands. The county shall seek to maximize the efficient use of existing roadway capacity before considering adding new capacity to rural regional corridors.**

T-211 **Any segment of a county roadway that forms the boundary between the Urban Growth Area and the Rural Area should be designated urban and all associated road right-of-way fully contained within the Urban Growth Area boundary. Such urban boundary roads shall be designed and constructed to urban roadway standards on both sides of the roadway segment.**

T-212 **King County shall work with cities for the annexation of county-owned roadways and/or street segments located in the urban area and within or between cities, in order to provide for a consistent level of urban services on the affected roads.**

E. Airports

T-213 **King County should use its authority including zoning, permitting and development standards to protect the public use airports of Banderra near the town of North Bend and Skykomish airport in King County from encroachment of non-compatible land uses. Compatible airport land uses are those that comply with generally accepted Federal Aviation Administration guidance on location, height, and activity that provide for safe aircraft movement, airport operations, including expansion, and community safety.**

F. Marine Transportation

T-214 **King County should support, encourage and be an active partner in local and regional passenger-only ferry transportation solutions that support mobility, accessibility, growth management, and help reduce road congestion.**

G. Level of Service Standards

The Growth Management Act (GMA) requires level of service standards for all arterials and transit routes to judge performance of the transportation system. The GMA also calls for specific actions and requirements for bringing into compliance facilities or services that are not meeting the adopted level of service standard. King County's level of service standards comply with growth management policies of encouraging growth in the urban area while restricting growth in the rural area.

Level of service (LOS) is a qualitative measure that describes traffic flow and is often represented by a system using the letters A through F. LOS A represents the least congested conditions and LOS F represents the most congested conditions. LOS B is indicative of stable traffic flow. However, unlike LOS A, operating speed is beginning to be restricted by other traffic. At LOS E, operation is unstable, and speeds are reduced but will fluctuate widely from point to point. There is little independence of speed selection and maneuverability at LOS E. LOS F is indicative of forced flow of traffic with extremely low speeds and long delays at intersections.

King County recognizes a profound difference between the nature and character of the Rural Area as compared with the urban area and therefore sets LOS standards to allow less congestion in the Rural Area. In addition, King County recognizes certain areas, called Mobility Areas, where land use designations support a greater variety of transportation mode choices. The LOS standards for Mobility

Areas are set to recognize these greater choices and support and encourage people to use forms of transportation other than cars. The Rural Mobility Areas are the Rural Towns of Vashon, Snoqualmie Pass and Fall City.

In addition to the Mobility Areas, certain large Rural Neighborhood Commercial Centers are recognized as having distinct mobility characteristics and will have a LOS standard consistent with their land use character. The large Rural Neighborhood Commercial Centers are: Cottage Lake, Maple Valley, Preston and Cumberland.

The framework for identifying appropriate levels of service for King County Metro services is established in the Strategic Plan for Public Transportation and the King County Metro Service Guidelines.

T-215 **The LOS standard for the Urban Area shall be E except as provided in T-216. The LOS standard for the Rural Area shall be B except as provided in T-216, T-217, and T-218. These standards shall be used in concurrency testing.**

T-216 **The LOS standard for certain minor residential and minor commercial developments, along with certain public and educational facilities, shall be LOS F. This standard shall be used in concurrency testing.**

T-217 **The LOS standard for designated Rural Mobility Areas shall be E. This standard shall be used in concurrency testing.**

T-218 **The LOS standards for the Cottage Lake, Maple Valley, Preston and Cumberland Rural Neighborhood Commercial Centers shall be D. This standard shall be used in concurrency testing.**

H. Concurrency

The Growth Management Act (GMA) requires local jurisdictions to adopt and enforce ordinances that prohibit development approval if the development causes the LOS on identified county arterials or certain state roads to decline below the adopted LOS standards. King County's Transportation Concurrency Management program was developed to address the GMA's concurrency requirement. The Transportation Concurrency Management program requires that adequate transportation facilities must be available to carry the traffic of a proposed development at county LOS standards, or construction for needed improvements funded in the adopted Six-Year Roads Capital Improvement Program, or else the proposed development cannot be approved.

The requirements of King County's Transportation Concurrency Management program may apply to transportation facilities designated by the Washington State Department of Transportation (WSDOT) as "highways of statewide significance." The portions of certain highways of statewide significance that do not have limited access and function like county arterials may be included in the King County concurrency test.

The Transportation Concurrency Management program has been designed to meet the following goals:

- Fulfill the requirements of state growth management legislation;
- Be simple to understand, easy to implement and administer and transparent to those affected by its processes and regulations;
- Consider and encourage multimodal travel;
- Encourage growth in urban areas where provision of transportation infrastructure and services is most efficient and economical; and
- Efficiently integrate concurrency determination into the permit system process and database.

Transportation concurrency is a plan-level system that does not require testing of individual developments. Instead, concurrency status is determined by broad geographic areas called travel sheds, which were drawn to reflect where travel patterns share common characteristics. Trips associated with development within a particular travel shed would use or be affected by arterials located within and bordering that travel shed. A development proposal (including both residential and nonresidential proposals) will be considered to meet the transportation concurrency standard if it is located in a travel shed that meets LOS standards as depicted on the concurrency map in effect at the time of development application. Development proposals must still meet all applicable zoning and land use regulations.

T-219 **For the purposes of concurrency testing, a travel shed is a geographic area within unincorporated King County where trips generated by development within the travel shed would likely use or be affected by traffic on arterials within the travel shed.**

T-220 **The concurrency program shall include provision for mobility areas within travel sheds as provided in T-217. Rural Mobility Areas shall be defined as unincorporated Rural Towns as designated in the King County Comprehensive Plan.**

T-221 **The concurrency map shall identify the travel sheds that meet or do not meet concurrency standards. Any proposed development in travel sheds that meet concurrency standards will be deemed concurrent.**

T-222 **The concurrency test shall be based on the LOS on arterials in unincorporated King County using the county's adopted methodology. The test may be applied to designated Highways of Statewide Significance.**

T-223 **The concurrency test may include provision of factors for safety, pavement condition and availability of multiple modes of transportation.**

T-224 **In the Rural Area, the concurrency test may include a provision that allows the purchase of Transferable Development Rights in order to satisfy transportation concurrency requirements.**

I. Impact Mitigation

The State Environmental Policy Act (SEPA) establishes environmental review of project impacts on all elements of the environment including transportation. In addition, the county has a mitigation payment system whereby developments are charged proportionate shares for transportation projects and services needed as a result of the related growth.

T-225 **Needed rights-of-way, strategies to manage transportation demand and off-site improvements should be identified and required as conditions of development approval to the extent that such conditions are directly related to impact mitigation.**

T-226 **King County shall encourage the development of highly connected, grid-based arterial and nonarterial road networks in new developments and areas of in-fill development. To this end, the county should:**

- **a. Make specific findings at the time of land-use permit review to establish a nonarterial grid system for public and emergency access in developments; and**
- **b. Require new commercial, multifamily, and residential subdivisions to develop highly connective street networks to promote better accessibility and avoid single street only access.**

T-227 **Development proposals should extend the public road system through dedication when the extension is in the public interest. Conditions that may warrant such an extension include, but are not limited to, impacts on neighborhood circulation, increases in the use of arterials for local vehicular**

trips, reductions in traffic safety through uncoordinated and inadequately spaced street access to arterials, and restrictions on the availability of alternative emergency access routes.

T-228 **As mitigation for the impacts of new development and as a condition of development approval, the county shall require the improvement of existing offsite roadways and undeveloped road rights-of-way, and other strategies to reduce demand on roads. Impacts that may warrant such mitigation include, but are not limited to, those that create safety concerns, raise road operational issues or increase the number of residences served by a single access route.**

T-229 **The county shall implement a system that establishes fees needed to mitigate the growth-related transportation impacts of new development. The fees will be used to pay a development's proportionate share of transportation capital projects needed to support growth including, but not limited to, road, transit, and nonmotorized facilities. Such fees are in addition to any requirements established for transportation services and facilities needed solely as a result of the development.**

J. Nonmotorized Program

Vision 2040, the region's long-range growth management, economic and transportation strategy, and Transportation 2040, the adopted Metropolitan Transportation Plan, call for the development of a regional transportation system that offers a variety of travel choices while preserving environmental quality and open space. Nonmotorized transportation plays a key role in achieving these goals and is an essential component of King County's multimodal transportation system. Pedestrians, bicyclists and in some parts of the county, equestrians, are nonmotorized users of the transportation system.

Biking and walking are energy efficient, economical, low-impact modes of travel that don't contribute to air or water pollution. By providing options for nonmotorized travel, King County helps to reduce automobile dependency and congestion, reduce greenhouse gas emissions, and create opportunities for individuals to integrate healthy exercise into everyday activities. The ability to safely bike and walk can provide varying levels of accessibility and mobility to almost everyone, including young, elderly, physically disabled, or low-income people and others who may not drive. Well-designed, strategically located bicycle and pedestrian facilities can also provide increased and safer access to transit for more people. Bicycle, pedestrian, and equestrian trails are important community amenities that foster vibrant communities and may help spur economic development. Equestrian travel is also an important aspect of the rural heritage and lifestyle of King County as well as a very popular recreational activity.

In unincorporated King County, the Road Services Division is responsible for nonmotorized facilities such as bike lanes, sidewalks, or shoulders on county roads. The division also provides crosswalks and specialized signals or signage that help facilitate safer nonmotorized travel. The King County Road Design and Construction Standards include accommodation for nonmotorized uses and specify bike lane, sidewalk, or road shoulder criteria for unincorporated urban and rural roads. Road-related nonmotorized capital needs in the unincorporated area are included in the Transportation Needs Report (TNR) and are programmed in the six-year Roads Capital Improvement Program (CIP) as funding allows. The HealthScape Transportation Programming Tool, along with other criteria, is used in prioritizing nonmotorized projects in the TNR.

King County also plays a countywide role in nonmotorized transportation through its Regional Trail System and transit services. The regional trail network, discussed in Chapter 6, is an integral component of the county's transportation system. It includes facilities located both in cities and the unincorporated area. The trail network functions as the spine of the county's nonmotorized system in many areas. Transit and walking or biking are highly synergistic; transit use tends to be highest in locations where walking and biking are prevalent, and vice versa. The Metro Transit Division supports nonmotorized transportation programs such as bike racks on transit buses and bike lockers at park-and-ride lots, employment sites and other locations. Another county resource is the King County Bike Map, an informational online map that helps bicyclists navigate safely around King County and access points of interest, such as libraries, bike shops, farmers' markets, and other public and private facilities.

T-230 **King County shall consider the needs and abilities of nonmotorized users of the transportation system in the planning, design, construction, maintenance, preservation and operation of road infrastructure and other transportation facilities to the extent feasible given available funding.**

T-231 **Consistent with the priorities defined in the County's functional transportation plans, nonmotorized transportation system investments should aim to increase safety and mobility, facilitating mode integration, and providing opportunities for healthy activity and alternatives to driving for all populations.**

T-232 **King County shall evaluate and implement nonmotorized transportation improvements in its road construction projects where appropriate and feasible.**

T-233 **In both urban and rural unincorporated areas of King County, the following needs will be given the highest priority when identifying, planning, and programming nonmotorized improvements:**

a. Addressing known collision locations;

b. Fostering safe walking and bicycling routes to schools and other areas where school-aged children regularly assemble;

c. Filling gaps in, or enhancing connections to, the regional trail system; and

d. Locations of high concentration of pedestrian and/or bicycle traffic.

T-234 **In urban areas, nonmotorized improvements should also increase access to transit and enhance connections to parks, local trails, shopping, libraries, healthcare, and other public and private services and facilities.**

T-235 **The King County Regional Trail System is the centerpiece of the nonmotorized system in the Rural Area. The county's efforts to enhance the Rural Area nonmotorized network should include filling in the Regional Trail System's missing links, coordinating road and trail projects whenever possible, and considering access from roadways such as trailhead parking.**

T-236 **In rural areas, nonmotorized improvements shall be consistent with providing rural levels of service, preserving rural character, and avoiding impacts to the environment and significant historic properties.**

T-237 **To increase equitable access to walking, bicycling and transit mobility options, the county should actively seek grant funding to improve nonmotorized infrastructure that serves the needs of people of color, low-income communities, people with limited English proficiency, and others who may have limited transportation options, and others who may have limited transportation options such as students, youth, seniors, and people with disabilities.**

T-238 **New school development should address safe walking and bicycling routes for students. If the existing transportation infrastructure within a one-mile radius, together with the school's road frontage improvements, cannot support safe walking or bicycling to school, King County shall use its development review authority to require the school district and the new school to address the long-**

term transportation needs of students, including through the state-mandated Safe Routes to School program.

T-239 **New land use plans and subdivisions shall seek to accommodate internal nonmotorized mobility and access to nearby shopping, parks, trails, schools, healthcare, community resources and other public and private services and facilities, consistent with the different needs and service levels for urban and rural areas.**

T-240 **The specifications in the King County Road Design and Construction Standards shall support nonmotorized safety and accessibility, consistent with the county's adopted policies regarding appropriate urban and rural levels of service.**

T-241 **In supporting equestrian travel in the rural area, King County should emphasize safety and connection to the Regional Trail System and other established trail networks open to equestrian use.**

T-242 **King County shall seek opportunities to acquire and develop nonmotorized transportation corridors. Evaluation of requests to vacate unused road rights-of-way will consider existing nonmotorized uses and future development of such uses.**

T-243 **King County should coordinate with bicycling, pedestrian and equestrian stakeholders and advocacy organizations to ensure that their input is included early in the planning and project design process for projects with nonmotorized elements or that have the potential to affect nonmotorized users.**

T-244 **King County will participate in and support the Puget Sound Regional Council's regional bicycle network planning efforts. Once a regional network is designated, related project needs within King County's jurisdiction should be incorporated into the county's nonmotorized planning and project prioritization processes.**

K. Transportation Demand Management

Transportation affects every aspect of the lives of King County residents, not only in terms of mobility but also in terms of health, economy, and environment. Transportation Demand Management (TDM)

consists of a broad range of strategies that provide for reduced reliance on single occupancy vehicle (SOV) trips, reduced vehicle miles traveled (VMT) and increased efficiency of the whole transportation system. TDM results in lower greenhouse gas emissions and other pollutants.

King County, both as a government and as an employer, is a leader in implementing transportation initiatives and encouraging land uses, policies and development that lead people and businesses to reduce single occupant vehicle (SOV) trips and vehicle miles traveled (VMT), while decreasing the impacts of greenhouse gas emissions from the transportation sector. King County's ability to provide for the mobility needs of its residents will increasingly depend on actively managing the existing transportation system.

TDM strategies include (but are not limited to):

- Public education/information;
- Public transportation (i.e. bus, rail, ferry, and vanpool);
- Nonmotorized travel options;
- State-mandated Commute Trip Reduction and Growth and Transportation Efficiency Centers;
- Roadway and lane management (such as ridesharing, intelligent traffic systems, and active traffic management);
- Variable tolling strategies (such as high-occupancy toll lanes, corridor tolling, cordon tolling, and system-wide tolling);
- Joint use and intermodal transfer facilities (such as park and rides);
- Parking management and pricing (such as connecting supply with mode split targets);
- Telecommunications substitutes for physical travel (such as telecommuting, e-government, and internet-based business-to-business activities); and
- Land use decisions (such as site design standards and concurrency).

In its application of TDM strategies, King County fulfills many roles, including:

- The jurisdiction responsible for land use, transportation infrastructure and permitting in unincorporated areas;
- The operator and manager of unincorporated area roadways and Metro Transit;
- A local, regional and statewide advocate for integrated transportation solutions and climate change actions; and
- A leading edge employer implementing progressive employee transportation programs.

T-245 **King County shall implement policies and programs that support transportation demand management, non motorized travel, transit service improvements, and**

expansion of high-occupancy-vehicle travel in order to increase the share of trips made by modes other than driving alone.

T-246 **Where appropriate King County should support the use of Transportation Demand Management strategies including variable tolling on state highways to increase mobility options, promote travel efficiency, optimize the existing transportation system and reduce the adverse environmental impacts of the transportation system.**

T-247 **King County should consider Transportation Demand Management (TDM) strategies, beyond those adopted as county regulation, among a menu of measures to mitigate for traffic impacts of proposed development or major highway construction projects. TDM, as well as other mitigation requirements, may be imposed on new development as mandatory mitigation measures as necessary to meet the requirements for mitigation of impacts pursuant to the State Environmental Policy Act and the State Subdivision Act.**

T-248 **King County should actively participate in developing and implementing state-mandated Commute Trip Reduction and Growth and Transportation Efficiency Centers programs.**

T-249 **King County should participate in local, regional, and statewide efforts to implement and measure the results of Transportation Demand Management (TDM) strategies, technologies, and systems, including policies developed through regional consensus and adopted by the county. To this end, the county shall identify funds to research, plan, implement and measure the success of TDM strategies.**

T-250 **King County will work with the Washington State Department of Transportation, Washington State Transportation Commission, Puget Sound Regional Council, and cities to develop and implement applications of managed transportation facilities and variable tolling strategies on new and existing transportation facilities. Toll and high-occupancy-toll lane collection systems used in the region should be simple, unified, and interoperable and should avoid the use of tollbooths, whenever possible.**

T-251 **King County supports variable tolling strategies as a means to optimize transportation system performance, generate revenues and reduce vehicle miles traveled, and reduce greenhouse gas emissions.**

T-252 **Revenue from variable tolling should be used to improve, preserve and operate the transportation system including transit and other multimodal investments, as well as to help fund improvements that address the diversionary impacts on non-tolled facilities.**

T-253 **King County should partner with the Washington State Department of Transportation, Puget Sound Regional Council, local jurisdictions, employers, major institutions and developers to implement programs to encourage alternatives to commuting by single-occupant-vehicles, and to improve travel options and awareness of those options.**

III. Ensuring Effective Management and Efficient Operations

This section contains policy direction to guide the ongoing design, maintenance, operation and management of the county transportation system to provide for safety, efficiency and sustainability. It is consistent with the goals, objectives and strategies of the King County Strategic Plan (KCSP), which, as a component of the county's Performance Management and Accountability System (PMAS), provides the foundation for managing the performance of county services. The Strategic Plan for Public Transportation (SPPT) and the Strategic Plan for Road Services (SPRS), as transportation functional plans, provide the detailed guidance on operational issues and also address transportation performance measurement and reporting.

A. Public transportation policies and service guidelines

Metro is committed to using resources wisely and increasing the efficiency of its operations. Consistent with its Strategic Plan, Metro emphasizes planning and delivery of productive services and is committed to controlling costs. To help ensure efficiency, Metro uses service guidelines and performance measures to manage the transit system. Performance monitoring helps Metro evaluate its progress, plan and budget for the future, and improve agency practices. Metro is also committed to improving it transparency and so makes performance reports readily available to internal and external audiences.

T-301 **King County should provide reliable, safe, convenient public transportation services that are responsive to needs of people, businesses and communities in King County.**

T-302 **King County should work with the Washington State Department of Transportation, Kitsap County, and other entities offering passenger ferry services, including the King County Ferry District, to ensure that service and capital plans for ferries are consistent with transit service plans and goals.**

B. Road services policies and priorities

Effective design, management, and operation of the road system are critical to mobility and quality of life. King County strives to make efficient use of the existing infrastructure, serve the broad needs of users,

address safety issues, and design facilities that are appropriate for the surrounding communities. King County has a structural funding deficit that continues to severely impact the county's ability to provide basic preservation and maintenance of its aging and declining road system. Therefore, as revenue available to manage the road system fluctuates, so will the county's ability to maintain and preserve its roads and bridges. If sufficient revenue is not available to sustain the road system, then infrastructure may be downgraded or closed. The county's focus then will remain on those priorities in the Strategic Plan for Road Services (SPRS) to guide these critical decisions. SPRS also prioritizes funding of services and projects, including both the type of activities and the location of investments. The SPRS lays out the priority for the Road Services Division (RSD) funding decisions in the following order:

1. Regulatory compliance;
2. Safety, narrowly defined as actions to address immediate operational hazards and projects to improve identified collision locations;
3. Maintenance and preservation of existing facilities;
4. Mobility improvements; and
5. Capacity improvements.

Based on the SPRS, King County has implemented a graduated service level framework. Priority will be given to keep the most vital components of the road system operational for users. This approach guides service provision under limited funding scenarios and also helps direct investments toward the most critical needs when additional resources are available. Performance measurement and reporting is also an important aspect of SPRS and a critical tool in managing the county's road system.

To improve efficiency and productivity, starting in 2013, King County will be implementing a data driven asset management approach that, combined with the policy direction in this Comprehensive Plan and the Strategic Plan for Road Services, will guide investment choices over the next biennium and beyond.

RSD's Capital Improvement Program (CIP) and Financial Plan must be consistent with this Comprehensive Plan and consider the current performance of the transportation system, concurrency needs of planned developments, priority projects, phased implementation of improvements, and other related factors. Revenues from a range of sources, including grants and Mitigation Payment System fees, are programmed to appropriate projects.

T-303 **King County shall maintain and preserve the unincorporated area road system to keep it operating safely, protect mobility and infrastructure investments, and maximize the useful life of transportation assets to the extent feasible under available funding levels.**

T-304 **King County should implement a decision framework in order to keep the most vital components of the road system operational for users. This approach should both guide service provision and help direct investments towards the most critical needs when additional resources are available.**

T-305 **To ensure that the most vital components of the county's road system are kept operational, essential regulatory compliance, safety, and maintenance and preservation needs of the road system should be funded prior to mobility and capacity improvements.**

T-306 **Maintenance and preservation of the unincorporated rural roadway system shall be emphasized in long-term planning and asset management in recognition of the fact that Rural Area roads and bridges will remain the county's long-term responsibility after all annexations are complete.**

T-307 **Roadway stormwater facilities are an integral component of a properly functioning transportation network and shall be maintained, preserved, and, when practicable upgraded in order to protect infrastructure, public health, and the natural environment, as well as meet federal, state, and local regulations.**

T-308 **Road projects and programs shall be implemented in ways that avoid or minimize negative impacts for people of color, low-income communities, and people with limited English proficiency, and others who may have limited transportation options, such as students, youth, seniors, and people with disabilities and seek to provide tangible, positive benefits whenever possible.**

T-309 **To facilitate the establishment of a safe and efficient traffic circulation network reflecting all transportation modes and to retain the availability of access to adjacent properties, the county shall review and comment on the appropriate placement of new or major modified facilities or physical barriers, such as buildings, utilities, and surface water management facilities in or adjacent to road rights-of-way.**

T-310 **State highway facilities and arterial roads are designed to accommodate higher traffic volumes, at higher speeds, than local roads. To protect residential neighborhoods from the impacts of pass through traffic, King County should**

design and operate roads to direct such traffic away from local roads and encourage such traffic to use highways or arterials whenever possible.

T-311 **The King County Department of Transportation has responsibility for development and maintenance of transportation facilities in county-owned road rights-of-way. Other right-of-way users must obtain approval from the department regarding projects, maintenance and other activities impacting the right-of-way.**

T-312 **Arterial Functional Classification, established in Appendix C of this plan, should be implemented through the specifications provided in the King County Road Design and Construction Standards. The Comprehensive Plan's Urban Growth Area boundary provides the distinction between urban and rural arterials.**

T-313 **King County's road design and construction standards shall promote safe, cost-effective roads that encourage multimodal use, and reflect the different needs and service levels for the Urban Growth Area and Rural Area.**

T-314 **King County should provide road services in a manner that is sensitive to the natural environment, historical properties, and archaeological resources, and to design new facilities that fit within the context of the built or natural environments in which they are located.**

T-315 **King County should preserve its identified Heritage Corridors through context sensitive design, planning, and maintenance, as exemplars of historic and scenic character. The corridors include: Cedarhurst Road/Westside Highway (Vashon Island), Dockton Road (Vashon-Maury Islands), Green Valley Road (Auburn-Black Diamond), Issaquah-Fall City Road (Snoqualmie Valley), Old Cascade Scenic Highway (Stevens Pass), Osceola Loop (Enumclaw Plateau), Old Sunset Highway (Snoqualmie Pass), West Snoqualmie River Road (Snoqualmie Valley), and West Snoqualmie Valley Road/Carnation Farm Road (Snoqualmie Valley). In-kind replacement of road and roadside features and the use of materials that complement the character of each corridor should be utilized to the extent that is practicable and meets safety needs. King County should encourage adjacent property owners, through outreach efforts, to similarly support the preservation of these corridors.**

T-316 **King County shall support and encourage the preservation and enhancement of scenic, historic, and recreational resources along the designated Washington Scenic and Recreational Highways located in the county, including I-90 (Mountains to Sound Greenway), US 2 (Stevens Pass Greenway), SR 410 (Chinook Pass Scenic Byway), and SR 202 (Cascade Valleys Scenic Byway). The corridor management plans established for these highways should be considered in the development and implementation of King County's plans, projects and programs.**

C. Air Transportation

T-317 **King County shall plan, design, and implement services, programs, and facilities for the King County International Airport in compliance with FAA regulatory requirements to support a safe, secure, and efficient global aerospace system.**

In 2005, the FAA approved a Part 150 Noise and Land Use Compatibility Plan to reduce noise impacts in communities surrounding Boeing Field. This is a significant event and represents a positive step in making KCIA a "good neighbor" to affected residential areas. The Part 150 plan identifies many actions that are allowed to be taken by KCIA, pilots, tenants, the FAA and others to reduce noise impacts on residential areas.

T-318 **Recognizing that certain noise reduction measures are contingent on ongoing and future FAA funding, King County shall implement those actions, under its control and identified in the Part 150 Noise and Land Use Compatibility Plan. King County shall encourage other entities to implement those measures under their control and also identified in the Part 150 Noise and Land Use Compatibility Plan.**

T-319 **King County shall encourage all airports located in the county, whether owned by a public or private entities, to be responsible neighbors and make all reasonable efforts to minimize noise impacts on sensitive land uses such as residences, hospitals and schools.**

D. Climate Change, Air Quality, and the Environment

Clean air contributes to the health of people, the ecosystem and the economy. Transportation is the primary source of air pollutants regionally. In addition to complying with state and federal regulations

described below, the county is working to reduce transportation-related emissions through the policies and actions contained in this Comprehensive Plan.

The Washington State Clean Air Conformity Act establishes guidelines and directives for implementing the federal Clean Air Act Amendments. It specifically links air quality conformity to growth management planning efforts at the local and regional level. The King County transportation system complies with the federal and state Clean Air Acts by maintaining conformity with the Puget Sound Regional Council Transportation 2040 plan and by following the requirements of Chapter 173-420 of the Washington Administrative Code.

Climate change is of significant local, national and global concern. It is clear that greenhouse gas emissions from transportation sources are a significant contributing factor to climate change. In addition to meeting its regulatory requirements, King County is committed to addressing climate change through its decisions and actions and encouraging others to act to reduce greenhouse gas emissions as well.

Climate change is projected to increase the frequency of flood events in most of western Washington's river basins. Increased flood frequency and intensity will increase public investment needed to ensure public safety and mobility, particularly on the county road system. Climate change will affect the county's road and transit infrastructure. More storm events and increased temperatures will disrupt service, increase road maintenance requirements and adversely affect mobility. Changes in precipitation patterns and sea levels may cause greater damage to roads, bridges and seawalls from erosion, landslides, and flooding.

The goals and activities of the King County Department of Transportation are integrally linked to the county's strategies and activities for addressing climate change. In fact, it is not possible to describe the county's efforts to address climate change without discussing how it implements its transportation operations and infrastructure. Therefore, in 2012, the county will initiate its Strategic Climate Action Plan (SCAP) that will emphasize King County's transportation and land use policies.

The SCAP will provide the mechanism by which the county will refine specific strategies and program activities to achieve the twin objectives of reducing greenhouse gas emissions and adapting to climate change impacts. Additionally, the SCAP will identify clear performance targets (how much change is the County attempting to achieve) for those strategies and priority activities. It will allow for the reporting of all strategies, program activities, and performance measures related to climate change in one location. The initial plan, due in 2012, will focus directly on county operations and activities, and, by 2015, the SCAP will be updated to include community level actions.

T-320 **Transportation improvements should be designed, built, and operated to minimize air, water and noise pollution, greenhouse gas emissions, and the disruption of natural surface water drainage in compliance with provisions and requirements of applicable federal, state and local environmental regulations. Natural and historic resource protection should also be considered. Particular care should be taken to minimize impacts where the location of such facilities could increase the pressure for development in critical areas or rural or resource lands.**

T-321 **Within new developments, King County supports designing and building roads, bike lanes, pedestrian ways and trails in ways that minimize pollution, provide opportunities for physical activity, promote energy conservation, increase community cohesion, and preserve natural flora and wildlife habitat.**

T-322 **Through its own actions and through regional partnerships, King County will promote strategies to reduce emissions from the transportation sector. The county will promote new vehicle technologies, fuels and strategies to reduce emissions, including land use changes, provision of transit, promotion of nonmotorized travel, joint purchasing, pilot projects, and other actions to reduce vehicle miles traveled.**

T-323 **King County will be a leader in the use of transportation fuels and technologies that reduce operational greenhouse gas emissions from its fleets by buying hybrid-electric, electric and other clean transportation technologies; using clean fuels in its fleets; implementing demonstration projects that use alternative fuels and technologies; purchasing locally-produced energy sources when practical; seeking local and federal support to expand the use of alternative fuels and technologies; and promoting best practices, innovations, trends and developments in transportation fuels and technologies. The county will also seek to deploy and use its vehicles in an energy-efficient manner through vehicle routing, idling, and operator practices.**

T-324 **King County will incorporate climate change impacts information into construction, operations, and maintenance of infrastructure projects. The department will incorporate climate change into its planning and design documents and also develop strategies to incorporate climate change response into the design and operations of its transportation structures and services.**

T-325 **King County will develop methods to evaluate the climate change impacts of its actions and transportation services and will implement climate sensitive strategies and practices consistent with the environmental sustainability goals and policies described in Chapter 4, Environment, as well as existing state, regional and local plans, laws, and regulations.**

T-326 **To the extent practicable, future expansion or redevelopment of the county's road stormwater infrastructure should minimize pollutant discharges and flow alterations by preserving mimicking the natural drainage system or preserving the ability to create such a system in the future.**

IV. Financing Services and Facilities that Meet Local and Regional Goals

Fully achieving King County's transportation goals depends on adequate funding for transportation system and service needs. The major economic downturn that began in 2008 has had a severe impact on transportation agencies' ability to maintain and preserve existing facilities and services. Service growth and facility expansion is not possible in the current economic climate. Near term forecasts for economic recovery show slow growth and further cuts or downgrades to some services and facilities will be necessary. This section discusses the extent to which the transportation system and services can be funded within a reasonable revenue forecast and expenditure schedule. The Growth Management Act requires the county to include an analysis of funding capabilities, a multiyear financing plan based on needs, and a discussion of how to raise additional funds to build needed transportation projects, or to reassess growth and level of service (LOS) standards to resolve potential funding shortfalls in a ten-year time frame. This analysis is provided in the Transportation Needs Report and summarized below.

A. Transit Revenue Sources

King County Metro Transit's budget provides for both the operating and capital needs of the public transportation system. The operating budget funds Metro's broad range of public transportation services. The capital budget provides for transit facilities needed to operate Metro's services, such as maintenance and bus storage facilities, transit centers and park-and-rides, bus shelters and other passenger facilities, buses and non-revenue vehicles.

Metro's primary funding source is sales tax. Metro receives sales tax at a rate of 9/10 of one percent, the maximum authorized by the state. This rate has been in effect since late 2006, when voters approved a 0.1 percent increase as part of the Transit Now initiative. In addition, the state legislature has provided two additional funding tools, the use of property tax, and authority for a temporary Congestion Reduction Charge (2012-2013 biennium only), which King County implemented in 2011. These sources contribute a significant but lesser amount to Metro's operations compared with sales tax. Fares paid by users of Metro system and transit advertising revenues provide about a quarter of Metro's operating revenues. Metro also receives federal and state grants that contribute primarily to capital expenses.

Since 2008, Metro has faced significant financial challenges due the recession and slow recovery that limited consumer purchases and therefore the amount of sales tax revenue collected. Metro has taken multiple actions to reduce costs in order to preserve service. Metro eliminated positions not directly

related to service delivery, improved the efficiency of bus schedules, increased fares substantially, tapped reserves, deferred planned service expansions and eliminated, reduced or delayed capital projects. Additional revenues have been added through the property tax authorization and temporary Congestion Reduction Charge mentioned previously. Despite these efforts, an adequate and sustainable revenue source is needed to support planned growth in the Puget Sound Region. Metro still faces significant ongoing cuts without a long term funding source to replace the temporary Congestion Reduction Charge. Several factors influence this need for additional revenue, including: (1) the dramatic fluctuations in the yield of Metro's primary source of revenue (sales tax); (2) the magnitude of the deficit and impact faced by King County Metro if additional funding is not identified; (3) the importance of the transit system to the economic recovery in King County; and (4) the need for significant future growth of the transit system to support projected population and employment growth.

Over the coming years, Metro will continue to take actions to stabilize its finances and improve the efficiency and effectiveness of service delivered as state, county and local officials work on a long-term transit funding solutions.

B. Road-Related Funding Capabilities

King County receives road revenues from a variety of sources, including a dedicated unincorporated King County property tax, federal and state grants, gas tax, local taxes and road mitigation payments from private developments. The dedicated property tax and gas tax provide the largest portion of funding for the Road Services Division (70% in 2012). The property tax is tied to the assessed value of properties in unincorporated King County. Property values in King County have been dropping in recent years and are not projected to rise in the near term. The gas tax is also volatile, in part because of vehicles that are more fuel efficient, lower sales of gas due to the economic conditions and a decline in the allocation to King County due to reduction in road miles from recent annexations.

Financial viability to support the operation of the road system and provide for capital construction and preservation needs is tested over two time frames. The Transportation Needs Report (TNR), the county's 20-year transportation plan, identifies the road-related improvements needed to support the land use vision of the comprehensive plan. The 20-year plan provides an assessment of revenues projected from currently available resources and identifies reasonable options for securing additional revenues over the life of the plan. Secondly, the biennial update of the roads CIP examines the specifics of how to implement the financing plan over the next six years.

C. Funding priorities consistent with transit and road strategic plans

T-401 **Financial investments in transportation should support a sustainable, transportation system, consistent with the priorities established in the King County Strategic Plan and each division's strategic plan or other functional plans.**

T-402 **King County should fund services, operations, and capital facilities that support local and regional transportation and land use goals and result in a balanced, multimodal transportation system.**

T-403 **The unincorporated county road system provides transportation connections for large numbers of users that travel through the Rural Area to reach adjoining cities, other counties or regional destinations. King County should seek and support regional funding sources that could be used to repair and maintain the arterial system.**

T-404 **When funding transportation projects in areas where annexations or incorporations are expected, the Department of Transportation should seek interlocal agreements with the affected cities and other service providers to provide opportunities for joint grant applications and cooperative funding of improvements.**

D. Revenue Shortfall

The state Growth Management Act provides guidance for managing a revenue shortfall.

The following actions can be used to balance the funding shortfall of the plan:

1. Reduce transportation funding needs;
2. Develop new revenue options;
3. Change LOS; or
4. Change land use.

T-405 **During review of its Comprehensive Plan, King County should consider and address any potential shortfalls likely to occur between expected revenues and needed improvement costs. Such review could include a reassessment of land use, growth targets, LOS standards and revenue availability.**

T-406 **King County shall continually work to improve the efficiency of its operations and delivery of projects and services in order to minimize the need for new revenue sources.**

T-407 **New funding sources should be identified that would provide adequate and sustainable resources for transportation system improvements and whenever possible provide multi-jurisdictional benefits.**

T-408 **King County should leverage partnership opportunities, grants and other cooperative funding mechanisms to help finance transportation services, infrastructure and facility improvements.**

T-409 **King County shall maximize its efforts to obtain federal and state funding for its transportation services, infrastructure and facility improvements.**

V. Coordination and Public Outreach

All elements of the transportation system outlined in this comprehensive plan update are planned and operated in coordination with the cities in and abutting King County, the adjoining counties, the PSRC, the Port of Seattle, the transit agencies providing service in and connecting to King County, and the WSDOT. Agencies and the public were invited to review and comment on this plan.

The following activities support the coordination process:

- Review by the transportation subarea boards;
- Review by residents and organizations within the county's Community Service Areas, including the Unincorporated Area Councils (UACs);
- The update of the Strategic Plan for Public Transportation;
- The statewide and countywide grant application process;
- The TNR and CIP coordination process;
- Participation in the Puget Sound Regional Council, which enables King County to coordinate its transportation planning activities with other local and regional agencies for the four central Puget Sound counties;
- Internet sites and other public information provided in a variety of formats; and
- Public outreach and meetings.

As a countywide transportation service provider, King County provides Metro Transit's public transportation services and works with Sound Transit and other transit agencies to provide seamless, multimodal transit services. King County cooperates with other local governments and WSDOT to improve freight mobility and carry out strategies to maintain the efficiency of freeways and arterials in the region. One such strategy would include active management, which is the ability to dynamically manage recurrent and nonrecurrent congestion based on prevailing traffic conditions. King County works with the PSRC and its members to ensure that the transportation needs of the region's residents and economy are addressed in a timely manner.

A. Regional Coordination

T-501 **King County should pursue regional coordination and partnership to address county-wide transportation challenges.**

T-502 **King County should promote a multi-jurisdictional regional corridor approach to reducing congestion and improving efficiency on highways and arterial roads.**

T-503 **King County should lead, partner in, and promote regional technology initiatives that help to improve mobility.**

T-504 **King County should work with the Puget Sound Regional Council and its members to ensure that any regional projected aviation capacity problems, and the air transportation needs of the region's residents and economy are addressed in a timely manner.**

T-505 **King County shall support active management of state-owned freeways to optimize movement of people. High-Occupancy-Vehicle (HOV), High Occupancy Toll (HOT) or Express Toll lanes should be managed to prioritize reliable speed advantage for transit and vanpools, and maintain a reliable speed advantage for the other high occupancy vehicles consistent with the State's HOV lane performance standard.**

T-506 **King County shall advocate that transit should be exempt from paying tolls as it is an essential element of the transportation system, and is critical to maintaining and increasing the person-carrying capacity of the highway and arterial network. Transit provides an alternative travel mode and improves mobility for all users of the system. Transit also increases the efficiency of transportation infrastructure, thereby reducing investments needed in roadway expansion and additional parking.**

T-507 **King County should collaborate with the Puget Sound Regional Council, cities and other affected agencies to develop a regional parking strategy consistent with the parking pricing and management recommendations of Transportation 2040.**

B. Freight mobility

Freight mobility is critical to King County's economy and western Washington's role as a major national and international trading region. King County supports efforts to plan and create a fast, reliable freight transportation system in the region. To maintain the region's competitive edge, our transportation

infrastructure must provide for the efficient movement of goods and freight to and from our port, airports, and industrial areas balanced with the needs of general purpose and high occupancy vehicle traffic.

T-508 **The King County transportation system should support reliable and efficient movement of goods throughout the county, while minimizing the impacts of freight traffic on general purpose traffic and residential neighborhoods. The county should participate in regional efforts and partnerships to achieve these goals.**

T-509 **King County should support regional freight mobility by incorporating freight considerations into road planning, design, construction, and maintenance.**

T-510 **King County should coordinate with other jurisdictions, the public and the private sector to identify barriers to the effective and efficient movement of freight and goods and develop proposals to improve freight mobility on the arterial system.**

C. Public Involvement

T-511 **King County should provide timely, accurate, and consistent public information about transportation services, infrastructure and funding issues, and ensure a wide range of opportunities for input and engagement with county residents and other stakeholders.**

T-512 **King County should actively engage the public and other appropriate stakeholders, such as the community service areas constituencies, community groups, and subarea transportation forums, in transportation planning processes and plan updates.**

CHAPTER 8
SERVICES, FACILITIES & UTILITIES

The Growth Management Act requires coordinated planning so that the services required by new residents and their homes and businesses are available as growth occurs. Needed services include many that are not provided by King County, such as water supply, local sanitary sewers, fire protection, schools, energy facilities, and telecommunications. King County does provide services such as regional wastewater treatment, regional solid waste management, regional human services, and local stormwater management. This chapter contains policies that guide service provision.

I. Regional Services

King County government is a regional and local service provider. Types of regional services provided include transit, wastewater treatment, human services, and solid waste management. Local services provided to citizens of unincorporated urban King County and the Rural Area include police, building permits, and health and human services. As annexations and incorporations of unincorporated urban areas continue, King County government will focus more on its role as the provider of regional services and protector of the county's Rural Area and Resource Lands. The following policies direct King County's evolving role as regional service provider.

F-101 **King County, the cities, special purpose districts or local service providers shall plan as partners. King County's planning will focus on unclaimed urban unincorporated areas and cities' Potential Annexation Areas.**

F-102 **King County shall work with cities, special purpose districts, other local service providers and citizens to identify and distinguish local and countywide services. Over time, cities will assume primary responsibility for coordinating the provision of local services delivery. The county will assume primary responsibility for coordinating the provision of countywide services, including countywide services that must be delivered within city boundaries. The county will also work with cities, special purpose districts, and other counties to identify regional service and facility needs and develop strategies to provide them.**

F-103 **King County will provide or manage countywide services which include but are not limited to:**

- **a. Affordable housing;**
- **b. Economic development;**
- **c. Flood warning and flood hazard management;**
- **d. Harborview Hospital;**
- **e. Hazardous waste management;**
- **f. Human Services**
- **g. Protection and preservation of natural resource lands;**
- **h. Public health;**
- **i. Regional law and criminal justice services (including law enforcement, courts, prosecution, public defense, and the detention of adults and juveniles);**
- **j. Regional park, trails and open space systems;**
- **k. Regional wastewater collection and treatment, and reclamation;**
- **l. Solid waste management and recycling;**
- **m. Surface water management;**
- **n. Transit; and**
- **o. Water resource management.**

Historically, in King County, housing affordable to very low- and low-income households has been concentrated in certain sub-areas while other sub-areas have very little housing affordable to these income groups. An over-concentration of low-income housing in certain areas can detract from the opportunity of those households to improve economically because of poor access to jobs and services and lack of options for better schools. Two complementary strategies can help to improve the opportunities of low-income households: 1) work to improve schools, services, public transportation options, and job opportunities in areas that have historically provided more affordable housing; and 2) provide many more affordable housing options in sub-areas of the County that already have good access to jobs and transportation and high-achieving schools.

F-104 **King County shall encourage new, rehabilitated, and preserved affordable housing development in areas with access to well-developed social, educational, and health services, as well as public transportation, sidewalks, and bicycle infrastructure.**

F-105 **King County should encourage partnerships among housing providers, neighborhood groups and schools at all levels from pre-school through college**

especially in areas that currently have an abundance of very low- to moderate income housing. King County should also promote collaboration with libraries, recreational and social service agencies. Among other strategies, these partnerships could involve mutually-supportive planning and sharing of facilities and services.

F-106 **To the extent feasible, after a disaster which significantly affects housing, King County shall:**

a. Coordinate efforts to assist households with housing inspection and repair resources;

b. Help displaced households find interim housing; and

c. Work with federal, state, and both public and private local agencies to identify ways that available resources can assist those affected by a disaster.

F-107 **King County will, in cooperation with special purpose districts or local service providers, continue to plan for and provide public services to the Rural Area, consistent with rural standards and needs.**

F-108 **To support the intent of the Growth Management Act, King County should work with cities and other service providers to establish priority areas for public funding of capital facilities, services and infrastructure.**

II. Facilities and Services

A. Providing a Spectrum of Services

King County and numerous service providers need to coordinate planning and funding activities to ensure that needed facilities and services are provided in the region.

F-201 **All facilities and services should be provided in compliance with provisions and requirements of the Endangered Species Act and the Clean Water Act.**

F-202 **King County should seek to create quality communities by defining the needs and proposing strategies for a full range of public facilities and services, including physical infrastructure and health, human and public safety services. King County should strive to provide an adequate supply of public facilities necessary to support all communities.**

F-203 **When service providers are planning and designing facilities, King County should encourage them to use sustainable development practices.**

F-204 **King County should work with the cities, special purpose districts and other service providers to define regional and local services and to determine the appropriate providers of those services.**

F-205 **King County shall work with its neighboring counties, the state, Puget Sound Regional Council, special purpose districts, ports and the cities to identify areas of shared need and adequate land supply for public facilities. The county's capital acquisition budget shall reflect the jointly agreed-upon priorities and time schedule.**

F-206 **Public and private community service providers should be encouraged to share or reuse facilities when appropriate to reduce costs, conserve land and provide convenience, access and amenity for the public and to reduce the generation of greenhouse gasses. Joint siting and shared use of facilities should be encouraged for schools, community centers, health facilities, cultural facilities, libraries, swimming pools and other social and recreational facilities.**

F-207 **King County should make its public facilities or properties available for use as a P-patch or community garden when such use is compatible with the primary public use of the facility.**

B. Urban and Rural Services

Although growth will be directed to Urban Areas, it is recognized that Rural Areas have facility and service needs also.

F-208 **Public spending to support growth should be directed to the Urban Growth Area and prioritized and coordinated through Capital Facility Plans to comply with the concurrency requirements of the Growth Management Act.**

F-209 **In the Rural Area, services provided by agencies should support a rural level of development and not facilitate urbanization.**

C. Identifying Needs for Facilities and Services

Public facilities and services are vital to protect public health, safety and welfare and to protect and enhance community and environmental quality. Inadequate sewage disposal, for example, could directly threaten public health. Inadequate groundwater protection could result in unsafe drinking water and threaten stream flow. Deficiencies in other services, such as police protection or parks, might not raise severe obstacles to any single new development, but over time could cause general threats to public health, safety and welfare and deterioration of community quality.

King County government is responsible for assuring that adequate facilities and services are available or can be made available to support planned growth. This responsibility is carried out by identifying needs for facilities and services based on the planned amount and location of growth. The mechanism for identifying needs is capital improvement programming.

The Growth Management Act requires the county to prepare a capital facility plan that includes an inventory of existing capital facilities owned by public entities, a forecast of the future needs for capital facilities, including the proposed locations and capacities of expanded or new facilities, and a six-year plan that will finance the expanded or new facilities.

The Capital Facility Plan Element for King County is comprised of the following four components:

1. Technical Appendix A is an executive summary of documents containing inventories of facilities and services provided by King County (health and human services and law, safety and justice, transportation, stormwater and regional wastewater treatment and reclamation) and those provided by other entities (drinking water supply, sanitary sewer collection and treatment, schools, fire protection, libraries, natural gas, telecommunications, and electricity).
2. Technical Appendix A is an executive summary of documents containing the forecast of future needs for capital facilities, including the proposed locations and capacities of expanded or new facilities:
3. Six-year plan that will finance the expanded or new facilities:
    a. Technical Appendix A is an executive summary of the finance plans for facilities and services provided by the county and other entities.
    b. Technical Appendix A references the Transportation Needs Report, which includes an analysis of funding capability to judge needs against probable funding resources, and a 20-year financial forecast report based on identified needs.
    c. Current adopted King County Capital Improvement Program for facilities other than transportation.
4. Requirement to reassess land use if funding is unavailable to meet existing and future needs:
    a. Policies of Chapter 8 Section II (Facilities and Services), subparts B through F.
    b. Chapter 7, Transportation, Section IV.

D. Capital Facility Planning

King County and other service providers are required to prepare six-year capital facility plans that describe needs for the six-year facility and propose funding to meet those needs.

F-210 **The capital facility plans and capital improvement programs prepared by all other agencies that provide services to unincorporated areas of the county should be consistent with the King County Comprehensive Plan.**

F-211 **To reduce overall public costs, noise, climate change impacts and disruption to the local area during construction, installation of new or maintenance of existing utility facilities should be timed and coordinated with other projects that utilize public rights-of-way and easements, where possible.**

F-212 **King County's capital facility plans should identify financing strategies to support its adopted 20-year growth target and land use plan.**

F-213 **King County's capital improvement program shall demonstrate that projected needs for facilities and services can be met within the Urban Growth Area and can be served in compliance with the concurrency requirements of the Growth Management Act or, if that is not possible, King County shall determine where and when deficits may occur and how needed facilities and services might be phased in and or financed to serve such deficit areas. Alternative phasing and financing strategies must be identified and determined to be infeasible prior to triggering a land use and zoning reassessment under Policy F-223.**

F-214 **School districts that choose to have the county collect impact fees for them, and water and sewer utilities that provide their services to unincorporated King County, shall prepare capital facility plans consistent with requirements of the Growth Management Act and King County Code.**

F-215 **Provision of an adequate supply of kindergarten through twelfth grade (K-12) public schools and K-12 public school facilities is essential to avoid overcrowding and to enhance the educational opportunities for our children. King County shall adopt regulations that are supportive of the permitting of K-12 public schools and K-12 facilities.**

It is the goal of King County to work toward a model sustainable community to balance growth with natural resource protection while addressing climate change. Sustainable development seeks to achieve this goal by addressing the impacts of the built environment in which we live and work.

Traditional development practices can contribute significantly to the adverse impacts buildings and associated infrastructure have on our environment. These impacts include heavy consumption of energy and water, large-scale production of wastes, water pollution, degradation of habitats and other ecological resources, and contribution to greenhouse gas emissions. Implementing sustainable development involves incorporating green building practices into our policies through education, incentives and regulations to help reduce these negative impacts.

The elements of green building include: siting the project (to take advantage of existing services, to retain existing landscaping and natural features and to increase building energy performance); requiring energy efficiency (to reduce energy consumption, to increase occupants' comfort and to reduce green house gas emissions); managing building construction and demolition materials efficiently to reduce greenhouse gas emissions and to increase the life-cycle of the building); increasing water efficiency (to reduce water

consumption and to reduce wastewater treatment); and implementing universal design to ensure for aging in place and to service diverse occupancy opportunities.

The incorporation of sustainable practices into the design, construction and operation of King County capital improvement projects can reduce greenhouse gas emissions, reduce pollution, reduce the use of natural resources, reduce energy and other operating costs, enhance asset value, optimize performance, promote cultural sustainability by preserving historic resources and create healthier and more appealing environments for the visiting public and for King County employees. The strategic energy management, efficiency and conservation program called for in F-312 will enable King County to monitor the effectiveness of sustainable development practices in improving energy efficiency. The Green Building and Sustainable Development Ordinance 16147, adopted in 2008, requires that county capital projects either apply for Leadership in Energy and Environmental Design (LEED) certification or integrate cost-effective sustainable development practices into infrastructure projects.

The LEED rating system is a nationally recognized system for rating the performance of buildings and to guide project design. The LEED rating system components include sustainable site design; water efficiency; energy and atmosphere; indoor environmental quality; materials and resources; innovation in design and regional priorities. For those projects that are not eligible for LEED certification, the county's Green Building Team, comprised of representatives from the various county department that have capital projects, developed a Sustainable Infrastructure Scorecard and guidelines to help such projects achieve measurable green building goals.

F-216 **King County capital facilities and county-funded projects should be designed and constructed using sustainable development practices, with consideration for long-term environmental and economic sustainability.**

F-217 **All eligible King County capital projects shall plan for and should achieve LEED Gold certification when the incremental cost impacts do not exceed the maximums allowed by King County code.**

F-218 **King County shall require those new county infrastructure projects ineligible for LEED certification to incorporate cost-effective sustainable development practices and document those practices by using the county's Sustainable Infrastructure Scorecard.**

F-219 **King County should leverage its purchasing power related to capital improvement projects to help expand the markets for green building products, including recycled-content materials and clean, renewable energy technologies.**

F-220 **King County should explore incorporating proven alternative sustainable development certifications into its capital planning procedures to further promote the county's commitment to cost-effective green building and sustainable development practices.**

E. Addressing Service Deficiencies

In the event that needed facilities and services are not available to support either existing development or growth, King County will work with other service providers, such as water, sewer or solid waste purveyors, to address the service deficiency.

F-221 **King County shall initiate a subarea planning process with any service provider that declares, through their capital facilities plan, an inability to accommodate projected service needs inside their service area.**

F-222 **King County and its cities should coordinate planning for health and human service facilities and services. County investments in health and human service facilities should be targeted primarily to the designated Urban Centers and secondarily to other locations in the Urban Growth Area and Rural Towns.**

F-223 **If a service deficiency is identified in a service provider's existing service area, King County and the applicable service provider shall remedy the deficiency through a joint planning process addressing capital improvement programs and long-term funding strategies. If financing and level of service remedies cannot solve the deficiency, King County shall not allow for expansion of the service provider's service area and shall consider regulations to mitigate the effect of the deficiency.**

F. Financing Strategies

King County, cities, and other service providers will work together to address the financing needs of facilities and services.

F-224 **King County shall work with the cities to create a financing partnership for areas of the Urban Growth Area that the cities will annex. This includes determining county/regional and city/municipal facilities and services and then committing to a shared financing strategy to build or provide these infrastructure improvements or services.**

F-225 **King County should, in cooperation with other jurisdictions, develop funding strategies for governmental infrastructure that take into account economic development goals and consider the costs to, and benefits for, the jurisdictions and the region.**

G. Essential Public Facilities

The region will work cooperatively to site essential public facilities in an equitable manner. Essential public facilities are defined in the Growth Management Act and include large, usually difficult to site facilities such as prisons, solid waste facilities, wastewater facilities, and airports.

F-226 **Proposed new or expansions to existing essential public facilities should be sited consistent with the King County Comprehensive Plan. Listed existing essential public facilities should be preserved and maintained until alternatives or replacements for such facilities can be provided.**

F-227 **King County and neighboring counties, if advantageous to both, should share essential public facilities to increase efficiency of operation. Efficiency of operation should take into account the overall value of the essential public facility to the region and the county and the extent to which, if properly mitigated, expansion of an existing essential public facility located in the county might be more economical and environmentally sound.**

F-228 **King County should strive to site essential public facilities equitably so that no racial, cultural, or socio-economic group is unduly impacted by essential public facility siting or expansion decisions. No single community should absorb an inequitable share of these facilities and their impacts. Siting should consider equity, environmental justice and environmental, economic, technical and service area factors. The net impact of siting new essential public facilities should be weighted against the net impact of expansion of existing essential**

public facilities, with appropriate buffering and mitigation. Essential public facilities that directly serve the public beyond their general vicinity shall be discouraged from locating in the Rural Area.

F-229 **A facility shall be determined to be an essential public facility if it has one or more of the following characteristics:**

a. **The facility meets the Growth Management Act definition of an essential public facility;**

b. **The facility is on a state, county or local community list of essential public facilities;**

c. **The facility serves a significant portion of the county or metropolitan region or is part of a countywide service system; or**

d. **The facility is the sole existing facility in the county for providing that essential public service.**

F-230 **Siting analysis for proposed new or expansions to existing essential public facilities shall consist of the following:**

a. **An inventory of similar existing essential public facilities in King County and neighboring counties, including their locations and capacities;**

b. **A forecast of the future needs for the essential public facility;**

c. **An analysis of the potential social and economic impacts and benefits to jurisdictions receiving or surrounding the facilities;**

d. **An analysis of the proposal's consistency with policies F-226 through F-229;**

e. **An analysis of alternatives to the facility, including decentralization, conservation, demand management and other strategies;**

f. **An analysis of economic and environmental impacts, including mitigation, of any existing essential public facility, as well as of any new site(s) under consideration as an alternative to expansion of an existing facility;**

g. **Extensive public involvement; and**

h. **Consideration of any applicable prior review conducted by a public agency, local government, or citizen's group.**

F-231 **King County supports coordination of regional water supply planning, sales of excess water supplies among municipalities in the region, water quality programs and water conservation, reuse and reclaimed water programs.**

H. Water Supply

King County is not a water utility that provides potable water to citizens in the region. However, it plays an important role in the coordination or linking of water resources and growth and regional protection and management of water resources. This regional protection and management includes protection of the quantity and quality of groundwater, stormwater management, flood hazard management, protection of fish and wildlife habitat, and commitment to regional water strategies through such efforts as the Puget Sound Partnership, regional water supply planning, salmon recovery planning, and multiple groups engaged on climate change mitigation and adaptation. It carries out this role through its responsibilities for planning, permit issuance, and regulatory oversight. The King County Comprehensive Plan must demonstrate that projected needs for facilities and service can be met within the Urban Growth Area and can be served in compliance with the concurrency requirements of the Growth Management Act. Within Rural Areas, the Comprehensive Plan must provide for rural services, including domestic water service, needed to serve permitted densities and uses. The Utilities Technical Review Committee (UTRC), as authorized in King County Code chapter 13.24, assures that water system and water supply planning by water utilities in King County meet the requirements of the Growth Management Act and other applicable statutory requirements, as well as determining consistency with the King County Comprehensive Plan. The UTRC is responsible for identifying the elements and provisions of the Comprehensive Plan and development regulations, adopted by the county under the Growth Management Act, with which water system plans must be consistent, as prescribed in RCW 43.20.260. The UTRC is also responsible for ensuring that the purposes of chapter 13.24, as provided in KCC 13.24.005, are carried out. Water system plans are ultimately approved by ordinance by the King County Council and King County Executive.

King County has been working with water utility representatives for the last several years on refinements to the UTRC review process. The intent of the refinements has been to clarify the County's interests in reviewing water systems plans, create more transparency in the review process, provide clarity on what the County does with the information it gets from water purveyors and reduce overall processing time. King County will continue coordinating with water utilities to help ensure successful implementation of the UTRC review process refinements.

Water utility service areas in King County are described in Coordinated Water System Plans (CWSP's) developed under the Public Water System Coordination Act (chapter 70.116 RCW) and individual water system plans (WSP's) developed under State Board of Health rules adopted under chapter 43.20 RCW. CWSP's describe future service areas for water utilities within which they are provided the exclusive right to serve future customers, and are to include the means for meeting those needs in the most efficient manner possible. Other service providers may serve within the future service area of a designated water utility if the designated water utility is unable to provide service in a timely and reasonable manner.

Individual WSP's must include the water utility's retail service area, which includes existing customers and areas where the utility plans future service. Under state law (RCW 43.20.260), the water utility is required to provide service within its retail service area, provided it can meet the conditions prescribed in state law, including the ability to deliver such service in a timely and reasonable manner. The planned provision of service must be consistent with local government comprehensive plans, land use plans, and development regulations.

Washington State laws encourage the development and use of reclaimed water, require consideration of reclaimed water in wastewater planning, and recognize the importance of reclaimed water as a strategy for water resource management statewide (Chapters 90.46, 90.48, and 90.82 RCW). Reclaimed water is an important mechanism for improving water quality and reducing discharge of treated wastewater into Puget Sound and other sensitive areas. Reclaimed water is an important wastewater management tool that can also be used as a beneficial resource. King County has been producing and distributing reclaimed water since 1997. Reclaimed water is used for treatment process water and onsite landscaping at the County's wastewater treatment plants. In addition, some of the reclaimed water from the South Treatment Plant is used off-site for irrigation purposes and public works uses, such as street sweeping and sewer flushing. Reclaimed water from the Carnation Treatment Plant is sent to the wetlands at the Chinook Bend Natural Area in accordance with the County's commitment to use the wetlands as its primary discharge location rather than the Snoqualmie River. And by summer 2013, the Brightwater Treatment Plant will be producing reclaimed water that can be used in select locations in the Sammamish Valley and Bothell for irrigating golf courses, soccer fields, nurseries, farms and for commercial and industrial uses.

1. Potable Water Systems

Potable water is provided by Group A public water systems having 15 or more connections, Group B public water systems having 2 to 14 connections, and individual private wells serving one connection. Exempt wells refer to wells that do not require obtaining a water right permit from the state for withdrawal of water. These exempt wells are subject to all other rules and regulations other than the requirement to get a permit from the state to withdraw water. Water withdrawn from an exempt well for individual or group domestic water supply cannot exceed 5,000 gallons per day, nor may the water be used to irrigate more than a half acre of lawn or noncommercial garden. The type of water system required for new development will depend upon whether a proposed development is or is not located within the Urban Growth Area, is or is not within an approved service area of an existing public water system, and is or is not able to provide an adequate water supply as required under RCW 19.27.097 and RCW 58.17.110.

F-232 **Water utilities that obtain water from, or distribute water in unincorporated King County, and water utilities formed as special purpose districts under Title 57 RCW are required to submit water system plans to the county for review and approval and shall describe in their plans how they intend to meet their duty to provide service within their retail service areas, and generally how they plan to meet water service needs in their future service.**

F-233 **In both the Urban Growth Area and Rural Areas of King County, all new construction and all new subdivisions shall be served by an existing Group A public water systems except in the circumstance when no Group A public water system can provide service in a timely and reasonable manner per RCW 70.116.060 and RCW 43.20.260 or when no existing system is willing and able to provide safe and reliable potable water with reasonable economy and efficiency per RCW 19.27.097.**

F-234 **In the Urban Growth Area, individual private wells are not permitted unless application of Policy F-233 to a proposal for a single-family residence on an individual lot would deny all reasonable use of the property. In that case, the well would be allowed only as an interim facility until service by a public water system can be provided. The individual well must meet the criteria of the King County Board of Health Title 13.**

F-235 **In the Urban Growth Area, if an existing Group A water provider cannot provide direct or indirect service to new development under Policy F-233, a new public water system may be established if it is owned or operated by the following, in order of preference:**

- **a. By a satellite management agency approved by the State Department of Health under contract with the Group A system in whose service area the system is located, provided that the existing Group A water system remains responsible for meeting the duty to serve the new system under RCW 43.20.260; or**
- **b. By a satellite management agency approved by both the State Department of Health and King County.**

All new public water systems formed in the UGA shall connect to the Group A water system in whose service area the new system is located when direct service becomes available.

F-236 **In the Rural Area, King County land use and water service decisions support the long-term integrity of Rural Area ecosystems. Within the Rural Area, individual private wells, rainwater catchment, Group B water systems, and Group A water systems are all allowed. If an existing Group A water provider cannot provide direct or indirect service to new development per the exceptions in Policy F-233, a new public water system or private well may be established if it is owned or operated by the following, in order of preference:**

a. By a satellite management agency approved by the state Department of Health under contract with the Group A system in whose service area the system is located, provided that the existing Group A water system remains responsible for meeting the duty to serve the new system under RCW 43.20.260; and

b. By a satellite management agency or an existing Group B system approved by both the State Department of Health and King County.

If service cannot be obtained by means of the above stated options, then water service may be obtained by creation of a new system, use of private wells or rainwater catchment. All new public water systems formed in the Rural Area shall connect to the Group A water system in whose service area the new system is located when direct service becomes available.

F-237 **New public water systems established in the Rural Area shall be owned and operated by the following, in order of preference:**

a. By the Group A public water system in whose service area the system is located, by direct service or satellite management by the Group A system,

b. By a satellite management agency approved by the State Department of Health and providing service within the county and under contract with the Group A system if it is located in a Group A system service area; or

c. By the owners of the lots, which are provided water by a new Group A or B system if not within the service area of an existing Group A system or not within the area covered by a satellite management agency.

Approval for any such system shall be conditioned for future ownership or management by a satellite management agency, when such service becomes available, and for periodic review of system operations, as required by RCW 70.119A.060(2).

The State Department of Ecology has determined that the rivers and streams in the major river basins in King County have no water available for further consumptive appropriation without harmfully impacting instream values. For that reason, it has by regulation closed those basins to issuance of new water rights, and has directed that the natural interrelationships between surface and ground waters should be considered in future water allocation decisions in order to avoid adverse impacts to instream flows. The installation and use of wells that are exempt from ecology's water rights permitting process may further harm those rivers and streams when the wells are withdrawing groundwater that is directly connected to the water in the stream. The installation of new exempt wells may also create health and safety problems by interfering with the water supplied by existing wells, and by creating more holes in the ground that can lead to contamination of entire aquifers. Under K.C.C. chapter 9.14, the Department of Natural Resources and Parks is to act as lead agency in coordinating the activities of DDES and Public Health in order to ensure that groundwater quality and quantity are protected, and facilitate implementation of the plans that have been developed to protect groundwater in five groundwater management areas within King County.

F-238 **New subdivisions with more than six single-family lots on Vashon-Maury Island and in basins with closed streams in the Rural Area (as defined in WAC 173-507,508, 509, 510, and 515) may not be served by a potable water system using an exempt well, or a combination of multiple exempt wells. Exempt wells are allowed only in the Rural Area and only under the following circumstances:**

- **a. New subdivisions or short subdivisions with six or fewer lots;**
- **b. Except as otherwise provided in subsection c. of this policy only one exempt well per subdivision or short subdivision will be permitted unless more than one exempt well is needed to meet the water flow requirements for the subdivision or short subdivision;**
- **c. Individual private wells may be used in a subdivision or short subdivision when all lots in the subdivision or short subdivision are twenty acres in area or larger; and**
- **d. New developments in the Rural Area served by one or more exempt wells shall not exceed one-half acre of irrigation.**

F-239 **King County shall work with water service providers, the State Department of Ecology and the State Department of Health to track and measure groundwater use and to meet the County's obligation to protect groundwater quality and quantity in rural areas, while supporting uses of groundwater that meet public**

health, resource protection, land use planning, and fish recovery objectives and obligations.

F-240 **King County shall require any new or expanding Group B water system to have a totalizing source meter and make information from the meter available upon request of King County.**

F-241 **King County shall encourage the adoption of state or local laws and codes to limit the construction of new exempt wells within existing water utility service areas and promote the safe and timely decommissioning of wells no longer in service.**

2. Regional Water Supply Planning

In recent years King County worked cooperatively with many of the larger water utilities in the region to gather information about regional water demand and supply. As a result of potential impacts from climate change on water demand and supply, this effort will become increasing important in future years. King County would like to use this information to help develop a regional water supply plan.

F-242 **King County supports initiation of a water planning process for the development of a regional water plan. The planning process should at a minimum cover all of King County, but may include a broader geographic area. The County will work in concert with water utilities and others that participate. Key components of this planning process should include:**

- **a. Involvement, oversight and support of elected officials in the region;**
- **b. Meaningful public participation including the involvement of the state and federally recognized tribes; and**
- **c. Recognition of, and making appropriate linkages with, other state, regional, or local planning processes.**

F-243 **King County recognizes that a regional water planning process will be a collaborative process. King County's objectives for the process and a resulting plan are that it:**

- **a. Be consistent with, and support, growth management objectives and decisions made by local and regional jurisdictions under the Growth Management Act;**

b. Address the need for sufficient flows to achieve salmon recovery objectives of the approved regional recovery plan for species listed under the Endangered Species Act, and recognize tribal water rights;

c. Be consistent with and support the approved water quality and quantity strategies adopted by the region, local governments, and other responsible entities (such as water utilities) in compliance with federal requirements under the Clean Water Act, Safe Drinking Water Act, and other authorities relevant to water quantity and quality;

d. Include provisions for the efficient use of water, including reclaimed water;

e. Consider the impacts of climate change on water demand and supply;

f. Address the water needs of other specific sectors of the local economy, including agriculture and other industries with significant water uses;

g. Include, to the extent possible, assigned accountability for implementing conservation and developing new supplies and related infrastructure; and

h. Identify, and develop a strategy for, any legislative changes necessary or desirable to implement the plan.

F-244 **King County shall participate in the development of a regional water supply plan or plans addressing potable water supply service by multiple water purveyors to ensure that uses of reclaimed water intended to augment or replace potable water supplies will be considered in the development of any such plans, and for such other purposes as are authorized in the underlying authority for such a plan. King County's participation in the development of such plans shall be carried out in accordance with RCW 90.46.120, and pursuant to processes provided in the underlying planning authority.**

F-245 **Prior to initiation of any process to develop a regional water plan as described in Policy F-243, King County shall work with utilities to conduct a joint assessment of the state of water planning and coordination in the region. Such an assessment should identify where current planning and coordination efforts by and among water utilities address County interests and where there are gaps. The assessment should be used to guide any efforts related to development of a regional water plan.**

3. Utility System Interties

Water utilities obtain water supplies from many varying sources. Some water utilities receive the vast majority of their water supply from wells. Others receive substantial portions from municipal watersheds and reservoirs. The varying water supply sources can differ substantially in terms of dependability of output, so that while one water utility may have excess capacity, a neighboring water utility could be experiencing severe shortages and be unable to adequately serve their customers.

F-246 **King County supports interties that allow the transfer of water resources among water utilities to meet the projected demands for growth where such interties meet the requirements of RCW 90.03.383 and are also consistent with any applicable locally adopted comprehensive plans, regional water supply plans, adopted groundwater management plans, watershed plans, approved Coordinated Water System Plans, Endangered Species Act response requirements and Clean Water Act requirements.**

F-247 **King County supports the development of appropriate regional water intertie capital projects, subject to approval from appropriate local, state, and federal agencies and consistent with Policy F-246.**

4. Water Use Efficiency, Planning, and Management

Water is becoming an increasingly scarce resource, which calls for commitments to improved planning, more efficient water use, and better water management. The impacts of climate change on water demand and supply adds to the need to make efficient use of this scarce resource. As part of its resource management and land use planning responsibilities, the King County Utilities Technical Review Committee (UTRC) reviews water utility plans for those water utilities serving unincorporated King County or otherwise subject to the planning requirements of K.C.C. 13.24 and ensures the inclusion of elements related to reclaimed water, water use efficiency, and water conservation in the plans as may be called for under state law, the King County Code, or the King County Comprehensive Plan. As part of its evaluation process, the UTRC also encourages water purveyors to include conservation and reuse measures, where applicable, as well as development of new sources to support planned land use with reliable service at a reasonable cost. The Reclaimed Water Act of Washington State (RCW 90.46) recognizes the value of reclaimed water in the process to better manage, protect, and conserve our water resources. In addition, measures to increase water conservation and expand the use of reclaimed water for non-potable uses throughout the county are important elements in preparing for potential climate change impacts, and to address water as a recognized limiting factor for Puget Sound and salmon recovery efforts. The King

County Code also directs county programs to act as a clearinghouse for data related to groundwater quality and quantity in order to facilitate implementation by King County and others of the groundwater management plans that have been developed for major portions of King County.

F-248 **King County shall partner with utilities to publicize water conservation and encourage best management practices that conserve potable water supply through measures that include use of alternative supplies such as reclaimed water.**

F-249 **Utilities with more than one thousand service connections required to submit water system plans for approval to King County shall include an evaluation of reclaimed water use opportunities by completing King County's Water Reclamation Evaluation Checklist.**

F250 **The County shall encourage local developers with new projects in unincorporated King County to explore the possibility of using reclaimed water for nonpotable purposes when a plan for reclaimed water has been approved for the area.**

F-251 **In its review of water system plans, the UTRC shall consider the criteria provided in K.C.C. 13.24.010, 13.24.060, and 13.24.070, and determine the plan's consistency with the following:**

- **a. Applicable provisions of the King County Comprehensive Plan, land use plans, and development regulations adopted under the Growth Management Act;**
- **b. Approved or adopted regional water resource plans, such as basin plans, groundwater plans, watershed-based conservation and recovery plans developed under ESA, salmon recovery plans developed under chapter 77.85 RCW, water resource plans developed under chapter 90.54 RCW, watershed plans developed under chapter 90.82 RCW, and a regional water supply plan or water resource management plan;**
- **c. The county's Regional Wastewater Services Plan; and**
- **d. Other applicable provisions of countywide plans managed by King County, as specified in UTRC guidance or checklists.**

The UTRC shall work with state agencies, water utilities, and other parties to develop any necessary rules, policies or checklists to provide clear information

and guidance as to the county's expectations for its reviews. For each plan submitted to the county for review, the UTRC should have the goal of providing an initial response and comments to the water utility within the same timeframes as the state Department of Health under RCW 43.20.250.

F-252 **In reviewing proposals for modified and expanded service area boundaries for municipal water suppliers, the UTRC shall consider, in addition to Policy F-251:**

a. Compliance by the water system with its water system comprehensive plan, including water conservation elements;

b. Whether it can meet its duty to provide service within its service area, as required under chapter 43.20 RCW; and

c. Consistency with the service provisions of any applicable Coordinated Water System Plan, as adopted in King County Code Chapter 13.28.

The county shall not approve a water system plan with a proposed retail service area where the water system is unable to provide timely and reasonable service for one or more of the reasons identified in RCW 43.20.260. King County accepts and encourages timely and reasonable service by a water utility within its service area through the provision of satellite or remote ownership or management of facilities that are not physically connected with the water utility's other facilities. This does not preclude a modified or expanded service area boundary for the water system in order to correct problems and provide reliable potable water service to existing water users within the proposed modified service area. The UTRC is responsible for making determinations of timely and reasonable service, as provided for under RCW 70.116, and K.C.C. 13.24 and 13.28.

5. Resource Management and Protection

Water system reservoirs and watersheds often serve a number of functions. These functions can include open space, recreation, forestry, and resource management. However, each function must be weighed against the primary purpose of such reservoirs and watershed, which is to provide and protect supplies of potable drinking water.

F-253 **Consistent with Countywide Planning Policies, public drinking water system surface water reservoirs and their watersheds should be managed primarily for the protection of drinking water, but should allow for multiple uses, including**

recreation, when such uses do not jeopardize drinking water quality standards. Public watersheds must be managed to protect downstream fish and agriculture resources.

F-254 **Groundwater-based public water supplies should be protected by preventing land uses that may adversely affect groundwater quality or quantity to the extent that the supply might be jeopardized. The county shall protect the quality and quantity of groundwater used as water supplies through implementation of Policies E-493 through E-497 where applicable.**

I. Public Sewers and On-Site Wastewater Treatment and Disposal Systems

King County protects water quality and public health in the central Puget Sound region by providing high quality and effective treatment to wastewater collected from 34 local sewer utilities. The county's Wastewater Treatment Division (WTD) serves about 1.5 million people within a 420-square-mile service area, which includes most urban areas of King County and parts of south Snohomish County and northeast Pierce County. In addition to treating wastewater, King County also creates resources such as energy, reclaimed water and biosolids from byproducts of the treatment process.

The County's wastewater system includes:

- three large regional wastewater treatment plants (the West Point Plant in the City of Seattle, the South Plant in the City of Renton, and the Brightwater Plant in unincorporated Snohomish County),
- two small wastewater treatment plants (one on Vashon Island and one in the City of Carnation),
- one community septic system (Beulah Park and Cove on Vashon Island),
- four combined sewer overflow (CSO) treatment facilities (Alki, Carkeek, Mercer/Elliott West, and Henderson/Norfolk--all in the City of Seattle),
- over 350 miles of pipes,
- 19 regulator stations,
- 42 pump stations, and
- 38 CSO outfalls

King County adopted the Regional Wastewater Services Plan (RWSP) in 1999 to make sure the regional wastewater system keeps pace with growth and meets permitting standards. The RWSP includes a number of planned projects through 2030 to protect public health, the environment and the economy for both present and future wastewater customers, such as building the Brightwater Treatment System to

accommodate growth in the northern portion of the wastewater service area; improvements to the county's regional conveyance system to meet the 20-year peak storm design standard and accommodate increased wastewater flows; improvements to reduce existing and future levels of infiltration and inflow into local collection systems; and improvements to control combined sewer overflows (CSOs) so that an average of no more than one untreated discharge occurs per year at each CSO site by 2030. The adopted policies that guide implementation of the RWSP are in King County Code 28.86.010 through 28.86.180.

In addition to King County's role as the regional wastewater treatment provider, the Seattle-King County Department of Public Health is the agency responsible for permitting on-site wastewater treatment and disposal systems (septic systems). In addition, the UTRC and the King County Council review and approve sewer utility comprehensive plans.

F-255 **In the Urban Growth Area, all new development shall be served by public sewers unless:**

- **a. Application of this policy to a proposal for a single- family residence on an individual lot would deny all reasonable use of the property; or**
- **b. Sewer service is not available for a proposed short subdivision of urban property in a timely or reasonable manner as determined by the Utility Technical Review Committee. These on-site systems shall be managed by one of the following entities, in order of preference:**
  1. **The sewer utility whose service area encompasses the proposed short subdivision; or**
  2. **The provider most likely to serve the area; or;**
  3. **An Onsite Sewage System Maintainer certified by the Seattle-King County Department of Health.**

The onsite system shall meet all state and county approval requirements. The approved short subdivision shall indicate how additional lots to satisfy the minimum density requirements of the zoning will be located on the subject property in case sewers become available in the future. There shall be no further subdivision of lots created under this policy unless served by public sewers.

F-256 **In the Urban Growth Area, King County and sewer utilities should jointly prioritize the replacement of onsite systems that serve existing development with public sewers, based on the risk of potential failure. King County and sewer utilities should analyze public funding options for such conversion and**

should prepare conversion plans that will enable quick and cost-effective local response to health and pollution problems that may occur when many on-site systems fail in an area.

F-257 **City-owned parks that are redesignated from Rural to Urban to allow future annexation by a city and that are subsequently served by public sewers shall be tightlined. This policy applies to parks that were redesignated from Rural to Urban on or after September 20, 2004.**

F-258 **The existing public sewer system in the Town of Vashon cannot be expanded to serve land beyond the boundaries of the town, except as provided in Policy F-264 and as consistent with Title 57 RCW. Onsite systems, community on-site systems or decentralized treatment systems may be used as appropriate for planned growth in other Rural Towns.**

F-259 **Sewer facilities such as pump stations, force mains and trunk lines that do not provide connections to the Rural Area may be located in the Rural Area only when they are identified in a King County-approved comprehensive sewage system plan and upon a finding by King County that it is technically necessary in providing service to the Urban Growth Area.**

F-260 **Onsite wastewater treatment systems in the Rural Area and Resource Lands should be designed, built and operated as permanent methods of sewage disposal.**

F-261 **King County should monitor onsite systems that have shown evidence of failure or potential for failure. The data should be used to correct existing problems and prevent future problems. King County should analyze public funding options for correcting on-site wastewater system failures which may include, where feasible and otherwise consistent with this plan, conversion to community sewage systems or installation of public sewers.**

F-262 **Collective on-site systems may be used only in the following circumstances in the Rural Area and Resource Lands:**

a. **Existing on-site systems are failing within an area and the Seattle/King County Department of Public Health concurs that long-term individual on-site system repairs are not feasible or water quality is threatened by**

the presence of or potential for health hazards resulting from inadequate on-site wastewater disposal methods;

b. An authorized public agency will manage the community system; and

c. The community system is designed only to serve existing structures and lots and cannot be used as a basis to increase density or to expand permitted nonresidential uses. Substandard vacant lots must be combined to the extent feasible to meet rural density policies. Management of the community system must be by an authorized public agency.

Greywater is residential wastewater generated from bathtubs, showers, bathroom sinks, washing machines, dishwashers, and kitchen sinks. It includes sewage from any source in a residence or structure that has not come into contact with toilet wastes. Greywater comprises 50-80% of residential wastewater.

F-263 King County supports innovative technologies to process greywater for safe use on-site in the Agriculture and Rural Zones.

F-264 Except as otherwise provided for in this policy, public sewer service shall be prohibited in the Rural Area or on Natural Resource Lands.

a. Public sewer service may be expanded to the Rural Area or to Natural Resource Lands, only:

1. Where needed to address specific health and safety problems threatening the use of existing structures; or

2. To serve a new school authorized to be located in the Rural Area by R-327.

b. Public sewers may be extended, pursuant to this policy, only if they are tightlined and only after a finding is made by King County that no reasonable alternative technologies are feasible.

c. Public sewers that are allowed in the Rural Area or on Natural Resource Lands pursuant to this policy shall not be used to convert Rural Area land or Natural Resource Lands to urban uses and densities or to expand permitted nonresidential uses.

J. Solid Waste

King County's *Comprehensive Solid Waste Management Plan,* prepared by the Solid Waste Division of the Department of Natural Resources and Parks, guides the management of solid waste in the unincorporated county and for cities with which the county has interlocal agreements. The *Comprehensive Solid Waste Management Plan* presents policies, recommendations and goals for the following elements of solid waste management: system planning, waste prevention and recycling, solid waste collection and processing, the transfer system, landfill management and solid waste disposal, and system financing.

F-265 **Regional solid waste planning should integrate the principles of environmental stewardship and sustainable development into all aspects of solid waste management.**

F-266 **Solid waste should be collected, handled, processed, and disposed in ways that reduce waste, conserve resources, and protect public health and the environment.**

F-267 **King County should achieve Zero Waste of Resources – to eliminate the disposal of materials with economic value – by 2030, through a combination of efforts in the following order of priority: a. waste prevention and reuse, b. product stewardship, recycling, and composting, c. beneficial use.**

F-268 **Solid waste management should be planned, and transfer and disposal capacity provided, on a regional basis.**

F-269 **King County shall operate a transfer system that is dispersed throughout the county to ensure access to safe, reliable, efficient, and affordable solid waste services.**

F-270 **King County should maximize the capacity and lifespan of the Cedar Hills Regional Landfill, subject to environmental constraints, relative costs to operate, and stakeholder interests.**

F-271 **King County shall encourage sustainable development and provide consumer education in the public and private sectors regarding green building practices, product stewardship, recycling, purchasing, and consumption in order to reduce the amount of waste disposed.**

K. Surface Water Management

Current development practices can adversely impact both the quantity and quality of water entering the natural environment. Urban areas are largely covered with impervious surfaces (e.g., buildings, streets, parking lots) that cause increased runoff and are a source of pollutants. Pervious and semi-pervious areas such as lawns and gardens can also be a source of pollutants from the application of fertilizers, insecticides, herbicides, and rodenticides. Management in the Rural Area is important, too, because of the potential adverse impacts of land clearing and impervious surface as well as potential pollutants in runoff from forestry, agricultural, and livestock practices.

Prevention or mitigation of flooding, erosion, sedimentation, and water quality and habitat degradation is important for both the built and natural environments. Surface water management activities address both the quantity and quality of water entering the natural environment. King County has been and will continue to be a leader in developing and implementing state-of-the-art stormwater management techniques including pollutants source control at businesses and homes, stormwater flow control and water quality treatment facilities, and low impact development (LID).

LID is an approach to land development that works to preserve a site's natural hydrological functions by protecting and enhancing native vegetation and soils, reducing impervious surface and managing stormwater at the sources. Similarly, King County also encourages the use of low-impact site design techniques to reduce impacts to aquatic resources. These techniques, where feasible, are well suited to development in rural residential zoned areas. LID is becoming an increasingly valuable tool for controlling polluted runoff that contributes to declining populations of federally protected aquatic species, meeting the requirements of the National Pollution Discharge Elimination System Municipal Stormwater Permit, and protecting and restoring the region's stream's, river and lakes and the Puget Sound.

The primary LID tools to be used in the Rural Area are forest retention and limiting impervious surface. King County shall continue to help limit impervious surface through code and incentive programs that help keep land in forest and agricultural use.

F-272 **To reduce flooding, erosion and sedimentation, prevent and mitigate habitat loss, enhance groundwater recharge and prevent groundwater and surface water quality degradation, the surface waters of King County shall be managed through plans, programs and regulations developed by King County in cooperation with affected jurisdictions whenever possible.**

F-273 **A watershed approach shall be taken to surface water management, with responsibility shared among King County and affected jurisdictions. This approach should emphasize prevention of water quality degradation through education programs and implementation of best management practices to reduce pollution entering the region's groundwater and surface waters, including Puget Sound.**

F-274 **In the Rural Area, King County shall minimize the use of constructed facilities for surface water management and maximize the use of natural systems, provided that the ecological functions of the natural systems are not harmed. The county should provide incentives to keep these natural systems intact. Natural systems are also preferred in the Urban Growth Area, but it is recognized that structural systems will be needed to realize urban growth and density goals**

F-275 **King County will plan and manage surface waters on a watershed basis pursuant to Policies E-463 and E-464. To accomplish this goal, surface waters should not be diverted from one watershed into another, nor from one drainage basin into another, unless no other reasonable alternative is available for managing surface water run-off within the same watershed and drainage basin. Where such diversions are permitted, King County will require such environmental analysis and mitigation as is needed to protect surface water resources from significant adverse impacts.)**

F-276 **In the Urban Growth Area, regional and shared surface water management facilities should be encouraged to support infill development to preclude the need for individual on-site facilities, provide development incentives, encourage efficient use of land, and reduce overall facility maintenance costs. These facilities should be planned and financed through public and private partnerships.**

F-277 **Stormwater programs including regional and shared stormwater facilities, retrofitting developed areas, and operations and maintenance programs should be funded through an adequate and equitable funding mechanism. Stormwater facilities required for new development, redevelopment and retrofitting should be designed and built for aesthetic value, as well as for low-cost, long-term maintenance.**

F-278 **King County shall continue to encourage, support and require the use of low impact development as a part of its strategy to mitigate stormwater impacts from new development to the maximum extent feasible.**

F-279 **King County should incorporate state-of-the art stormwater management techniques including low impact development principles and practices into the design, construction and operation of all county facilities and county-funded projects to the maximum extent feasible.**

F-280 **King County shall continue to promote preservation of native vegetation and soils and restoration of disturbed soils on rural residential zoned parcels to the maximum extent feasible. Dispersion of runoff from impervious surfaces into native vegetation in accordance with the Surface Water Design Manual is the preferred method of stormwater management in the Rural Area.**

F-281 **King County should work with residential and commercial developers to incorporate state-of-the art stormwater management techniques that protect native vegetation and soils, restore disturbed soils, facilitate reuse of resources, such as reclaimed water, reduce the carbon footprint of the project, and reduce impervious surface.**

F-282 **When King County provides technical assistance and incentives for the use of state-of-the art stormwater management techniques, it shall be at no cost to any private sector development.**

F-283 **King County shall identify and evaluate potential changes to land use development regulations and building codes to support and promote state-of-the art stormwater management techniques.**

F-284 **King County should work cooperatively with other jurisdictions to develop and implement plans and programs that address the appropriate recycling, reuse, reclamation and disposal of the materials and wastes generated from maintenance of stormwater facilities.**

F-285 **King County shall work with jurisdictions to ensure that storm and surface water management facilities are transferred from King County to the local jurisdiction that annexes or incorporates that portion of King County.**

L. Floodplain Management

Six major river systems flow through King County – the South Fork Skykomish, Snoqualmie, Sammamish, Cedar, Green and White. These rivers, and their major tributaries, pass through lands ranging in use from forested to agricultural to urbanized cities. Each of these major river systems are unique in their geology and geomorphology as well as the extent in which the hydraulics of the rivers have been altered by dams, levees and bank hardening. All of these rivers are used by federally listed endangered species of salmonid.

Within unincorporated King County over 61 percent of the mapped floodplain is within land zoned for agriculture, forest or mining. Another 32 percent is zoned as rural leaving just under seven percent within the urban area, mainly contained within Potential Annexation Areas around the City of Carnation. Consequently much of the flood risk in unincorporated King County is to natural resource lands, primarily agriculture, and rural lands with a lower relative risk to residential and resource based commercial activities. Most of these rivers also pass through highly urbanized incorporated cities that are important economic centers for King County and the Puget Sound region. These river segments are often constrained by levee systems that provide varying level of flood risk reduction.

Both the Washington State Growth Management Act, chapter 36.70A of the Revised Code of Washington (RCW) and Title 86 RCW, Flood Control require interlocal coordination for effective flood hazard management. Counties are directed to prepare comprehensive flood hazard management plans with participation of the cities. Once King County adopts the plan it is binding on all jurisdictions within the county. Flooding is a countywide issue impacting public safety, regional economic centers, Agricultural Production Districts, transportation corridors, and public and private properties. As such, King County is a regional service provider for floodplain management.

F-286 **King County shall participate with cities to prepare, update and implement comprehensive flood hazard management plans that meet or exceed standards established by the National Flood Insurance Program and Washington State Flood Control statutes.**

Flooding affects all people equally regardless of race, income, language or age. In February 2008, King County launched the Equity and Social Justice Initiative to further the goals of assuring justice and equal

opportunity for all residents of King County. The King County Council supported this goal by unanimously adopting the ordinance that provided guidance for implementing the social justice principles of the 2010-2014 Strategic Plan.

F-287 **King County shall consider equity and social justice in implementing the King County Flood Hazard Management Plan to assure floodplain property owners and residents are given equal access to flood risk reduction services. Outreach should consider vulnerable populations that may face barriers based on age, income, language, race or other factors.**

In 2011 King County celebrated the 50th anniversary of the King County Flood Warning Program, which is responsible for the collection, analysis and dissemination of flood data and forecasts to individuals and organizations. The King County Strategic Plan directs the County to "Coordinate and provide direct response to crisis such as communicable disease outbreak, floods, earthquakes, severe weather events, and homeland security." King County's Flood Warning Program supports the Strategic Plan by coordinating response to flooding.

F-288 **King County shall maintain a regional flood warning program in King County.**

There is now evidence that climate change is resulting in important changes in temperatures; sea level rise; and timing and magnitude of stream and river flows, resulting in impacts on plant and animal species, water supply and humans. King County's ability to adapt to these changing conditions will likely depend on the policy decisions made today. King County can expect to see more frequent and severe flooding and a shifting of when storm events occur during the winter months. The King County Strategic Plan directs the County to "Identify and adapt to the impacts of climate change on natural systems, human health, public safety, county operation, infrastructure and the economy."

F-289 **King County should continue to assess and revise current flood warning phases based on the most current data on hydrology and climate change predictions and modify the King County Flood Warning Program, as needed, to reflect these revised flood phases.**

F-290 **King County should assess the most appropriate level of service for flood risk reduction along river segments based on existing and predicted development density, land use, and hydrologic conditions.**

F-291 **King County will review available information on the potential impacts of climate change on winter floods, and consider those potential impacts when updating the flood risk reduction policies and capital improvement projects for the King County Flood Hazard Management Plan.**

King County has prepared a climate change scenario map for Vashon-Maury Island based on studies from the University of Washington's Climate Impacts Group as well as the most current data on storm-induced velocity wave action. This map estimates an increase in total water level ranging from 0.5 to 6 feet based on an assumed two-foot sea level rise over the next 100 years.

F-292 **King County should encourage property owners on Vashon-Maury Island to consider the estimated increase in water level reflected on the best available sea level mapping and information when constructing new structures or making substantial improvements to existing structures.**

King County works with the U.S. Army Corps of Engineers (Corps) to construct and maintain flood levees along some of the major river systems. Under Public Law 84-99 (P.L. 84-99), the Corps is authorized to provide emergency assistance to cost-share and construct levee repairs following a flood disaster. However eligibility for this cost-sharing program requires that levee sponsors (often local jurisdictions) comply with the Corps' vegetation maintenance standards as outlined in the Rehabilitation and Inspection Program (RIP). The RIP national standard requires the removal of vegetation greater than two inches in diameter from levees and the area surrounding levee. King County believes this standard may adversely affect federally listed endangered species of salmonid that rely on riparian vegetation for refuge and to maintain cool water temperatures. While vegetation may pose a risk in some situations, King County has found through many years of experience that vegetation can be incorporated into levee designs and when properly maintained contribute to the resiliency of the levee system. The King County Strategic Plan recommends that King County "incorporate sustainable development practices into the design, construction and operation of county facilities and county-funded projects." King County believes that bioengineered techniques provide a stronger, more sustainable levee and revetment system that will reduce long-term maintenance and repair and contribute toward the recovery of endangered species.

F-293 **King County shall continue to work with the U.S. Army Corps of Engineers, the Puget Sound Partnership, and other regional partners to develop a science-based vegetation management framework that provides for safe and effective levees, functional riparian habitat, and cost-effective use of limited resources.**

The September 2008 National Marine Fisheries Service (NMFS) Biological Opinion on FEMA's National Flood Insurance Program(NFIP) raises specific concerns about the application of the Corps vegetation management standards in the Puget Sound region. The Biological Opinion directs FEMA to recognize only those vegetation standards that "enable the riparian vegetation to function in support of salmon habitat forming processes."

F-294 **King County will assess participation in the U.S. Army Corps of Engineers P.L. 84-99 Program to ensure compliance with the National Marine Fisheries Services Biological Opinion on the Federal Emergency Management Agency (FEMA) National Flood Insurance Program standards for levee vegetation, as well as cost-effective maintenance and repair of levees.**

The Biological Opinion for the NFIP established 'reasonable and prudent alternatives" that may be taken to reduce the adverse effects of development with the 100-year floodplain. Compliance with the Biological Opinion is required in order to participate in the NFIP.

F-295 **King County will maintain compliance with the National Flood Insurance Program by:**

a. Assessing the projects and programmatic actions recommended in the King County Flood Hazard Management Plan for compliance with the Biological Opinion prepared for the Program; and

b. Making necessary amendments to the Plan and its implementing development regulations.

In 2007 King County established the King County Flood Control District (District) to protect public health and safety, regional economic centers, public and private properties and transportation corridors. The District adopted the 2006 King County Flood Hazard Management Plan as its comprehensive plan. A private firm, ECONorthwest, was hired to study the economic benefits of implementing the plan. This report, the "Economic Connections Between the King County Floodplains and the Greater King County Economy," estimated that a one-day shutdown of economic activity in the King County floodplain areas would result in at least $49 million in forgone economic output in the region (2007 dollars). The study also found that, 52,000 people in King County commute into or out of the 100-year floodplain for work. The King County Strategic Plan recommends that King County "maintain infrastructure that facilitates the efficient movement of freight and goods to promote trade across the region." Implementation of the 2006 King County Flood Hazard Management Plan has played a significant role in protecting King County's economic base. The 2006 Flood Hazard Management Plan is now being updated.

F-296 **King County will work cooperatively with the King County Flood Control District, cities and other stakeholders to implement the Flood Hazard Management Plan to protect public safety, prevent property damage, and help protect the greater King County economy.**

F-297 **Consistent with guidance from FEMA and the USACOE, King County's risk reduction strategies should focus first on risk avoidance, followed by actions intended to reduce vulnerability in at risk areas. New levees and other flood facilities should be the last rather than the first line-of-defense.**

F-298 **King County shall continue to promote the purchase of flood insurance to businesses located within the floodplain, including those businesses located behind accredited levees, to protect the economic value of the business and reduce the vulnerability to the region's economic activity from a larger but less frequent flood event.**

F-299 **King County should continue to discourage new, at-risk development in mapped flood hazard areas.**

F-299a **King County should seek to site new critical public facilities outside of the 500-year floodplain.**

Levee setbacks (moving levees away from the river channel) can provide a higher level of risk reduction, reduce future maintenance costs, enhance habitat, and provide open space benefits. However, levee setbacks require purchase of additional right-of-way and, in some cases, relocation of homes and businesses. The county has relocated homes from high hazard residential areas along the Tolt, Raging, Snoqualmie, Middle Green, and Cedar Rivers. Levee setbacks can be more challenging in urban areas with higher land costs, well established businesses, and more extensive relocation needs.

F-299b **The county should work with cities, businesses, and landowners to evaluate the alternatives for levee setbacks that would provide a higher level of risk reduction, reduce long-term maintenance costs, and enhance habitat while promoting long-term economic resilience and vitality.**

M. Human Services

King County has a regional role in human services, working with many partners, such as the federal, state, and other local governments, service providers, non-profit organizations, foundations, faith

communities, businesses, schools, and the criminal justice system, to help those most in need. King County's investments in human services are guided by the Framework Policies for Human Services and ultimately, the King County Strategic Plan. The Framework Policies are contained in Chapter 2.51 of the King County Code and "establish priorities and guide the future development of county human service programs." The purpose of the Framework Policies is to communicate King County government's role in human services, the goals we seek to achieve, and the principles that will underlie our investments.

Since their inception, the Framework Policies have led the county toward increasingly targeted and coordinated approaches to human services. Resources have been streamlined to focus on the priorities and priority populations identified in the policies. One clear directive is that the County focus its resources on those "most in need." This would include those who are low and very low-income, people who are chronically homeless, and people who cycle repeatedly through the mental health, chemical dependency and/or criminal justice systems.

Both the Framework Policies and the Strategic Plan place a strong emphasis on stabilizing people and diverting them from jails and emergency rooms by providing appropriate treatment and services. King County has grappled with unsustainable costs in criminal justice and emergency medical services and has taken steps to reduce cost growth in this primary area of service responsibility. A major component of these efforts has been jail diversion programs and coordination with health and human services, in order to prevent unnecessary engagement with law enforcement and the criminal justice system. These efforts have begun to show results and the Strategic Plan continues this emphasis.

F-299c **King County will seek to build and sustain a coordinated regional human services system to provide services, supports, safety and opportunity to those most in need. In carrying out its role in human services, King County government will:**

- **a. Work with other jurisdictions and organizations to define a regional human services system and strengthen financing, access and overall effectiveness of services;**
- **b. Collaborate with other funders to assure coordination in how funds are used, and continue to explore improvements to system design, contracting, data collection and analysis;**
- **c. Retain responsibility for the development and implementation of mandated countywide specialty systems for mental health, drug and alcohol abuse and dependency, veterans, public health, and developmental disabilities services;**

d. Define its regional role in other human service systems, including aging, domestic violence, sexual assault, and youth and family services;

e. Assess and measure the health and needs of King County's citizens on an ongoing basis and modify strategies to respond to changing needs, outcomes, and new research; and

f. Review the effectiveness and appropriateness of this policy framework periodically and revise if needed.

F-299d **King County's priorities for human service investments will be programs and services that help to stabilize and improve people's lives, and prevent or reduce emergency medical and criminal justice system involvement and costs. King County will focus resources and efforts on programs and services that continue to improve individual and community quality of life, improve equity and social justice, counterbalance growth in areas costly to communities and taxpayers, and preserve the resources necessary to collaborate as a true partner in regional human service systems. The following priority investment areas are consistent with other regional plans and initiatives:**

a. Effective intervention and prevention strategies;

b. Job readiness and employment to increase self-sufficiency;

c. Prevention and elimination of homelessness; and

d. Services that reduce the growth of emergency medical and criminal justice system involvement and costs.

F-299e **King County will apply principles that promote effectiveness, accountability and social justice. King County embraces the following principles in its human service actions and investments:**

a. King County will provide information to the community on its human services planning and evaluation activities, funding processes and criteria, and the results of its investments in a transparent and accountable manner;

b. King County will uphold federal, state and local laws against discrimination; promote culturally competent and relevant service delivery; and work to end disparities in social, health and economic status among people of different racial and ethnic backgrounds;

c. King County will encourage service approaches that promote recovery and support individuals and families to achieve their full potential to live meaningful and productive lives in the community;

d. King County will foster integration of systems of care through increased information sharing across agencies and programs for the purpose of improved service delivery, coordination and outcomes; and

e. Together with its partners, King County will assess and respond to changing human service needs and use data, research, innovation, analysis and evidence-based practices to drive its investments.

III. Energy & Telecommunications

King County's economy and quality of life depend on readily available, inexpensive and clean energy and telecommunications resources. Energy and electronic communications systems provide important public services and their implementation must be coordinated with land use planning. The sustainable development and efficient use of energy resources can ensure their continued availability while minimizing long-term costs and impacts to the individual, society, and the shared environment.

In order to help mitigate global climate impacts resulting from human energy use, King County is planning its energy uses in ways that will reduce the release of greenhouse gases (GHGs).

Toward that goal, in 2010, King County implemented the 2010 King County Energy Plan, which includes the following key objectives for reducing energy use and greenhouse-gas emissions in King County:

1. Reduce energy use through continuous improvements in facility and equipment efficiency, procurement, construction practices, and resource conservation;
2. Increase transit use and provide transportation choices that reduce overall energy use and emissions in the county, while improving the efficiency of King County's fleet;
3. Be a leader in early adoption and promotion of innovative technology for buildings and vehicles with a focus on electric vehicles;
4. Increase production and use of renewable energy; and
5. Pursue sustainable funding strategies for energy efficiency, renewable energy projects, waste-to-energy projects and greenhouse-gas-reduction efforts.

The 2010 Energy Plan provided initial targets for reducing energy usage in operations and increasing the amount of renewable energy that the county produces or uses. These targets are measured for the county as a whole; divisions are directed to make policies and plans consistent with the King County Energy Plan and implement those as practical, considering the Plan and their other service priorities. Some divisions may exceed the targets, while others may not meet them in given years – but all divisions will use the Energy Plan as the basis for strategic energy planning and direction.

King County divisions are taking steps to translate countywide targets into agency specific plans and action. Agency specific plans are important steps that support progress towards countywide targets. If such plans or supporting targets are developed, they should be incorporated into updates of the Energy Plan.

The energy reduction targets adopted in the 2010 Energy Plan include an initial 2012 target of 10 percent for facilities and buildings. The goals and activities of the 2010 Energy Plan are integrally linked to King County's strategies and activities for addressing climate change. In fact, it is not possible to describe the County's efforts to address climate change without discussing its efforts to reduce energy use and to increase the use of renewable energy. Therefore, in 2012, the County will initiate its Strategic Climate Action Plan (SCAP).

The SCAP will provide the mechanism by which the County will refine specific strategies and program activities to achieve the twin objectives of reducing greenhouse gas emissions and adapting to climate change impacts. Additionally, the SCAP would identify clear performance targets (how much change is the county attempting to achieve) for those strategies and priority activities. It will allow for the reporting of all strategies, program activities, and performance measures related to climate change in one location. By 2015, the county plans to combine SCAP and Energy Plan will be combined into one plan to allow for a more efficient and cohesive use of county resources dedicated to these interrelated issues.

Various local, state, and federal agencies regulate retail energy providers in King County. Gas and electric utility resource and conservation plans are approved by the utilities and other agencies through a public process. The Washington Utilities and Transportation Commission (UTC) reviews and accepts plans of investor-owned electric and gas utilities, the Seattle City Council approves the plans of Seattle City Light and Snohomish Public Utility District is governed by a utility board. Electric and gas utilities operate in King County under franchises with the county for use of the public right-of-way. The UTC also defines the costs that investor-owned utilities can recover, approves rates, sets service standards and resolves customer complaints.

Telecommunications services are regulated by several entities, including the Federal Communications Commission and the Washington Utilities and Transportation Commission. King County has some regulatory authority over telecommunications services through franchises and the development approval process.

A. Energy

1. Consistency with Land Use Plans

State law mandates that electric and gas public service companies provide the same level of service on a uniform basis, regardless of location. (RCW 80.28.110). Policies in this chapter encourage the utilities to prioritize capital improvements in a manner consistent with land use.

F-301 **Energy providers' resource and facility plans should be consistent with the King County Comprehensive Plan and should provide for a reliable source of energy in the event of natural disaster or other potential threats of disruption to service.**

Disruption of traffic due to public and private road projects frequently occurs in King County. Policies in this chapter support existing programs to notify utilities of upcoming projects to build, expand, or maintain county roads so utility and road construction can be coordinated. Distribution systems for gas, electric and telecommunications installation in new construction now have separate permits. Permit consolidation is desirable as a means to expedite review while protecting the environment.

F-302 **King County should coordinate public road construction and maintenance projects with utility construction and maintenance.**

Appropriate planning, such as increased housing density, transit-oriented development and walk-to-work housing can significantly reduce regional energy use over time. Similarly, land use regulation can support increased availability and use of renewable energy. For example, consideration of solar access in land use codes and building siting can increase the potential for solar energy use. Policies in this chapter encourage such energy-conscious development.

F-303 **King County should encourage land uses and development that will improve energy efficiency, and should support the expansion of renewable energy resources through development regulations, prudent variances and active incentive programs when the benefits of doing so outweigh the costs.**

2. Energy Efficiency, Conservation and Alternative Energy Sources

King County Countywide Planning Policy CO-6 states that "aggressive conservation efforts shall be implemented to address the need for adequate supply for electrical energy and water resources, protect natural resources, and achieve improved air quality." King County has a continued commitment to energy efficiency, conservation, use of renewable resources and quality enforcement of the energy code. Recent recognition of climate change and other negative impacts of our energy infrastructure have brought the need to improve the county's energy use patterns and supplies into the forefront of policy discussions. King County's current energy use patterns and energy supplies could be modified and improved to reduce air pollution (including GHG emissions), conserve non-renewable resources important to future generations, and help to limit the growth in energy costs.

F-304 All King County departments and divisions shall use the Energy Plan as the basis for strategic energy planning and direction.

The 2010 King County Energy Plan sets the county's long term goal of reducing its green house gas emissions from government operations, compared to a 2007 baseline, by at least at least 80% by 2050. In order to accomplish this goal, the county is dedicated to reducing its energy use, which most heavily contributes to its greenhouse gas emissions. Included in the 2010 Energy Plan were short term goals for energy reduction. For 2012, in its government operations for buildings and facilities, the county set a reduction goal of 10 percent normalized net energy use as measured against the 2007 baseline. In its vehicle operations, the county set a reduction goal of at least 10 percent of its normalized net energy use, again measured against a 2007 baseline

To measure its progress in reducing energy consumption, the county uses the process of "normalizing" energy use, which provides a measure of the energy use per unit of service value delivered (units of energy / units of service delivered). Application of this methodology is typically unique to each organization or enterprise; and the county has developed normalization factors for various energy end uses and functions. Normalization is intended to reflect actual energy use reductions under varying conditions.

Near term goals for energy reduction will be approved as part of the SCAP; setting the appropriate energy reduction targets in turn directly reduce the county's greenhouse gas emissions.

F-305 King County shall plan for further reduction in its energy use from government operations by setting near term energy use reductions, consistent with its long term goals of reducing operating costs and environmental impacts, maximizing energy efficiency and minimizing waste.

F-306 King County shall continue to produce, use or procure renewable energy equal to at least 50 percent of total County net energy requirements on an ongoing basis.

F-307 King County should foster the development and increased use of clean, renewable and alternative fuel and energy technologies

F-308 King County shall:

a. Continue to increase the use of renewable fuel in and the efficiency of county buses and vehicles where cost effective and environmentally sustainable, and shall support adoption and promotion of innovative

technology vehicles with a focus on electric vehicles where appropriate; and

b. Consistent with policy E-203, collaborate with other local governments regionally, nationally and internationally to develop a common approach to accounting for the GHG emissions resulting from the operation of its public transportation system, and for claiming rights to any GHG reduction attributes associated with its operation.

In support of its environmental, long-term sustainability and energy security goals, King County will provide leadership by shifting to the use of renewable resources. Renewable resources include those sources listed in RCW 19.285.030(20), now and as may be amended, as well as "service by-products", such as including methane gas generated from the operation of the county's landfill and wastewater treatment plants. Although renewable energy sources can be more expensive than traditional power sources on a per unit basis, careful choices of technology and expanded economic considerations including "triple bottom line" life-cycle cost analyses (LCA) show that in proper applications the benefits of some renewable energy technologies already exceed their costs. Additionally, subsidies and grants are available for some renewable power systems. For example, solar electric power is cost effective in some applications at county facilities and rapid cost changes in this technology will require regular reconsideration of its use as an addition or alternative to traditionally produced electricity.

F-309 **King County shall maximize practical applications of electricity and heat production from renewable resources.**

F-310 **King County shall support the conversion of renewable resources and service by-products to energy for beneficial use consistent with E-208. King County shall claim rights to any and all renewable energy and greenhouse gas reduction attributes.**

King County, working with its utility partners, has a long and successful history of energy efficiency and conservation projects. The combination of generally increasing energy costs and climate change mitigation goals will require that the county continuously increase its energy efficiency for many years to come.

F-311 **King County should encourage its energy utilities to provide energy efficiency services and renewable energy options to all their customers. Additionally, the County should encourage the state and energy utilities to mitigate the environmental and greenhouse gas emissions impacts of energy and, as**

conservation and alternative energy sources demonstrate capacity to address energy needs, phase out existing fossil fuel based power plants, especially coal based sources.

To achieve energy goals already set and more aggressive goals expected in the future, a coordinated, strategic approach to energy management and investment in energy efficiency is being implemented in the county.

F-312 **King County shall develop and adopt strategic energy management, efficiency and conservation programs in its own operations, including:**

- **a. Consolidated energy accounting of county facilities to establish baseline energy performance for the county, benchmarking of facilities against comparable best practices where possible, setting goals for facility efficiency improvements, and measuring and reporting progress toward county energy goals;**
- **b. Energy efficiency audits of all significant county facilities and the creation of a prioritized action plan for reducing energy use at such facilities;**
- **c. Energy management plans for energy-intensive or special-purpose county facilities such as wastewater treatment plants, correctional facilities and transit bases that focus on least-cost management and that include specific approaches for each facility's use, as well as the production and sale of energy where appropriate;**
- **d. Mandatory energy efficiency and resource use guidelines for operation and maintenance of all county-occupied facilities, while recognizing the unique operating requirements of specialty facilities;**
- **e. Programs to encourage employees to implement energy conserving measures at work; and**
- **f. Incentives, including retaining a portion of energy cost savings, to county agencies and departments for achieving energy efficiency.**

F-313 **King County should benchmark all applicable county buildings as a basis for measuring energy efficiency improvements.**

F-314 **King County should purchase only certified energy efficient appliances and office equipment (such as ENERGY-STAR labeled equipment) where available**

and shall require consideration of energy efficiency in all procurement decisions as an element of determining the lowest price bids.

Many energy efficiency, conservation and renewable energy projects have been deferred or not implemented due to lack of funds, despite their benefits and financial indicators. The value of energy projects are often at a disadvantage because they require capital outlay up-front to reduce operating costs over the project lifetime, and are rejected even though the projects could be effectively self-funding using standard discount rates on capital funds. One problem is that the capital and operating budgets are separate and competing parts of county finance, with laws separating their accounting. Investment in cost effective, energy saving projects can play a role in helping King County meet climate change mitigation and energy efficiency goals, while at the same time saving the county money. Using accepted life-cycle cost analyses and other methods, the county could develop credible criteria to evaluate energy projects and determine if the operations and maintenance cost savings over the life of an energy project's assets exceed the implementation costs. Standardized financing rules and mechanisms (such as 3rd party energy performance contracting or even “energy conservation bonds”) for such qualified projects used in the budget process should greatly increase the likelihood of projects being funded. Meeting the County’s energy goals will require a commitment to pursuing multiple funding strategies. Grants, loans, and utility rebates provide essential seed money for up-front investments in energy efficiency projects, and the County should seek them aggressively. In addition, the County should develop a long-term, sustainable framework for validating savings from energy efficiency investments and using a portion of savings to support future investments.

F-315 **King County shall develop criteria to evaluate energy projects to determine if the operations and maintenance cost savings over the life of an energy project's assets exceed the implementation costs, taking into account alternative funding mechanisms available for energy efficiency and renewable energy projects.**

F-316 **Efficient energy consumption, conservation, the use of renewable technologies, and energy responsible land use decisions should be a priority in King County. King County promotes the maximum use of energy conservation and renewable energy resources now, while leaving options for increasing conservation and renewable technologies in the future.**

District energy systems provide space and water heating and/or cooling to multiple buildings, through pipes originating from a central heating or cooling source – generally a central energy plant. King County government is unique in that it also has the ability to serve as a district heat supplier through the potential

for buildings to utilize the energy value of the warmer-than-ambient water in the County's almost 400 miles of wastewater conveyance. Centralizing the generation of heat and/or cooling through a district plant and/or delivering energy content to multiple facilities through a distribution network can eliminate the need for equipment in each individual building.

District heating and cooling plants can be constructed with energy efficiency in mind. Central plants that provide combined heat and power can offer increases in energy efficiency compared to on-site heat generation in individual buildings, and can be an effective method of cutting carbon emissions. The technologies used to generate energy from wastewater are emerging, and offer the potential to achieve environmental and economic benefits through the recovery of resources from wastewater.

F-317 **King County should pursue district energy opportunities to maximize resource recovery efforts, in ways that can offer economic and environmental benefits to the county and community at large. This will be done by pursuing opportunities such as encouraging the use of wastewater for heat extraction and other forms of energy generation in the county's wastewater conveyance system.**

F-318 **King County should pursue combined heat and power district energy opportunities in its own facilities, as well as in partnership with other public and private entities, that result in reduced energy consumption, greenhouse gas reductions and financial savings to the county.**

F-319 **To implement the Countywide Planning Policy of aggressive conservation and promotion of regional air quality, King County should:**

- **a. Effectively enforce the energy code as part of the general permit process;**
- **b. Provide density incentives through the zoning code for energy-efficient developments;**
- **c. Continue to improve the fuel efficiency and emissions of the county-owned fleet of motor vehicles;**
- **d. Work with utilities to become a model of energy efficiency in facilities owned or operated by Metropolitan King County; and**
- **e. Seek cost-effective ways to capture energy from county operations which other-wise would be lost, such as methane gas from landfills and sewage treatment.**

Methane released from sewage treatment plants and landfills is a potential source of energy. In addition, methane is a potent GHG. As a result, capturing methane from these facilities and putting it to a productive use provides a dual benefit.

F-320 **King County shall continue to explore and develop productive uses for and marketing of methane gas from its sewage treatment plants and landfills where appropriate.**

The moderate climate of the Puget Sound region provides an opportunity for significant use of solar energy. Relatively low heating and cooling needs in much of the county allow passive and active solar technologies to meet most of our heating and cooling budgets with proper building design. Similarly, our mild climate and available solar energy allows growing some food year round, potentially decreasing the use of fossil fuels for a portion of our citizens' food needs. This opportunity for local investments in passive and active solar design and in local food production can only be realized if building and neighborhood site design provides for solar orientation and through the development of regulations to protect solar access.

Although permit staff attempt to accommodate solar design, current regulations do not typically take into account solar orientation or solar access protection from development on neighboring properties. In addition, regulations, such as building height and building setback allowances, road access requirements, and protections for critical areas, stormwater, and native vegetation, may limit suitable locations for providing solar access. Requirements to create and maintain view corridors may or may not provide solar gain. In order to protect solar access, landowners or developers enter into voluntary solar easements. As an alternative, some municipalities have incorporated measures to protect solar access in their comprehensive plans and development regulations. King County should study these measures and implement best practices in this area in support of the county's larger sustainability goals.

F-321 **King County encourages:**

- **a. the use of solar energy;**
- **b. the siting of roads, lots, landscaping and buildings for improved solar orientation;**
- **c. the use of passive solar design and active solar technologies; and**
- **d. the protection of solar access.**

F-322 **King County should consider passive and active solar energy collection systems in all new facility designs and major rehabilitations. Solar electric generation systems interconnected with local utilities should be employed**

where cost-benefit analysis shows net benefits, considering emergency power potential and capitalizing on utility net-metering and power production credit programs.

Gas and electric utilities offer low-income energy assistance programs. All feasible actions to increase the availability of conservation measures to low-income residents should be pursued, such as public-private cooperation and combining existing rehabilitation efforts with installation of energy efficiency measures.

F-323 **King County should expand the availability of energy efficiency measures to low-income residents.**

3. Electric Utilities

The four-state Fifth Northwest Electric Power and Conservation Plan (also called the 6th Power Plan) produced in 2010 by the Northwest Power and Conservation Council (NWPCC) provides a blueprint for the development of electricity resources in the region. Bonneville Power Administration and other federal agencies, the region's utilities, state and local government, private businesses and the people of the Northwest all participate in implementing the council's goals. Electric utilities serving King County include Bonneville Power Administration, Seattle City Light, Snohomish Public Utility District and Tanner Electric Cooperative. Puget Sound Energy provides both electricity and natural gas service.

A number of significant events in the past years have influenced the electric power business in King County's power markets. These include:

1) Ongoing very large expenditures by hydropower utilities (notably BPA) to mitigate salmon habitat losses caused by dams;
2) The failure of Enron in 2001, with its devastating effects on several local utilities and the resultant retrenchment in Washington State from utility deregulation/restructuring;
3) The recognition of human-caused climate change, driven mostly by carbon dioxide release—a significant portion of which can be attributed to electric power generation;
4) The passage of State Initiative 937codified at RCW chapter 19.285, requiring utilities to acquire an increasing portion of their electric supplies from qualified renewable resources (a so-called renewable resource portfolio standard);
5) North American natural gas resource supply limitations and competition for supply, caused in large part by major pipelines being completed from NW Canada to the US Midwest.

Hydropower is the largest single source of our existing electrical power, with the county's major electric resources located outside King County. These include the Grand Coulee, North Bonneville and Ross

Dams. No new large dam sites are available in the region, making hydropower a very small part of projected new regional power-generating resources.

Existing hydropower facilities in King County include Snoqualmie Falls, Cedar Falls, Twin Falls, Weeks Falls, and Black Creek. Proposed projects include expansion of Snoqualmie Falls and new facilities at South Fork Tolt River, Hancock Creek and Calligan Creek (both are tributaries of the North Fork Snoqualmie), the Upper South Fork Snoqualmie and Martin Creek near Stevens Pass. Few if any additional projects beyond these listed are expected to be built in King County, and some of those listed above, although licensed, may not be built.

The Federal Energy Regulatory Commission licenses such projects, but in doing so must consider existing plans and policies of public and private jurisdictions. While power generation benefits the public, care must be taken to ensure that small hydroelectric projects are constructed in an environmentally sound manner, directing new, small hydropower facilities, for example, to streams that do not have anadromous fish. Construction and operation must also be consistent with the intended functions and uses of forestlands, where most small hydroelectric projects are located.

The Northwest Power and Conservation Council's (NWPCC) recommended Plan for the next 20 years consists largely of using aggressive conservation as a resource, supplemented with wind power, a small amount of coal, and an even smaller amount of natural gas-fired generation, in combustion turbines. Notably, cogeneration (employed at two King County wastewater treatment facilities) also figures in the mix, albeit contributing a relatively small amount of the region's total energy. No significant addition of hydropower resources is projected.

Electrical utilities supplying King County are required by Washington State law to plan for their electric power resources in an integrated resource planning process very similar to the process that the NWPCC used for its 6th Power Plan. County suppliers Puget Sound Energy, Seattle City Light and Snohomish County Public Utility District are required by state law to regularly assess their power needs, supply strategies and impacts using Integrated Resource Plans (IRPs). The passage of the I-937 renewable resource portfolio standard has increased the demand (and attendant value of) qualified renewable resources.

F-324 **To address the cumulative effects of multiple energy facilities, King County should continue to participate in the state and federal processes for licensing, authorizing or certifying, and any such renewals, of existing and proposed power generation projects within King County. King County's review of individual projects in the state and federal processes should consider**

consistency with designated land uses and environmental protection goals. Specifically, power generation projects should:

a. Have climate change impacts considered and mitigated to the greatest extent practical;

b. Be consistent with, and preferably directly incorporated in, utility integrated Resource Plans;

c. Use renewable resources to the greatest extent practical;

d. Include public engagement;

e. Not significantly interfere with commercial forestry operations;

f. Be located and operated in a manner such that impacts to salmonid fish and wildlife are minimized;

g. Avoid unstable and erosion-prone areas;

h. Include performance bonding to fund erosion control;

i. Provide full mitigation for construction and operation impacts;

j. Avoid, to the extent practicable, diminishing scenic values; and

k. Incorporate adequate public safety measures.

F-325 **King County and the utilities should identify and preserve corridors to accommodate future electric power transmission and distribution lines. Corridor designation should include:**

a. Identification of appropriate shared uses and recognition of the values provided by nonutility uses, such as recreation;

b. Recognition of county roads as utility corridors; and

c. Evaluation of proposed facility plans on a system-wide basis, rather than project-by-project.

F-326 **When new, expanded or upgraded transmission is required, use of existing corridors that have above-ground utilities should be evaluated first. King County should facilitate appropriate corridor sharing among different utility types and owners.**

F-327 **New electrical distribution lines should be installed underground where reasonably feasible and not a health or safety concern. The county should encourage underground placement of existing distribution lines through such tools as local improvement districts.**

Public concern exists over the potential health effects of electrical power lines. The concern focuses on the effects of extremely low level electromagnetic fields, called ELF/EMF or simply EMF. Seattle-King County Department of Public Health currently responds to inquiries from citizens about EMF and keeps abreast of current research. The following policy recognizes the inconclusive nature of the data concerning EMF and the need to have an informed citizenry through public disclosure of available research about the potential health risks. Scientific evidence to-date does not support firm conclusions about the existence of adverse health effects related to EMF.

F-328 **King County will monitor scientific research on potential human health effects of extremely low frequency electric and magnetic fields (EMF). If federal or state agencies promulgate rules to reduce exposure to EMF — through changes in the use of appliances, construction practices, the location of electrical infrastructure or other activities — the county shall inform its citizens and take appropriate actions.**

4. Natural Gas

Generally, the most thermally efficient use of natural gas is in "direct applications." For example, to heat homes and businesses, the use of natural gas can reduce the demand for additional electricity. The choice of fuel shall be based on market conditions and the prudently weighted GHG impacts of using natural gas as compared with alternatives, with the customer comparing various fuels. Many homes and businesses in King County do not have the choice of natural gas, however, even within the Urban Growth Area.

Because of this, most multifamily housing is built with electric heat, a significant consideration given that they represent a large share of projected new housing units in urban King County.

King County has by far the largest resource of biologically produced methane in the region, from its wastewater treatment facilities and its solid waste landfills. The county is also developing pilot tests of farm animal waste digesters locally. King County should continue to develop and promote the development of biologically-derived sources of fuel gas and support the efficient marketing and use of such gas.

F-329 **King County should work to remove barriers to the availability and efficient use of natural gas.**

F-330 **King County will provide leadership in and promotion of the use of biologically-sourced methane fuel gas to minimize climate change impacts, including that**

from its own sources, as a substitute for fossil-sourced natural gas where practical.

5. Hazardous Liquid and Gas Transmission Pipelines

Hazardous liquid and gas transmission pipelines, as defined by RCW 81.88.040 and WAC 480-93-005, consecutively, provide a vital service of transporting hazardous materials from one location to another. Long-distance transmission pipelines move a variety of hazardous materials, including crude oil, petroleum products, natural gas and hazardous liquids, such as anhydrous ammonia. Pipeline rupture or failure can result in release of these materials, which are highly flammable, explosive or toxic. The policies in this chapter identify public values and goals to assure that the transmission of hazardous materials by pipeline address public health and safety.

The Federal Energy Regulatory Commission regulates the location, construction and operational conditions of interstate natural gas pipelines through its certification process. The state and federal government regulate the location, construction and operational conditions of hazardous liquid and intrastate gas pipelines through the Energy Facility Site Evaluation Council (EFSEC). In its review of pipeline applications, however, EFSEC must determine whether the pipelines are consistent with county land use plans and zoning codes. Thus, King County's authority to regulate the location of pipelines is through the comprehensive plan and development regulations.

F-331 **King County recognizes that federal and state regulatory programs govern the design, construction, and operation of hazardous liquid and gas transmission pipelines. To preserve the safety and reliability of the hazardous liquid and gas transmission pipeline system, land use, zoning and regulations shall be consistent with state and federal requirements.**

F-332 **Any new hazardous liquid and gas transmission pipelines proposed for construction in King County shall meet the county's development regulations, including but not limited to, King County's zoning code, building code, grading code, and shoreline management code.**

King County anticipates that few new hazardous liquid or gas transmission pipelines will be constructed in the near future. However, as existing pipelines age and the relationship between resources, refineries and markets changes over time, new pipelines will need to be constructed. Hazardous liquid and gas transmission pipelines are best constructed away from locations where large numbers of people assemble. King County recognizes however, that under some circumstances, new gas transmission

pipelines may need to locate in densely populated areas as the only practical alternative to meet the demand for service.

F-333 **New hazardous liquid and gas transmission pipelines should be located away from high-density residential zones, Urban Activity and Business Centers, Office Parks, sports fields, schools and day care centers or other land uses where large numbers of people would assemble.**

F-334 **When new, expanded or upgraded hazardous liquid or gas transmission pipelines are required, use of existing corridors should be evaluated first. King County should facilitate appropriate corridor sharing among different utility types and owners.**

F-335 **Hazardous liquid and gas transmission pipelines should not be located in areas susceptible to soil disturbance or liquifaction or in aquifer recharge areas. When it is impractical to avoid such areas, special engineering precautions should be taken to protect public health, safety and welfare.**

It is essential to map the location of existing hazardous liquid and gas transmission pipelines within King County so that developers know where they are and who to call for information before construction begins. Accurate maps will assist King County in reviewing land use applications for land uses located near pipelines.

F-336 **King County should map the location of existing and new hazardous liquid and gas transmission pipelines. Maps shall not substitute the one-call locating system and shall not be used for any construction or maintenance activity.**

Risks to life and property can be minimized by keeping land uses a safe distance from hazardous liquid and gas transmission pipelines. Pipelines transport a variety of materials, some of which flow under the force of gravity. While standard setbacks do not assure protection from materials that have the ability to migrate, setbacks may protect life and property from hazardous materials that are highly flammable, explosive or toxic. Limiting the allowable uses within pipeline rights-of-way can further reduce risks to life and property.

F-337 **Structures designed for human occupancy shall not be located within hazardous liquid or gas transmission pipeline rights-of-way and should be set**

back from the pipeline to protect public health, safety and property. No structures shall be located over the pipeline.

F-338 **Land uses shall be restricted within hazardous liquid and gas transmission pipeline rights-of-way. Passive recreational uses, such as hiking trails, may be allowed if the risk to life and property is assessed and determined to be minimal.**

Pipeline failure can result from damage caused by excavation near existing pipelines. Many existing pipelines initially were constructed in less-populated areas with little development. As demand for land grows, the risk of conflict between existing pipelines and land development increases.

F-339 **King County should promote the safety and reliability of the hazardous liquid and natural gas transmission pipeline systems by requiring developers, contractors, and excavators to notify the state, pipeline operators and utilities through the one-number locator service, before beginning excavation or construction.**

F-340 **In the interest of safety and reliability of the hazardous liquid and natural gas interstate transmission pipeline systems, the county should take steps to protect and preserve the signs that mark pipelines.**

6. Natural Gas Distribution Systems

Natural gas pipelines fall into two major categories: gas transmission lines that transport natural gas from production fields to local distribution companies and distribution systems that deliver natural gas from transmission pipelines to retail customers. The federal government may define certain parts of the natural gas distribution system that serve large volume gas users as part of the transmission system. Distribution systems for transporting natural gas are fundamentally different from transmission gas pipelines and should be regulated based on their design, use and location.

Gas distribution systems are owned and operated by local distribution utilities. Such systems consist of the pipelines that deliver natural gas to end users together with intermediate supply lines. The distribution system is constructed incrementally, with addition of new segments and upgrading of existing lines in numerous small projects. The distribution system is a network that is primarily located in road rights-of-way, where service is available. Local distribution companies are subject to the comprehensive safety regulations administered by the Washington Utilities and Transportation Commission (WUTC) under state

law and regulations and by the federal Office of Pipeline Safety under federal law and regulations. The rates and services of investor-owned utilities also are subject to comprehensive regulation by the WUTC under state law and regulations.

F-341 **King County recognizes that the gas distribution system is primarily located in road rights-of-way.**

F-342 **In the interest of safety and reliability of the natural gas distribution pipeline systems, the county should take steps to protect and preserve the signs that mark pipelines.**

F-343 **Structures designed for human occupancy shall not be located within gas distribution pipeline rights-of-way and should be set back from the pipeline to protect public health, safety and property. No structures shall be located over the pipeline.**

F-344 **Permit requirements shall require excavators to ensure adequate protection of any facilities that are encountered during their work. This shall include but not be limited to adhering to the foreign facility owners requirements for separation and backfill, developing joint plans when drilling or boring parallel to foreign facilities, and potholing all facilities that will be crossed by drilling or boring.**

King County's economy and quality of life depend on readily available, inexpensive and clean energy and telecommunications resources. Energy and electronic communications systems provide important public services and their implementation must be coordinated with land use planning. The sustainable development and efficient use of energy resources can ensure their continued availability while minimizing long-term costs and impacts to the individual, society, and the shared environment.

Various local, state and federal agencies regulate retail energy providers in King County. Gas and electric utility resource and conservation plans are approved by the utilities and other agencies through a public process. The Washington Utilities and Transportation Commission (UTC) reviews and accepts plans of investor-owned electric and gas utilities, and the Seattle City Council approves the plans of Seattle City Light. Electric and gas utilities operate in King County under franchises with the county for use of the public right-of-way. The UTC also defines the costs that investor-owned utilities can recover, approves rates, sets service standards and resolves customer complaints.

B. Telecommunications

1. Telecommunications

Telecommunication technologies are changing rapidly and will continue to change during the horizon of this plan. The future telecommunication system may make little distinction between cable, telephone and cellular. Telecommunication services include voice, data, video and other communication services on various mediums including, but not limited to, wire, fiber optic or radio wave. Effective telecommunications services are critical to citizens in several ways. They promote and enhance individual information exchange, contribute to a robust regional economy, and afford numerous public services, including delivery of emergency services, education and opportunities for citizen involvement.

F-345 **Telecommunication services are to be encouraged as a means to mitigate the transportation impact of development and growth, including GHG emissions.**

F-346 **King County encourages the telecommunication service providers to engage in long-term planning for telecommunications construction, reconstruction and facility upgrades, including provisions to ensure that the system's capacity, design and equipment will allow users to take advantage of innovative uses, services and technology.**

F-347 **Telecommunication companies and the county should coordinate activities when facilities are being installed or road construction projects are scheduled.**

F-348 **Long-term planning for telecommunications systems by the telecommunication service providers should allow uninterrupted service during natural disasters.**

F-349 **Collocation of telecommunication facilities is encouraged to reduce the unnecessary proliferation of individual, single-user towers. Collocation shall be required unless an applicant can demonstrate to the satisfaction of the county that collocation on an existing tower is not feasible and not consistent with service quality and access.**

F-350 **Although visual impacts are always an important consideration in the decision to approve or deny a proposal, King County shall give greater weight to the visual impacts of telecommunication facilities proposed to be located on residentially-zoned lands or in the Rural Area. In addition, the visual impacts of**

proposals for an individual tower with a single user shall be given greater weight than proposals to collocate facilities.

F-351 **King County considers the placement of telecommunication facilities within street rights-of-way as the preferred alternative to the construction of facilities on private property. Regulatory standards shall require placement in street rights-of-way, especially within residential neighborhoods and Rural Areas, unless such a location is not feasible or not consistent with service quality and access.**

2. Cable Services

King County Ordinance No. 10159 dictates current policy for cable services. It states in part:
"it is the County's policy to promote the widespread availability of cable service and diverse information to County residents and to encourage the development of cable systems and cable technology as a means of communication between and among members of the public and public institutions."

The county's cable-related needs are expressed in the following policies:

F-352 **Long-term planning for cable systems should include service to all areas of the county which meet the minimum density established in the cable company's franchise agreement and the county's Cable Television Ordinance.**

F-353 **Cable companies should provide services that meet the cable-related needs and interests of all segments of the community, taking into account the cost of meeting such needs and interests.**

F-354 **Cable companies should take affirmative steps to ensure that reasonable services are available regardless of income or the income of other people in the person's neighborhood.**

F-355 **The goal of long-term cable planning should be a high-capacity, state-of-the-art system. Two-way capacity should be installed and activated. Cable systems should be interconnected to other communications systems. They should be designed to be "open"; that is, the systems should be usable by many, for a variety of purposes.**

F-356 **Public uses of the cable system should be expanded as the system is upgraded.**

3. Internet Access

Rapidly changing technologies are providing opportunities for alternative work environments and lifestyles as more people transmit and receive information through the internet. Although there is a growing interest in the use of computer technologies, few new developments are including high-speed internet access lines or home cabling. King County encourages private partnering between developers, builders and communication providers to expand the opportunities for access to the internet.

F-357 **Developers should collaborate with major employers to create developments that facilitate and encourage telecommuting by installing high-speed internet lines during construction of the project.**

F-358 **Builders and architects should work with the telecommunication industry to design state-of-the art cable-ready homes and offices.**

Wireless internet connections, also referred to as “hotspots,” first conceived in 1993, now number over 300,000 nationally. A hotspot is a location (park, coffee shop, airport, office building. etc) that offers Wi-Fi access. Hotspots allow the public to use laptop computers, Wi-Fi phones or other suitable portable devices to access the Internet. Ninety percent of the hotspots in the nation are free. Of the estimated 150 million laptops and 14 million personal digital assistants (PDAs) sold annually, most include Wi-Fi capability.

F-359 **King County encourages public and private organizations to create wireless internet connections where the public can access the Internet. This will create additional opportunities to reduce traffic, lower GHG emissions and enhance convenient information exchange.**

CHAPTER 9
ECONOMIC DEVELOPMENT

I. Overview

The foundation for a vibrant and sustainable economy consists of several elements. These include, but are not limited to a favorable business climate with consistent/predictable regulations, an educated and trained workforce, adequate public infrastructure, land supply, research and advancing technology, affordable housing, available capital, recreational and cultural opportunities, and a healthy natural environment.

The policies in this chapter are designed to continue King County's long-term commitment to a prosperous, diverse, and sustainable economy. They do so by promoting public programs and actions that support a successful economy, one in which the private, nonprofit, and public sectors can thrive and create jobs, is compatible with the environment, and contributes to a strong and stable tax base and a high quality of life for all residents.

The policies also recognize businesses and the workforce as customers of an economic development system; and they support actions and programs that promote the strength and health of both groups.

A. Consistency with Plans

This chapter is consistent with the Washington State Growth Management Act (GMA), passed in 1990 and 1991, which establishes the framework and direction for the development of comprehensive plans, including the economic development element as set forth in RCW 36.70A.070(7).

VISION 2040, adopted by the Puget Sound Regional Council in April of 2008 states that “a robust economy is integral to our region’s environmental, social, and financial well-being. A sustainable economy is marked by a high quality of life for all people in the region, as well as vibrant communities.” The Vision 2040 plan was also reviewed and incorporated into the development of the policies in this chapter.

The King County Strategic Plan (KCSP), adopted in 2010, is the guiding document for decision-making by the county and reinforces the county’s commitment to economic development through the Economic Growth and Built Environment Goal (EGBE): “Encourage a growing and diverse King County economy

and vibrant, thriving and sustainable communities." Both existing and new policies contained within this Plan support the objectives and strategies of that goal.

- The policies in *Section II, Business Development* support EGBE Objective 1: "Support a strong, diverse, and sustainable economy".
- The *General Economic* policies in Section I (particularly ED-107, 108 and 109) support EGBE Objective 1, Strategy a., which calls for promoting economic develop through partnerships.
- The policies in *Section III, Workforce Development* support EGBE Objective 1, Strategies b. and c. call for workforce development programs for adults and youth and contracting opportunities for small and disadvantage businesses, respectively.
- The policies in *Section IV, Infrastructure Development* support EGBE Objective 1, Strategy d, to maintain infrastructure to help facilitate the movement of freight and goods to promote trade.
- The policies in *Section V, The Rural Economy* support EGBE Objective 4 and its strategies to preserve and support economic development that maintains the character of rural communities.

Additionally, as environmental protection, safeguarding and enhancing natural resources, including sustaining agricultural and forestry uses, and ensuring a high quality of life for residents are part of the county's economic development efforts, objectives and strategies within the KCSP Environmental Sustainability Goal are also implemented through the policies and discussed within this chapter.

The Regional Food Policy Council was established in September of 2010 and has adopted a vision, mission and goal statements to guide its work. Their economic development, agriculture, and policy goals are all forwarded within the policies of this chapter as the county explores opportunities for regionally-scaled natural resource infrastructure, attempts to maximize opportunities and reduce barriers to farming and development of value added products, and promotes efforts to strengthen local and regional food systems and access networks.

B. The State of the Economy

King County's economy is the largest, most diverse, and most significant economy in Washington State. In 2010, King County's economic base included:

- 1,134,000 nonagricultural jobs. This represents 65.7% of the Central Puget Sound Region's (King, Kitsap, Pierce, and Snohomish Counties) 1,727,000 nonagricultural jobs and 40.7% of the state's 2,784,000 nonagricultural jobs;
- A $67.8 billion payroll. This represents 72% of the region's $94 billion payroll and 49.8% of the state's $136.3 billion payroll;

- 74,700 business firms, excluding sole proprietorships. This represents 63% of the region's 118,000 firms and 35.8% of the state's 208,400 firms; and
- A 2010 Census population of 1,931,200. This represents 52.3% of the region's 3,691,000 population and 28.7% of the state's 6,724,500 population.

The last decade has been characterized by two major recessions and two periods of recovery and growth. Nonagricultural employment peaked in 2000 at 1,187,000 jobs, but as the dot-com recession took hold, declined 7% to 1,109,000 jobs in 2003. Employment began to rise again in 2004, and by the job peak in 2008, employment had exceeded 2000 levels, growing to a total of 1,216,000 jobs. During the Great Recession, employment decreased by 7% again to 1,134,000 jobs in 2010, 4% *below* levels of a decade before. From recessions to recoveries, nonagricultural employment has shifted among industry sectors, from Goods-Producing to Service-Providing. Both manufacturing and construction, the primary Goods-Producing sectors, were hit hard by the Recession. The proportion of employment in the Goods-Producing sectors steadily dropped from 2000, falling from 17.2% to 13% of total employment, with a corresponding increase in the Service-Providing sector. At 985,000 jobs in 2010, the Services sectors have essentially the same total employment numbers as in 2000, although individual sectors have shifted.

King County employment in 2010 was comprised of the following sectors:

- Trade, Transportation, and Utilities was the largest sector, with 207,000 employees or 18.3% of total employment. This sector includes Retail Trade (106,300), Wholesale Trade (58,700), Transportation (40,100), and Utilities (2,300).
- Professional and Business Services (legal services, architecture, computer designing) was the second largest sector, with 178,000 employees (15.7% of total employment), followed by Government (federal, state, and local), with 167,000 (14.7%).
- Three sectors had employment in the 100,000 range: Educational and Health Services (mostly in health) had 139,000 (12.2%), Manufacturing had 98,100 (8.6%), and Leisure and Hospitality had 108,400 (9.6%). At less than 100,000, manufacturing was the lowest in decades, but prospects are favorable for aerospace and other manufacturing.
- Three other sectors had employment in the 50-70,000 range: Financial Activities had 65,600 (5.8%), Information (Software Publishing and Telecommunication) had 79,300 (7%), and Construction had decreased to 50,300 (4.4%).
- Other Services (repair and maintenance, personal services and religious, professional and civic organizations) was the smallest sector at 41,200 employees, 3.6% of the total.

The rural portion of the county's economic base plays a significant role in helping the county maintain a diversity of economic sectors, thus contributing to the county's overall economic health. Evaluation and

discussion of the rural economy includes the Rural Area, Resource Lands, and the Rural Cities of Black Diamond, Carnation, Duvall, Enumclaw, North Bend, Snoqualmie, and Skykomish.

Information on the rural economy is as follows:

- In 2010, about 8.5% (163,500) of the county's total population of 1,931,200 lived in the Rural Area, Resource Lands, and Rural Cities.
- However, only 3% (34,400) of the total 1.1 million jobs in the county are located within the Rural Area, Resource Lands, and Rural Cities (2008 data).
- About two-thirds of the rural jobs (62%) are located in the rural unincorporated area, with the remaining one-third (38%) located in the Rural Cities.
- The Service Sector, which caters to both rural households and businesses, comprises 34% of rural employment.
- The more traditional Construction and Resources sector, including agriculture, forestry, fishing, hunting, and mining, accounts for 20% of rural jobs.
- Farming in King County is changing in response to increased demand by urban residents to purchase locally grown foods. Farms are becoming smaller with increased crop diversity. In 2007 there were 1,790 farms in the county, with an average farm size of 28 acres. Farm acreage increased 18% from less than 42,000 acres in 2002 to 49,000 acres in 2007. Farm product sales totaled over $127 million in 2007.
- Sales at county farmers' markets in 2006 generated over $25 million in direct sales to Washington farmers.
- The timber industry is also experiencing profound changes as larger companies have left the county and, in many cases, sold off timber lands for large acreage residential development. Between 2000 and 2002, the county saw a 35% decline in timber harvest to 91,000 board feet processed.
- The equestrian industry plays a role in the rural economy. In 2005, there were about 3,200 persons directly employed in the equestrian industry and 945 persons employed in jobs related to the industry countywide. Additionally, equestrian industry sales totaled $227 million based on 2005 numbers, which included direct, indirect, and induced sales.

C. General Economic Development Policies

King County partners with businesses, economic development organizations, and other jurisdictions in efforts to grow our economy to ensure the elements for a prosperous and successful economy are provided. The county also provides infrastructure, business, and workforce development products and services as part of its regional responsibilities; and it makes many other contributions to sustain the quality of life that makes the region a desirable place to live and work.

General King County economic development policies include:

ED-101 **King County has a long-term commitment to sustainable economic development throughout the county.**

ED-102 **The focus for significant economic growth will remain within the Urban Growth Area, while within the Rural Area, the focus will be on sustaining and enhancing prosperous and successful rural businesses as well as encouraging new businesses that support and are compatible with the rural economic clusters.**

ED-103 **King County policies, programs, and strategies shall recognize the importance of, and place special emphasis on, retaining and expanding homegrown firms in basic industries that bring income into the county and increase the standard of living of our residents.**

ED-104 **King County policies, programs, and strategies shall recognize the importance of a diversified economic base to provide a continuum of job opportunities to meet the skill levels of all workers.**

ED-105 **King County recognizes the environment as a key economic value that must be protected.**

ED-106 **King County shall protect cultural resources and promote expanded cultural opportunities for its residents and visitors in order to enhance the region's quality of life and economic vitality.**

King County's role in economic development is implemented at several levels. At all levels, King County seeks to coordinate, partner, and engage with private and public organizations to pursue mutually beneficial outcomes.

ED-107 **At the multicounty level, King County should partner with other counties, regional entities and the state, as appropriate, to devise and implement economic development policies, programs and strategies to provide for sustainable and equitable growth throughout the Puget Sound region.**

ED-108 **At the countywide level, King County should partner with other jurisdictions, economic development organizations, chambers of commerce, the Port of Seattle, and others, as appropriate, to develop and implement policies, programs, and strategies that set the general framework for economic development within the county.**

ED-109 **Within the unincorporated areas, King County should partner and engage with local businesses, the Agriculture and Rural Forest Commissions, community service areas, adjacent cities, other organizations and residents, as appropriate, to develop and implement policies, programs, and strategies that promote compatible local economic development.**

II. Business Development

King County has long supported a growing and diversified economy, one that provides business development opportunities throughout the county. Since 2004, King County has participated in developing and implementing "A Regional Economic Strategy for the Central Puget Sound Region," which is discussed in more detail below. The County is also working with several other regional business development efforts and partners to create opportunities for new business development, help retain and expand existing companies, and recruit new firms into the county.

Homegrown businesses are those that started in the region. Local and national research over the last 25 years has concluded that homegrown, small to medium-size businesses create the majority of new jobs in a local economy. King County's policies, plans, and programs should support a positive and healthy business climate that enables all local firms to stay globally competitive, quality-oriented, technologically advanced, and able to pay good wages.

Industries and firms that export their products and services outside King County bring income into the county and are considered basic, in economic terms. Jobs in basic industry generally pay better than non-basic jobs and support the non-basic or secondary part of the county's economy.

About 37% of the jobs in King County are basic and support the 63% non-basic jobs, such as retail and personal services. Roughly one of every four jobs in the Puget Sound region is dependent on international trade.

The county's leading export sectors are:

- Information Services, with 16.4% of all export jobs. Software Publishing is the principal factor in this sector, accounting for over 50% of the sector's basic jobs and 9.3% of total basic employment.
- Manufacturing, with 14% of all basic employment, led by aerospace, with 9% of total basic jobs.

Business Services, such as banking, insurance, accounting, legal, architectural, engineering, research and development, and computer services, with 13.8% of export jobs

On September 27, 2005, the Central Puget Sound Economic Development District (serving King, Kitsap, Pierce, and Snohomish Counties) adopted a "Regional Economic Strategy for the Central Puget Sound Region". The Regional Economic Strategy was developed by the Prosperity Partnership—a coalition of over 200 government, business, labor, nonprofit and community leaders from the four counties—to ensure long-term regional prosperity.

The Regional Economic Strategy identifies five industrial clusters that, based on regional economic analysis, offer the best opportunities for business growth and job creation in the Central Puget Sound region for the next several years. Clusters are geographically concentrated groups of competing and complementary firms that sell to similar domestic and international markets. Clusters drive regional economies because they export goods and services outside the region, which results in greater income, wealth, and prosperity than would otherwise occur. An industry cluster differs from the classic definition of an industry sector because it represents the entire horizontal and vertical value-added linkages from suppliers to end producers, including support services, specialized infrastructure, regional universities' research and development, and other resources. Clusters are supported by the foundation elements listed in Section 1. The clusters are Aerospace, Clean Technology, Information Technology, Life Sciences, Logistics and International Trade, Military, and Tourism. The Regional Economic Strategy identifies specific strategies and actions to help support the growth of each cluster.

ED-201 **King County shall partner with federal, state, and local governments, economic development organizations, and the private sector to foster an innovative and entrepreneurial environment and support programs and strategies that promote sustainable business development and job creation. Programs that provide technical and financial assistance to businesses include, but are not limited to:**

- **a. Financial, marketing, expansion, and general operations assistance for small businesses to help them become competitive in the private sector;**
- **b. Technological, efficiency, and managerial assessments to help manufacturers reduce costs and use smaller footprints for existing or expanded production; and**
- **c. Assessment and/or remediation of contaminated property (Brownfields) in order to continue or expand operations to help individual small businesses or jurisdictions impacted by Brownfields.**

ED-202 **King County shall emphasize continued support for the aerospace and information technology industrial clusters as well as industrial clusters offering the best opportunities for business development, job creation, and economic growth including those identified in the Prosperity Partnership's Regional Economic Strategy for urban areas and the King County Rural Economic Strategies for rural areas (including resource lands).**

ED-203 **King County shall support and participate in programs and strategies that help create, retain, expand, and attract businesses that export their products and**

services. Exports bring income into the county that increases the standard of living of residents.

ED-204 **King County shall encourage redevelopment of and reinvestment in industrial and manufacturing properties by collaborating with other jurisdictions and the private sector to remove, revise, or streamline regulatory or other redevelopment barriers without compromising environmental standards or quality. This includes assessment and/or remediation of contaminated properties.**

ED-205 **King County shall support programs and strategies to promote and market Foreign Direct Investment opportunities in the county.**

ED-206 **King County shall promote and help position small and mid-size businesses to gain greater participation in the supply chains of large companies and the military located in the region.**

ED-207 **King County shall provide opportunities for small businesses to compete for and obtain contracts on county-funded construction, consulting, and goods and services projects. King County shall also collaborate with other jurisdictions to promote public-contracting opportunities for small businesses and to develop and maintain common standards, a common application, and a common directory for small contractors and suppliers seeking contracts on publicly-funded projects.**

ED-208 **King County shall assist businesses, property owners, and other jurisdictions in preserving and enhancing historic properties, including historic business districts, through incentives and economic development measures. County programs and incentives for land and resource preservation and economic development shall support and be coordinated with preservation of historic properties.**

ED-209 **King County shall foster the development and use of public/private partnerships to implement economic development projects and programs. At a minimum, these projects must demonstrate that they:**

- **a. Cannot be accomplished solely by either sector;**
- **b. Have an experienced and proven private partner(s);**
- **c. Do not unduly enrich the private partner(s);**

d. Provide tangible and measurable public benefits in terms of tax and other revenue, construction and permanent jobs, livable((-))wages with benefits and a wage-progression strategy, and public amenities; and

e. Will use the King County Jobs Initiative, or other entities with similar programs, as their first source of referral for training and employing low-income, low-skill residents in entry-level and semi-skilled jobs.

ED-210 King County should support programs and strategies to expand international trade, including those that:

a. Promote, market, and position the county for increased export, import, and foreign investment opportunities; and

b. Provide technical assistance, training, and opportunities for local firms wishing to export.

ED-211 King County should support programs and strategies to preserve and plan for an adequate supply of industrial and commercial land, including but not limited to:

a. Complying with the State of Washington Buildable Lands Program – RCW 36.70A.215 – and, in cooperation with the cities, inventory and monitor the use of industrial, commercial, and residential lands every five years;

b. Partnering with other jurisdictions and the private sector, to advocate for development and maintenance of a regional Geographic Information System to track the supply of land;

c. Actively applying for federal, state, and other resources to help defray the costs of assessment, remediation, and redevelopment of private and/or public Brownfields;

d. Selling county-owned surplus industrial and commercial lands for development by the private sector;

e. Promoting the redevelopment and infill of industrial and commercial areas and explore the feasibility of using incentives to achieve this goal; and

f. Preventing the encroachment of non-industrial uses on industrially-zoned land and the rezoning of industrial land to other uses.

III. Workforce Development

King County provides programs and participates in partnerships to address the ongoing workforce challenges of the Puget Sound region and within the county. The current economic climate has created an even greater need to ensure access by all residents to information about local workforce development programs, to work with employers in skills training and worker retention, and to recognize the importance of worker training and retraining to provide the skilled workers needed by industry today. While traditionally, many low-income people have difficulties gaining access to quality education, training, and support services needed to prepare them for the world of work, many displaced workers also need access to retraining opportunities to obtain employment. Meeting these challenges successfully will require the county to continue and strengthen strategies and working relationships between business, government, labor, advocacy organizations, education and training institutions, and human service providers.

Jobs that pay wages sufficient to support families are vital to the quality of life. However, training, education, skill levels, and abilities vary from person to person. As such, it is important for King County to support job opportunities for all residents with entry-level jobs being essential to helping low-income, low-skilled individuals enter the workforce, reduce their dependence on public resources, and move out of poverty.

A family wage, or sometimes referred to as livable wage, is a wage that allows a family to meet its basic needs without resorting to public assistance and provides it some ability to deal with emergencies and plan ahead. This definition is taken from the "2010 Northwest Job Gap Study" produced by the Alliance for a Just Society (formerly Northwest Federation of Community Organizations). According to this study, the 2010 family (livable) wage for a single adult with two children in King County was $32.01 per hour or $66,589 per year. For each job opening at this level, there are at least seventeen job-seekers.

For context, the 2010 King County average annual wage, excluding software workers, was $56,326 or $27.08 per hour. Adding the average annual wage for software workers – $121,000 – increases the 2010 King County average annual wage to $60,750 or $29.21 per hour.

As defined for this comprehensive plan, an acceptable entry-level wage pays a minimum of $9.00 per hour (to be reviewed annually and adjusted as appropriate), provides benefits, and offers workers wage progression opportunities. Although an entry-level wage is a wage that provides workers greater economic incentive than does being on welfare, it is not a family wage. Depending upon household size and income, persons making entry-level wages in King County most likely require public subsidies in the

form of childcare, housing, food stamps, and/or Medicaid. As skill levels and wages increase, workers become less dependent upon public subsidies as they approach a family wage level defined above.

ED-301 **King County should support workforce development programs that are integrated with the county's overall economic strategies, including but not limited to:**

- **a. Apprenticeship opportunities on county public works projects to ensure a continual pipeline of skilled, local construction trades workers and to encourage family-wage job opportunities.**
- **b. Development and growth of clean technology "green" jobs linked to the preservation and sustainability of the natural environment, including jobs in pollution prevention, Brownfields cleanup, energy efficiency, renewable energy industries, and other technologies that address climate change.**
- **c. Training in skills (job clusters) that apply to and are in demand across multiple industry clusters.**

ED-302 **King County supports the King County Workforce Development Council, established by the federal Workforce Investment Act of 1998, composed of high-level representatives from business, local government, labor, education and training institutions, advocacy organizations, and human service providers. The purpose of the council is to coordinate and improve employment, training, literacy, and vocational rehabilitation programs to meet the needs of workers and employers.**

ED-303 **King County policies programs, strategies, and partnerships shall recognize the importance of worker training and retraining, especially for low-income and low-skilled residents, to provide the skilled workers needed by industry. King County shall support and partner with other jurisdictions, educational institutions and industry to promote programs such as:**

- **a. Programs that retrain dislocated workers for jobs in growing industries;**
- **b. Training for jobs in growing industries that require post-technical or post-secondary training and credentials and provide a career pathway to self-sufficiency;**
- **c. Programs that facilitate employer involvement in hiring workers with limited experience and skills and provide successful strategies for skills training, job placement, and worker retention;**

d. Programs that reduce recidivism by helping residents exiting the criminal justice system gain access to training and employment services;

e. School-to-work programs and effective alternatives for out-of-school youth to provide a clear pathway to self-sufficiency through career options and applied learning opportunities;

f. Summer youth employment programs for at-risk youth;

g. Access to alternative modes of transportation by providing transportation information, financial assistance, and services to jobseekers and workers; and

h. Access to childcare by increasing the availability and affordability of quality childcare for low-income families.

IV. Infrastructure Development

Adequate and well-maintained public infrastructure is the lifeblood of a strong economy. Basic public services that maintain a high quality of life in an area support employment growth, increased productivity, and influence business location decisions.

ED-401 **King County recognizes that adequate infrastructure is essential to support existing economic activity and to attract new industry and development. The county therefore supports and partners on programs and strategies to maintain existing infrastructure and construct new facilities (transportation, utilities, schools, information, communications, including an adequate supply of housing) necessary to accommodate current and future economic demand.**

ED-402 **King County will support programs and partnerships to facilitate the efficient movement of freight to promote global competitiveness for business and industry.**

ED-403 **King County shall partner, where feasible, with jurisdictions and other stakeholders to develop subarea economic development strategies to promote development and redevelopment in areas that can accommodate growth.**

ED-404 **Through local subarea planning and partnerships with other agencies and organizations, King County should use zoning, incentives, or other measures to ensure that an appropriate proportion of the land adjacent or near to major public infrastructure facilities is used to capitalize on the economic benefit of that infrastructure. The surrounding land uses should be compatible with the economic development uses or a buffer provided as necessary.**

V. Sustainable Development in the Private Sector

It is the goal of King County to work toward a model sustainable community where both the public and private sectors seek to balance urban growth with natural resource protection while addressing climate change. Sustainable development seeks to achieve this goal by addressing the impacts of the built environment in which we live and work. Sustainable development is implemented through planning, design and construction methods, including green building and low impact development (LID) that promote environmental quality, economic vitality and healthy communities.

King County seeks to foster innovative design and development techniques in the private sector that reduce the negative impacts of site development and building construction while maintaining affordability and economic development.

ED-501 **King County should encourage, support and promote the application of sustainable development practices in all private sector development within the county. This may be accomplished through working with residential and commercial developers to reduce impervious surface areas, protect ground and surface water within a watershed, assure that habitat protection needs are incorporated into development proposals to the extent possible, incorporate greater use of green building materials, eliminate, to the extent possible, the use of materials that pose health hazards, and utilize systems that conserve or reuse resources, including those that use energy more efficiently. When King County provides technical assistance and incentives for the use of sustainable development practices, it shall be at no cost to any private sector development. King County shall collaborate with the private sector on potential future regulatory tools.**

ED-502 **In the Rural Area, King County shall provide assistance through development of customized stewardship plans for individual properties, to help property owners understand their properties' characteristics and the potential impacts of their actions, and to make sustainable land use choices that protect natural resources.**

ED-503 **King County shall identify and evaluate potential changes to land use development regulations and building codes to support and promote sustainable development.**

ED-504 **King County should participate in the development of national standards for measuring sustainability at the community scale and the breadth and effectiveness of county policies and practices that improve community-scale sustainability.**

VI. The Rural Economy

King County values its entire rural area, including the Natural Resources Lands and recognizes the traditional economic activities that support rural communities and a rural lifestyle. A healthy and sustainable rural economy is necessary to ensure rural residents can continue to both live and work throughout the entire rural area. The farm, livestock, and forestry operations, the many entrepreneurial home-based businesses, the Rural Towns, Rural Neighborhood Commercial Centers, and the rural cities all provide rural residents with goods, services, and employment.

Within unincorporated rural King County, economic activities include farming, livestock raising, equestrian uses, forestry, resource value-added businesses, and home-based businesses. The Rural Neighborhood Commercial Centers are designed to provide a limited array of goods and services to local rural residents on a small scale. The Rural Towns provide a wider range of goods, services, and jobs for rural residents, including retail, restaurants, and services. The designated Resource Lands support the long-term commercial aspects of agriculture and forestry and potential resource valued-added products.

The county also recognizes that the land areas, economies, and natural beauty of the Rural Area and Natural Resource Lands classifications benefit all county residents. The agriculture sector provides a safe and reliable local food source—keeping costs low and quality high—to restaurants and households, the majority of which are in urban areas, and regionally to farmers' markets and specialty stores. Rural King County provides many diverse recreation and tourism opportunities, including scenic vistas; trails for hiking, bicycling, off-road, and equestrian use; harvest festivals; open space and wildlife habitat; and working farms and forest lands, all within a short distance from the urban centers.

A vibrant and sustainable rural economy depends on several factors, including, but not limited to, preserving and enhancing the businesses within traditional rural economic clusters, ensuring that new commercial enterprises are of a size and scale that is consistent with and retains the rural character of the surrounding area, and changes in regulations to reflect and respond to the differing needs and emerging trends of rural economic activity while protecting the natural environment.

In 2004, the King County Comprehensive Plan was amended to include a policy that directed the county to develop and implement a rural economic development strategy. To comply with this policy, the county developed the Rural Economic Strategies Report in 2005 and began implementing the identified strategies and actions in 2006.

The mission of the Rural Economic Strategies is to advance the long-term economic viability of the Rural Area, with an emphasis on farming, forestry, and other rural businesses consistent with the unique character of rural King County. The mission is accomplished by initiating and implementing specific strategies and actions to support and enhance rural economic viability. Rural businesses generally fall into six rural economic clusters and each cluster is supported by specific strategies and actions to strengthen and/or enhance it. The clusters are: Agriculture, Forestry, Equestrian, Home-Based Businesses (i.e., those home occupations that are allowed on lands designated Agriculture, Forestry and Rural Area), Recreation and Tourism, Commercial/Industrial Rural Neighborhood Commercial Centers, Rural Towns, and Rural Cities. Consistent with CP-942, found in Chapter 10, Community Plans, no expansion of industrial land use or zoning is allowed within the Rural Town of Fall City.

The specific strategies and actions are intended to be flexible in order to respond to evolving rural business needs and changes within any of the economic clusters. Each year the county evaluates the actions accomplished in the previous year, introduces new actions to be initiated, and discusses proposed actions for the following year. This ensures the process stays flexible and is current with evolving trends in the rural economy. It is anticipated that this procedure will become part of the Annual Work Plans developed for each of the Community Service Areas.

The rural economic policies are designed to establish and maintain a long-term commitment to a sustainable and vibrant rural economy. They support implementation of the Rural Economic Strategies; continued evaluation of county codes to support the evolving agriculture, forestry, and other rural economic clusters; and support for programs and strategies that foster a diversified rural economy, compatible with existing rural character, while maintaining the natural environment.

ED-601 **King County is committed to a sustainable and vibrant rural economy that allows rural residents to live and work throughout the Rural Area and Natural Resource Lands. County policy, regulations, programs should be reviewed and developed in partnership with rural businesses, the Agriculture and Rural Forest Commissions, the community service areas, the unincorporated area councils, and others to support the preservation and enhancement of traditional rural economic activities and lifestyles, while supporting evolving compatible commercial uses and job opportunities.**

ED-602 **King County shall use the Rural Economic Strategies to guide future rural economic development and will modify and add strategies as needed to reflect the evolving nature of the rural economy, while protecting the traditional rural economic clusters.**

a. King County recognizes the value of the agriculture and forestry clusters for both their economic contribution and for their natural, educational, and recreational benefits to the county as a whole. The county will work with the Agriculture Commission, Rural Forest Commission, and other related organizations on strategies and programs to strengthen and enhance the economic viability of these clusters and the evolving value-added industry that helps sustain the county's legacy of raising crops and livestock and managing and harvesting forestlands.

b. King County recognizes the value of home-based business, recreation and tourism, and commercial/industrial clusters for their ability to provide job opportunities in the rural area and help sustain the rural economic base. The county will continue to work with chambers of commerce and other organizations that support these rural businesses to help ensure the continued viability and economic health of new and existing businesses in these clusters.

c King County recognizes the importance of the equestrian cluster for its diversity of business and recreation related operations which combine to provide jobs and income opportunities within the rural economy. The county will continue to work with equestrian related organizations on business and recreation aspects of the equestrian cluster and with organizations that represent the various trail user groups to help ensure the continued viability and economic health of equestrian and related recreation businesses.

d. King County is committed to ensuring that all economic development, including the provision of infrastructure, within the rural area, which includes resource lands, shall be compatible with the surrounding rural character, be of an appropriate size and scale, and protect the natural environment.

e. King County will continue to support and partner on programs and incentives to ensure the economic vitality of rural historic resources to help maintain the character of the rural area, which includes resource lands.

f. King County will explore opportunities to support agricultural tourism and value-added program(s) related to the production of food, flowers, and wine in the county. These partnership venues should be

educational and include information on the diversity of products available in the county and the importance of buying local.

g. King County should continue to review existing and proposed regulations to ensure they are relevant and effective in accommodating the differing needs and emerging trends of the compatible businesses that comprise the rural economy.

ED-603 **King County should partner with other Puget Sound counties and businesses to analyze the need and possible sites for regional agricultural (including beef and poultry) and forest product processing facilities that may require regional demand to make them economically feasible. The county should also explore options and incentives to encourage entrepreneurs to invest in mobile forest and food production processing facilities that can serve the region.**

The ability to bring rural agricultural, forestry, and value-added products into the urban area and the ability of urban residents to utilize the rural areas for education, open space, scenic vistas, and a diversity of out-door recreation options encourages the urban/rural interdependence and linkage, thus enhancing the county's economic base.

ED-604 **King County will continue to partner with organizations that support programs and strategies that strengthen the interdependence and linkage between the rural and urban economies, such as the Regional Food Policy Council and Puget Sound Fresh.**

CHAPTER 10
COMMUNITY PLANS

Though typically separate from the King County Comprehensive Plan, some community plan policies have been incorporated into the comprehensive plan. These policies apply to specific geographic areas of King County. The original community plan policy number appears in parentheses at the end of each policy.

Between 1973 and 1994 King County prepared community plans for 12 subareas of unincorporated King County. The first generation of community plans, substantially completed by 1984, were used to implement the county's 1964 Comprehensive Plan, and consisted of detailed land use policies, area zoning, and lists of capital projects (primarily roads and parks) for each planning area. The second generation of community plans, from 1985 to 1994, implemented many concepts of the 1985 King County Comprehensive Plan (for example low-density zoning for rural areas, resource lands and environmentally sensitive areas, higher urban residential densities, and development guidelines for major urban activity centers such as Kenmore) that were carried over to the 1994 King County Comprehensive Plan.

Under King County's pre-Growth Management Act (GMA) planning system, if a community plan conflicted with the comprehensive plan, the community plan governed. Under the GMA, the comprehensive plan prevails over "subarea" plans (RCW 36.70A.080(2)). The 1994 King County Comprehensive Plan spelled out the relationship between the comprehensive plan and community plans and directed the county to review community plans and repeal or revise them to eliminate conflicts. The county has reviewed the community plans adopted between 1973 and 1994 and determined that, while most community plans' policies are redundant (or, in a few cases, in conflict with the 1994 Comprehensive Plan), some are area-specific or issue-specific and should be readopted as part of the comprehensive plan.

Although the community plans (except for the Vashon Town Plan, West Hill, and White Center – see Section XIII) are no longer in effect as separately adopted plans, in many cases the published plan documents contain valuable historical information about King County's communities and other information that provides background for the policies listed below and for the portions of the local pre-GMA area zoning that remain in effect.

The following section contains those community plan policies that are readopted as part of the King County comprehensive plan, and community plan policies that have been amended through subarea plans. This section also contains policies that have been adopted subsequent to community plans, but are specific to individual community planning areas. This chapter is reviewed during each 4-year cycle

update and policies that directly pertain to areas no longer under King County jurisdiction because of annexation or incorporation are deleted.

I. Bear Creek

The Bear Creek Community Plan became effective in February 1989, and directed most forecast growth into a concentrated area near the City of Redmond Watershed, first referred to as the "Novelty Hill Master Planned Developments." The rest of the Bear Creek Plateau was designated for a mixture of suburban and rural residential development. The 1994 King County Comprehensive Plan redesignated most of the planning area as rural. In 1995, some of the Bear Creek Community Plan's policies relating to the Novelty Hill Master Planned Developments (MPDs) were amended by Ordinance 11954. Also, the 1994 Comprehensive Plan refers to MPDs as Urban Planned Developments (UPDs). After the 1994 Comprehensive Plan's urban designation of the UPD sites was appealed and remanded to the county, the sites in question were redesignated for Fully Contained Communities (FCCs) as defined in the Growth Management Act, as well as UPDs (See policy U-178). The readopted policies for the most part address Novelty Hill and some area-specific transportation and trail issues.

CP-101 **To provide a range of housing opportunities and accommodate a fair share of growth in Bear Creek, the Novelty Hill subarea should be designated an urban planned development (UPD) and fully contained community (FCC). This designation will be implemented by urban planned development. (BC-3)**

CP-102 **Urban planned development will be permitted in the Novelty Hill subarea only when the following planning policies are met:**

- **a.** **To protect existing wetlands, streams and wildlife habitat, urban planned development shall be consistent with the intent of King County ordinances, King County Comprehensive Plan policies, and sensitive areas regulations. The design of the proposed development shall protect and preserve existing wetlands, streams and wildlife habitat by several methods including (but not limited to) minimizing alterations to the natural drainage features, maintaining water quality, preserving storage capacity, providing undisturbed unique/outstanding wetlands and undisturbed or enhanced buffers, restricting the number of stream crossings, and minimizing erosion and sedimentation. To achieve the intent of this policy it may be necessary to exceed the requirements of the King County wetland guidelines.**
- **b.** **A master drainage plan for the Novelty Hill subarea shall be approved by King County.**

c. New development adjacent to a unique/outstanding or significant wetland should preserve or enhance the wetland and provide an undisturbed buffer around the wetland adequate to protect its natural functions. Encroachments into significant wetlands may be allowed when no feasible alternative exists and enhancements are provided to replace the lost wetland functions; and

d. Groundwater recharge areas should be identified and protected to ensure that groundwater resources are protected from potential pollution.

e. To ensure that the existing road system in both King County and Redmond is not adversely affected, on-site and off-site traffic impacts shall be mitigated consistent with the Integrated Transportation Program (K.C.C. chapter 14.65).

f. A project environmental impact statement (EIS) shall be required for all property proposed for urban planned development within the UPD development area. The project EIS shall address the full range of public services necessary to serve urban development on Novelty Hill. The EIS shall include the cost of these services, the financial responsibility of the developer(s) and affected jurisdictions, and the method of phasing development to coincide with availability of these public services.

g. Since the remainder of residential land in Bear Creek will either be recognized as existing one-acre neighborhoods or designated as rural areas, all improvements to public facilities, including but not limited to road construction and sewers, shall be financed by the UPD developers provided the impacts are the result of UPD developments or according to a fair-share formula agreed to by affected parties.

h. A full range of housing densities, types and prices including housing for low-, moderate-, and medium-income groups shall be included in the UPD. The mix of single-family and multifamily housing in the UPDs shall approximate the existing county housing stock mix.

i. Urban planned development shall maintain and keep open for public use identified major equestrian and hiking trails.

j. Urban planned development shall provide active recreation facilities that adequately serve the needs of future residents and employees.

k. Urban planned development shall provide a minimum of 25% open space in addition to the preservation of all surveyed wetlands.

l. The Novelty Hill urban planned development area shall contain an urban activity center, which includes a commercial center to provide for the everyday shopping needs of the planned UPD population.

m. The activity center shall also contain a business park of sufficient size to provide a diversity of employment opportunities and a balance of jobs and households for the UPD area.

n. In order to preserve opportunities for a variety of employment types in the business park areas, retail development in freestanding buildings should be excluded. Up to 10% of gross floor area in business park buildings may be planned for retail uses, such as restaurants and business services, to serve business park employees.

o. Development conditions for the shopping and business park areas should encourage high quality development and site design.

The area will revert to rural if UPD development is denied or not pursued. If the UPD area reverts to rural, the zoning shall be RA-5. (BC-4)

CP-103 **Sewer facilities necessary to serve urban planned development on Novelty Hill are planned, designed and constructed to serve only such development and are prohibited from serving nearby surrounding low-density urban and rural areas. Proposals to extend sewer service or expand urban development outside the Novelty Hill subarea are not appropriate and are inconsistent with the purpose of the King County Comprehensive Plan. (BC-5)**

CP-104 **The Novelty Hill urban planned development or fully contained community shall contain a commercial area of sufficient size to serve the future residents and employees. (BC-17)**

CP-105 **The natural drainage systems of Bear, Evans, and Patterson Creeks should be restored, maintained, and enhanced to protect water quality, preserve existing aquatic habitat, reduce public costs, and prevent environmental degradation. Public improvements and private developments should not alter natural drainage systems**

without mitigating measures which eliminate increased risk of flooding and erosion, negative impacts on water quality, and loss on aquatic or riparian habitat. (BC-32)

CP-106 **An undisturbed corridor wide enough to maintain the natural biological and hydrological functions of streams should be preserved in all new development in the Bear Creek Planning Area. (BC-34)**

CP-107 **Bear, Evans, and Patterson Creeks and their tributaries should be protected from grazing animal access in order to: 1) reduce water quality degradation from animal wastes, 2) reduce bank collapse due to trampling, and 3) allow shading vegetation to reestablish along stream banks. (BC-35)**

CP-108 **Streams channeled in the Bear, Evans, and Patterson Creek drainages should not be placed in culverts unless absolutely necessary for property access. To reduce disruption to streams and their banks, bridges should be used for stream crossings, and crossings should serve several properties. When culverts are required, oversized culverts with gravel bottoms that maintain the channels' width and grade should be used. (BC-38)**

CP-109 **New development should rehabilitate degraded stream channels and banks in the Bear, Evans, and Patterson Creek drainages to prevent further erosion and water quality problems. Where conditions permit, the banks and channels should be restored to a natural state. (BC-39)**

CP-110 **Unique or significant wildlife should be identified and preserved. Development plans should identify significant wildlife habitat and should locate buildings, roads, and other features on less sensitive portions of the site. These considerations may result in a reduction in density from that otherwise allowed by zoning. (BC-40)**

CP-111 **The Bear and Evans Creeks' watersheds have been designated as critical areas for protection of the aquatic resources and human health. The following surface water management activities should be promoted.**

- **a. Appropriate and reasoned changes in land use policies and regulations may be evaluated during the preparation of the Bear/Evans Creeks Basin Plan.**
- **b. Ensure adequate field inspection of land development activities.**

c. Implement a public information program to promote water resources and stream channel protection.

d. The Bear and Evans Creeks Basin Plan shall develop recommendations for water quality monitoring and recommended methods for citizen input and evaluation to assess the success of the county's policies and regulations pertaining to this planning area. (BC-41)

CP-112 **Mitigation of traffic impacts to the City of Redmond arterial system will be accomplished through the interlocal agreement process. The Avondale arterial corridor study recommendations shall be used as a basis for traffic mitigation requirements for both city and county development affecting the corridor.**

Mitigation shall preserve the operational integrity of the corridor and maintain existing local access. The primary arterial corridor between the Novelty Hill urban area and SR-520 should be located and designed to encourage transit and ride-sharing alternatives to single-occupant vehicle travel.
Transportation planning of new facilities and management of the transportation system should be coordinated with current and forecast needs of the East Sammamish and Northshore planning areas, adjacent areas of Snohomish County, and with the cities of Redmond and Kirkland, and should be a cooperative effort of the affected jurisdictions. Phasing of Bear Creek and Redmond development should be strongly linked to the provision of adequate transportation facilities and travel demand management programs. (BC-45A)

CP-113 **Establishment of new rights-of-way and acquisition of additional right-of-way in existing corridors should emphasize protection of natural systems and adequate buffering of existing and potential residential development. (BC-47)**

CP-114 **Road improvements in Cottage Lake, Ring Hill, Ames Lake, Union Hill, and the rural areas should incorporate design features such as grass-lined swales to minimize surface water disruption and to protect and enhance water quality. (BC-49)**

CP-115 **196th Avenue Northeast ("Red Brick Road") between Union Hill Road and Redmond-Fall City Road (SR-202) is a historic road and should be preserved by restoring its brick surface, limiting vehicular loads and speeds, and prohibiting access to**

commercially-zoned properties to the west. Access to these properties should be provided by other existing roads and by a new north-south road connecting Union Hill Road and 185th/187th Avenues Northeast. (BC-50)

CP-116 **Park-and-ride and park-and-pool lots should be developed in Redmond, Cottage Lake, Ring Hill, Ames Lake, and Union Hill to provide focal points for transit and ride sharing. Park-and-pool lots should be located in rural areas along major commuting corridors such as SR-202, Redmond-Fall City Road, Novelty Hill Road, and Woodinville-Duvall Road. (BC-52)**

CP-117 **The Northwest Gas Pipeline and Puget Sound Power Line should be established as regional trails in Bear Creek to tie in with the East Sammamish planning area and to connect with the King County Tolt Pipeline Trail and the Snoqualmie Valley Trail. (BC-61)**

CP-118 **When the development of property occurs in Bear Creek, adequate rights-of-way should be provided for trail use. Trails should connect to existing and proposed schools, parks, riding stables, and recreation areas. (BC-62)**

II. East Sammamish

The East Sammamish Community Plan was adopted in December 1992. The East Sammamish Community Plan Update became effective in June 1993. Most of the planning area was designated for urban development, but important rural areas included Happy Valley, Grand Ridge and the eastern edge of the Sammamish Plateau. For the most part, the 1994 King County Comprehensive Plan reaffirmed the land use designations of the East Sammamish Community Plan Update. The major changes from the community plan occasioned by the 1994 Comprehensive Plan were replacement of the "urban reserve" approach to growth phasing with the service and finance strategy outlined in the 1994 Comprehensive Plan and the designation of a portion of Grand Ridge for urban growth. Most of the readopted policies address drainage, transportation and road design.

CP-201 **For all new development, increased standards for retention/detention, water quality facilities, and monitoring shall be considered, adopted and implemented as appropriate within the areas identified in surface water management basin planning and reconnaissance study areas. (NE-1)**

CP-202 **As new roads are built and existing roads widened, special consideration shall be taken to create or retain the aesthetic character of the area through the use of vegetated buffers that utilize native vegetation. (NE-3)**

CP-203 **Control mechanisms equal to or more effective than those adopted by Ordinance 9365 limiting or removing phosphorus and other non-point source pollutants from water bodies should be established and implemented as special requirements in area-specific basins plans to provide added protection to streams, lakes, wetlands. The Lake Sammamish Water Quality Management Project Report and, upon their adoption, the Issaquah Creek and East Lake Sammamish Basin and Non-point Source Control Plan, the Pine Lake Management Plan and the Beaver Lake Management Plan recommendations should be implemented to protect water bodies from non-point source pollution. (NE-7)**

CP-204 **Development shall protect wildlife through site design and landscaping. New development within or adjacent to the wildlife habitat network should incorporate design techniques that protect and enhance wildlife habitat values. (NE-10)**

CP-205 **All golf course proposals shall be carefully evaluated for their impacts on surface and groundwater quality, sensitive areas, and fish and wildlife resources and habitat. (NE-11)**

CP-206 **Water used for irrigating golf courses should come from nonpotable water sources wherever possible. Use of natural surface water sources, such as streams, should be avoided due to impacts on fish and other wildlife habitat. A water conservation plan shall be submitted with golf course applications which should address measures such as the use of drought-tolerant plant species. (NE-12)**

CP-207 **The Patterson Creek Basin currently provides highly-productive aquatic habitat. Urban development within this basin should be conditioned to protect this resource by minimizing site disturbance, impervious surfaces and disturbances of wetlands and streams. (No Community Plan Policy Number)**

CP-208 **The Northwest Pipeline office and maintenance shop is an existing use and is recognized by this plan as providing a needed service to the area. This 6.5 acre site may redevelop for pipeline utility and/or school bus base uses exclusive of major maintenance functions that are compatible with the surrounding rural development and agricultural uses. Redesignation of additional properties in the immediate vicinity of Northwest Pipeline for manufacturing park uses or other urban uses shall not be permitted. (CI-13)**

CP-209 **New developments should be designed and constructed with an internal road system which includes a Neighborhood Collector linking with existing or planned adjacent developments, creating a complete Neighborhood Collector circulation system and such linkage should be designed to ensure safety of local streets. Through traffic on local access streets should be discouraged. (T-9)**

CP-210 **Metropolitan King County Government should establish park-and-ride facilities in the East Sammamish Community Planning area. Park-and-ride facilities should be built along 228th Avenue and/or adjacent to I-90 and SR-202. The park-and-ride lots should be sited adjacent to and connect with existing or proposed community or neighborhood centers or within the employment center located around the intersection of E. Lake Sammamish Parkway and SE 56th Street. Establishment of a**

site near, but to the north of, I-90 should be high priority response to current and anticipated I-90 access problems. (T-13)

CP-211 **Consistent with the King County Open Space Plan, the county shall encourage establishment of an open space system in East Sammamish and give priority to protecting recreational, cultural and natural and sensitive areas such as shorelines, aquifer recharge areas, wildlife habitat, historic properties, archaeological sites, scenic vistas and community separators or greenbelts. The county may require lot clustering within or adjacent to open space areas; linkages between open spaces and may provide density bonuses or incentives to developers who preserve significant open space or establish trails beyond usually applied mitigation. (P-11)**

CP-212 **Urban separators should be established to provide visual relief from continuous development, provide important linkages for wildlife habitat, and maintain a visual separation between distinct communities. (P-17)**

CP-213 **There are areas within the urban separators that are especially suitable for trail connections for recreational use by present and anticipated population. King County should develop a trail and/or parks system utilizing the preserved open space within the urban separators. (P-18)**

CP-214 **When the development of properties occurs in the East Sammamish planning area, public access or easements should be required to complete the development of a local trail system for those areas where existing trails have historically been used by the public, or where the King County Open Space Plan identifies proposed trail alignment for regional and local trails. The Parks Division shall review the application during the development review process. (P-23)**

III. Enumclaw

The Enumclaw Community Plan and Area Zoning were commenced in 1986-87 and adopted in June 1990. The community plan refined boundaries between the Enumclaw Plateau's Agricultural Production District and abutting Rural Areas and Forest Production District, and designated the Urban Growth Area agreed to by King County and the City of Enumclaw. The 1994 King County Comprehensive Plan reaffirmed the Enumclaw Community Plan's land use designations.

CP-301 **All development within 660 feet of the top of the Green River valley walls should be conditioned to avoid adverse impacts on the environment and risks to life and property. (EN-12)**

CP-302 **King County should work with landowners on either side of SR-410 east of the City of Enumclaw to protect the scenic qualities of this highway corridor. (EN-22)**

CP-303 **King County should work with Washington State Parks and Recreation Commission and landowners on either side of the Green River Gorge to protect the scenic qualities of the Green River Gorge conservation area. (EN-23)**

Enumclaw's expansion area, like that of other rural cities, is shown on the King County Comprehensive Plan Land Use Map.

CP-304 **King County should work with the City of Enumclaw to establish an agreement guiding future annexations, including but not limited to the following elements:**

- **a. Commitment from the city to extend and maintain public services to the area, including police, fire, transportation, sewer, water, storm water management and general government services.**
- **b. Commitment from the city to provide a variety of residential development at an overall density for unconstrained land of at least four to eight units per acre.**
- **c. Commitment from the city that the extension of public services to meet the needs of future residents will maintain service levels to existing city residents.**
- **d. Commitment that the city will continue environmental protection for sensitive areas, (including but not limited to flood plains, steep**

slopes, wetlands, seismic and landslide hazard areas) at or above King County standards.

e. Commitment from the city to use measures to buffer or protect abutting forest or agriculture resource lands.

f. Commitment that the city will provide protection of historic sites and areas equal to the county's Historic Preservation Ordinance.

g. Commitment by King County to consult with the city on public improvement standards, such as local road standards, drainage control requirements and transportation standards that will apply to development in expansion areas.

h. Commitment by King County to notify the city of development proposals in the expansion area and to consult with the city to condition development approvals to mitigate adverse impacts on city services and to implement city plans, policies and standards.

i. Commitment by King County to notify the city of development proposals in an impact area, which includes all lands within a one-mile radius of the expansion area, and to consult with the city where applicable to condition development approvals to mitigate adverse impacts on city services.

j. Agreement on which jurisdiction will have responsibility for parks, roads, storm water or other public facilities after annexation. (EN-40)

CP-305 **Access to state park lands should be designed to minimize adverse traffic impacts on the Southeast Green Valley Road. (EN-56)**

CP-306 **Any expansion of aircraft runway or hangar capacity in the Enumclaw planning area should be concentrated on or near the existing Enumclaw airport. Existing legally approved landing strips associated with low-density residential developments, such as Evergreen Sky Ranch, shall not be expanded. (EN-60)**

CP-307 **Redevelopment of the Enumclaw landfill site should be subject to studies to assure public health and safety. If these studies determine that there is no threat to public health and safety the site's rural designation may be changed to accommodate a public use such as a park or other facility without an amendment to the King County Comprehensive Plan. (EN-71)**

IV. Federal Way

Work on the Federal Way Community Plan and/or amendments occurred from 1972 to 1975, 1977 to 1980, and 1984 to 1986. Federal Way was part of the first generation of community plans in the county that were adopted separately from their implementing area zoning. After these experiences, the county decided to adopt both together to avoid going through essentially the same decisions twice for each community. The City of Federal Way incorporated in 1990, removing most of the planning area from the county's jurisdiction. None of the Federal Way Community Plan or its amendments are readopted.

V. Highline

Highline has one of the longest histories of any community planning area. Between its original adoption in 1976 as the "SeaTac Communities Plan" and adoption of the 1994 King County Comprehensive Plan, the Highline Community Plan has been updated or amended 13 times, and has been partially or wholly replaced by plans for smaller areas within Highline (e.g., West Hill, Burien Activity Center, White Center Community Action Plan, and SeaTac). The City of SeaTac incorporated in 1990, the City of Burien incorporated in 1993, and numerous portions of the planning area have been annexed by Tukwila and Des Moines. Although the planning area as a whole has grown slowly since 1970, the incorporations and annexations have resulted in a significant decrease in the unincorporated area population (down more than 38 percent between 1990 and 1994).

None of the Highline Community Plan is readopted with the exception of West Hill and White Center, which were adopted in 1994 as part of the comprehensive plan but published separately. (See Section XIII.)

VI. Newcastle

The Newcastle Community Plan commenced in 1978 and was adopted in May 1983. The final adopted plan designated three sites for Master Planned Developments (MPDs), but stipulated that only two MPDs could occur without an update of the community plan. One MPD was approved by the county in the late 1980s. Bellevue annexed Factoria and Newport Hills in 1993 and the City of Newcastle was incorporated in 1994, so the noncity portion of the planning area's population fell 13 percent between 1990 and 1994 even though the whole planning area is forecast to grow almost 18 percent between 1994 and 2010. The planning area also includes some areas designated Rural by either the 1985 or 1994 King County Comprehensive Plans.

CP-601 **King County supports the nomination of the Odd Fellows Cemetery and counterbalance right-of-way to the National and State Registers of Historic Places. (N-33)**

CP-602 **Limit grazing animal access to May Creek and its tributaries in order to 1) reduce water quality degradation from animal wastes, 2) reduce bank collapse due to animals' hooves, and 3) allow shading vegetation to reestablish along stream banks. (N-41)**

CP-603 **May Creek is acknowledged as a regional asset and should be protected. Thus, King County shall not increase zoning density on lands that drain into May Creek (i.e. the May Valley Basin) without first determining and implementing surface water runoff mitigation necessary to control flooding and siltation in May Creek.**

VII. Northshore

The Northshore planning area has been one of King County's faster-growing planning areas. The first "Northshore Communities Development Plan" began in 1972-73 and was adopted in August 1977. Almost immediately the Northshore Community Plan Revision Committee was established, and the "Revised Northshore Community Plan" was adopted in 1981.

The latest Northshore Community Plan Update began in July 1988 and was adopted in February 1993. During 1993, the newly incorporated City of Woodinville assumed jurisdiction within its territory. Portions of the planning area have been annexed by Bothell, Kirkland and Redmond. Kenmore, a significant unincorporated activity center, became a city in August 1998.

CP-701 **The north and east slopes of Norway Hill have an established neighborhood character and limited future development potential. They are, therefore, designated low density urban, 1 home per acre. King County recognizes that extensive steep slopes and erosive soils at the top of Norway Hill (above the 300-foot elevation mark) warrant lower residential densities. (E-10)**

CP-702 **The undeveloped area to the south of Metro's Brickyard Park and Ride lot should retain its office-only designation in recognition of its proximity to a major transportation corridor and the need for increased employment opportunity in proximity to planned high-density residential areas. (E-13)**

CP-703 **King County, Snohomish County, the City of Bothell, and the City of Woodinville should work on specific areas of mutual concern, such as the Swamp Creek and Daniels Creek drainage basins, the SR-527 transportation corridor, the proposed regional facilities of the University of Washington, and the future expansion of the City of Bothell. (E-25)**

CP-704 **Significant vegetation is a diminishing resource in the Northshore community. Significant vegetation contributes significantly to environmental quality, neighborhood character, and the quality of life in Northshore. All new residential development shall retain significant existing vegetation. Native vegetation should be utilized wherever possible. (R-17)**

CP-705 **New development must provide pedestrian connections to off-site facilities such as existing trails, walkways, community facilities and services, transit, schools and surrounding residential neighborhoods. Pedestrian links should be provided internally in all new residential development. Bicycle and equestrian links should be provided where possible. (R-19)**

CP-706 **King County recognizes the importance of existing mobile home parks in providing affordable housing options. Mobile home parks outside of the Woodinville and Kenmore commercial core areas are designated for mobile home park uses, and shall be zoned appropriately.**

King County shall continue to examine the feasibility of funding and developing a replacement mobile home park in north King County for displaced mobile homes on county-owned or privately owned sites.

King County should develop interlocal agreements with the cities of Bothell, Redmond, Kirkland, Woodinville and Kenmore for joint development of replacement parks to accommodate mobile home owners if they are displaced from mobile home parks within cities. (R-21)

CP-707 **Roadway improvements addressing the transportation needs in the Sammamish Valley from the South Woodinville bypass to Northeast 124th Street should carefully preserve the rural character of the valley as indicated by this and other adopted land use plans. Incorporating roadway design characteristics, such as tree windbreaks and shoulders instead of curb and gutter, will enhance this rural atmosphere. Access from adjacent properties to the proposed Willows Road extension shall be discouraged. Where access is necessary from adjacent properties, access shall be consolidated. (T-11)**

CP-708 **Transportation projects in Northshore should incorporate bicycle friendly design, utilizing a variety of design techniques appropriate to the particular project and right-of-way characteristics, including, but not limited to, bicycle lanes, wide outside travel lanes, paved shoulders, bicycle sensitive signal detectors, and appropriate signing. Existing bicycle facilities should be preserved or enhanced when general road improvements are made. Secure parking for bicycles should be provided at activity centers throughout Northshore. (T-33)**

CP-709 **Pedestrian and bicycle linkages are encouraged and should be planned. There should also be a link for equestrian uses from Hollywood Hill and NE 171st Street to the Sammamish River trail in the vicinity of the South Woodinville CBD bypass. (W-14)**

CP-710 **Protection of natural vegetation coverage at levels sufficient to moderate surface water runoff and erosion and to protect the integrity of stream channels should be required through special zoning requirements, critical drainage basin requirements, or countywide ordinance. When revegetation is required, appropriate native vegetation should be used. (NR-4)**

CP-711 **Unique geologic conditions in Northshore have resulted in hillsides that have a high risk of large scale erosion. Increased on-site retention/detention requirements in areas drainage over steep and erosive slopes should be adopted and implemented as special zoning requirements. (NR-9)**

CP-712 **A community-wide trail system for pedestrians, equestrians, and bicyclists should be developed. This trail system should connect regional trails with local trails and walkways. (P-6)**

CP-713 **When the development of properties occurs in the Northshore Planning Area, public access or easements should be required to complete the development of a local trail system. Adequate right-of-way should be provided for trail use. To ensure that the provision of trail corridor right-of-way does not result in a reduction in the number of permitted building lots, the area within the trail right-of-way, not otherwise credited as part of a road right-of-way dedication, should also be credited toward the lot area of any proposed development. Trails should connect to existing and proposed schools, parks, riding stables, recreation areas and neighborhoods. (P-9)**

CP-714 **King County should work closely with other jurisdictions and public agencies to seek appropriate trail links between elements of the open space system including, but not limited to the Burke-Gilman trail, Sammamish River trail, and the Tolt Pipeline Trail. (P-10)**

CP-715 **Existing public access points to the Sammamish River should be maintained and additional access points acquired and developed to ensure the use of this river as trail corridor and fishing area. (P-11)**

VIII. Shoreline

The Shoreline Community Plan was commenced in March 1977 and adopted in August 1980. The new City of Shoreline commenced operating in August 1995; between Shoreline and Lake Forest Park the planning area has very little unincorporated territory left, all of which is in one or the other city's Potential Annexation Area (PAA).

All of the unincorporated share of the planning area's 2012 household growth target will be accommodated within the new City of Shoreline. Therefore, none of the Shoreline Community Plan's policies are readopted.

IX. Snoqualmie

The Snoqualmie Valley Community Plan was initiated in April 1984, and adopted in August 1989. The process resulted in designation of the Snoqualmie Ridge Urban Growth Area for the City of Snoqualmie. The area was annexed by the City of Snoqualmie, and development is proceeding under an interlocal agreement as directed by the community plan. The 1994 King County Comprehensive Plan largely reaffirmed the Rural and Resource Lands land use map designations of the community plan.

CP-901 **King County, in cooperation with the Valley cities, and state and federal agencies, should conduct a study of baseline conditions and cumulative impacts of development on the Snoqualmie River's water quality, and identify methods of equitably controlling these impacts. (SQP-1 through SQP-6)**

CP-902 **Wildlife populations in the Snoqualmie Valley planning area are recognized as a regionally important resource and an important characteristic of the area's rural character. Special studies should be undertaken, in cooperation with the Washington State Department of Wildlife, to identify wildlife populations at risk due to the land uses allowed by the King County Comprehensive Plan and to develop mitigation measures to protect the continued viability of the area's wildlife populations. Should these studies indicate unmitigatable impact affecting wildlife populations due to the land uses allowed by the plan, a comprehensive plan amendment study will be undertaken to provide for the continued existence of this valuable resource. (SQP-17)**

CP-903 **Properties in erosion-prone drainage basins are subject to special development conditions applied to protect the safety and property of county residents through reducing or eliminating the occurrence of gully formation and sever erosion. These conditions may include:**

- **a. A drainage control plan;**
- **b. Installation of drainage control features prior to any land clearing, vegetation removal, site grading, road construction, or utility installation; and**
- **c. Runoff control requirements. (SQP-21)**

CP-904 **King County will oppose annexations to Snoqualmie Valley cities that currently contain designated floodplain lands until interlocal agreements have been enacted to advance the policies and standards set forth in the comprehensive plan. (SQP-27)**

CP-905 **The Shoreline Environment designations of the King County Shoreline Management Program should be consistent with comprehensive plan land use map designations and zoning. King County should initiate the shoreline redesignation process consistent with K.C.C. 25.32.130. (SQP-32)**

CP-906 **Until expansion areas are annexed, zoning for the expansion areas shall be urban reserve at five acre densities with the exception of the existing commercial/industrial area in the SE North Bend Way expansion area, and the existing industrial area in the Snoqualmie expansion area. (SQP-57)**

Community plan policies SQP 58 to 61 referred to "expansion areas one and two," reflecting the Snoqualmie Community Plan's attempt to phase growth of the valley cities. These phasing approaches were embodied in the interlocal agreement the county signed with the City of Snoqualmie; they may be reflected in the cities' comprehensive plans. The King County Comprehensive Plan simplifies the designations into one expansion area for each city.

CP-907 **King County will support development within the Snoqualmie Valley cities of Duvall, Carnation, Snoqualmie and North Bend and annexation and development of lands within their expansion areas, when each city demonstrates that its wastewater and storm water treatment systems for the existing and proposed city jurisdiction will not degrade the water quality of the Snoqualmie River and its tributaries. (SQP-58)**

CP-908 **King County will not support Snoqualmie Valley cities' annexations into expansion areas until each city has adopted mechanisms to reduce flood and channel migration hazards within its jurisdiction. (SQP-59)**

CP-909 **King County shall initiate an amendment to the King County Comprehensive Plan if the cumulative impact of development of the cities' expansion areas will reduce the quality of the Snoqualmie River and its tributaries below the current "A and AA" standards. (SQP-61)**

CP-910 **King County shall support annexation of the expansion area only when Carnation implements a long-term, nonstructural program to reduce flood damages on floodplains land within its jurisdiction. (SQP-68)**

CP-911 **Achieving a long-term solution to flood damages within the City of Snoqualmie is one of King County's highest priorities for this planning area. (SQP-70)**

CP-912 **King County intends to assist the City of Snoqualmie to develop a long-term solution and an implementation program which will reduce the risk from flooding and channel migration in the city. (SQP-73)**

CP-913 **If the long-term solution to reducing the risk from flooding in the City of Snoqualmie is determined to have basin-wide impacts, these impacts shall be reviewed by the King County River and Floodplain Management Program or its equivalent to identify any additional mitigations that may be required. If the long-term solution to reducing the risk from flooding is demonstrated to not have basin-wide impacts, it should be implemented as soon as possible and would not require a second, basin-wide, review of impacts and mitigations. (SQP-74)**

CP-914 **King County urges a public/private resource commitment to implement a long-term solution to flooding in the City of Snoqualmie. (SQP-75)**

Policies SQP 76 through 78 have been and continue to be implemented through an interlocal agreement. Most of the annexations referenced have taken place and are reflected in the expansion area boundaries for the City of Snoqualmie adopted in the King County Comprehensive Plan's Land Use Map.

CP-915 **Until a long-term solution to preventing flood damages in the City of Snoqualmie is agreed to by King County and the City of Snoqualmie, King County will support annexations in expansion areas when consistent with all appropriate policies herein and when higher residential densities can be achieved, municipal services can be provided, and river water quality will not be degraded. (SQP-77)**

CP-916 **Annexations of lands within the Phase 1 and Phase 2 additions to the City of Snoqualmie's Urban Growth Area shall not occur until completion of detailed**

planning, preparation and review of project-level Environmental Impact Statement(s), and a determination of required mitigations and amenities. The range of land uses to be allowed and the mitigations and amenities to be required shall be embodied in a binding Development Agreement between the City of Snoqualmie and the owners of proposed annexation lands.

CP-917 **The project-level Environmental Impact Statement(s) for lands within the Phase 1 and Phase 2 additions to the City of Snoqualmie's Urban Growth Area shall address aquifer recharge issues, and potential impacts to the water quality and quantity of Lake Alice, private wells in the Lake Alice and Snoqualmie Hills neighborhoods, and all streams that flow off-site.**

CP-918 **Based on the findings of the Environmental Impact Statement(s), the Development Agreement between the City of Snoqualmie and the owners of proposed annexation lands in the Phase 1 and Phase 2 additions to the City of Snoqualmie's Urban Growth Area shall establish a program for long-term monitoring of the water quality and quantity of Lake Alice and the private wells in the Lake Alice and Snoqualmie Hills neighborhoods, and of all streams flowing off-site.**

CP-919 **The Development Agreement shall also outline the remedies necessary if the monitoring program leads to findings that development activities on the annexation lands are the cause for adverse impacts to the water quality and/or quantity of Lake Alice and the private wells in the Lake Alice and Snoqualmie Hills neighborhoods, and of streams flowing off-site. The owners of the annexation lands shall be responsible for the monitoring program and correction of any impacts determined to have been caused by their development activities. Remedies may include connection to the public water system, or construction of alternative wells.**

CP-920 **The project-level Environmental Impact Statement(s) for lands within the Phase 1 and Phase 2 additions to the City of Snoqualmie's Urban Growth Area shall address traffic safety issues, with a focus on safety concerns for rural homeowners dependent upon the southern stretch of the Snoqualmie Parkway for access to their homes. A range of alternatives to improve safety at the**

intersection of the Snoqualmie Parkway and SE 96th Street, including signalization, road widening and turn lanes shall be explored.

CP-921 **Annexations of lands within the Phase 1 and Phase 2 additions to the City of Snoqualmie's Urban Growth Area shall be subject to updated Comprehensive Water and Sanitary Sewer Plans to determine the full range of improvements landowners within the annexation will be required to provide.**

CP-922 **A Drainage Master Plan shall be required for any new development of lands within the Phase 1 and Phase 2 additions to the City of Snoqualmie's Urban Growth Area. Stormwater facility design shall adhere to the standards in the most recent update of the King County Design Manual, or of the Snoqualmie Storm Drainage Plan, whichever is the most stringent.**

CP-923 **There shall be no road connections between the Phase 1 addition to the City of Snoqualmie's Urban Growth Area and 356th SE in the Snoqualmie Hills Planning Area, unless future analysis determines a restricted emergency access is necessary for safety purposes.**

CP-924 **There shall be no road connections between the Phase 2 addition to the City of Snoqualmie's Urban Growth Area and Lake Alice Road, unless future analysis determines a restricted emergency access for Lake Alice residents is necessary for safety purposes.**

CP-925 **To protect the rural character of the neighborhoods surrounding the Phase 1 and Phase 2 additions to the City of Snoqualmie's Urban Growth Area, the Phase 1 and Phase 2 areas shall include buffers to all rural lands along their perimeter. The size and structure of each buffer area shall be determined based on the characteristics of the land and existing vegetation, and its ability to perform the following functions: visual screening; noise reduction; and minimization of blow down. Buffers may include constructed berms and new plantings if deemed necessary and appropriate to perform the required functions.**

CP-926 **King County supports the continued industrial use of Weyerhaeuser's Snoqualmie Mill site and its annexation to the City of Snoqualmie. (SQP-79)**

CP-927 **King County will support annexations of land in North Bend's expansion area when higher residential densities can be achieved, municipal services can be provided, and river water quality will not be degraded. (SQP-81)**

CP-928 **Commercial and light industrial land uses are appropriate along SE North Bend Way subject to special development conditions to mitigate impacts. (SQP-82)**

A map is included in Appendix A to Ordinance 12824 (p-suffix conversion ordinance) showing the application of p-suffix conditions to commercial and industrial properties on SE North Bend Way.

CP-929 **Commercial and industrial zoned land (including potential-commercial or potential-industrial zoned land) within the City of North Bend's Urban Growth Area (UGA) are planned for nonretail, resource-based and highway-oriented uses. These uses shall be served by public sewers.**

CP-930 **The area between Tanner and the Edgewick Interchange, south of SE 140th and north of I-90, is appropriate for nonretail commercial and light industrial land uses. Commercial and light industrial uses shall be limited to uses that do not impact ground water and are related to resource-based shipping, distributing and trucking-related industrial development. (SQP-84)**

CP-931 **Land uses adjacent to the Edgewick Interchange shall be limited to highway-oriented commercial uses that do not impact ground water, and serve the traveling public. (SQP-85)**

CP-932 **The area north of the Edgewick Interchange is appropriate for resource-based, shipping, distributing and trucking related industrial uses that do not impact ground water. (SQP-86)**

The Fall City policies in this section were revised through a subarea planning process involving members of the Fall City community in 1998 and 1999. Through this planning process, the Citizens Advisory Committee identified the following elements that local residents value about their town:

- It is surrounded by agricultural and forest lands that are entirely rural;
- It has a pattern of development that has evolved over more than a century, which includes historic buildings and landmarks, an open spacing of streets and buildings, and locally owned businesses in a small-scale downtown;

- It is located in a unique geographic area formed by the confluence of two important salmon-bearing rivers, the Raging River and the Snoqualmie River, in an agricultural valley containing a number of other salmonid streams that are also important to the ecology of King County;
- It includes compatible home occupations and small-scale animal husbandry in harmony with residential neighborhoods;
- It provides rural-level street improvement (e.g., no traffic lights, no sidewalks outside the business district, and no street lights except as needed for public safety);
- It offers scenic vistas, open space, and rural and resource uses surrounding Fall City; and
- It has a small rural town identity.

CP-933 **Fall City is an unincorporated rural town which shall have overall residential densities of one to four dwelling units per acre.**

CP-934 **All property within the downtown Fall City business district is zoned Community Business (CB) and is included within a designated Special District Overlay (SDO). Development within the SDO is permitted using an on-site septic system approved by the Seattle-King County Health Department. Development is also permitted using either an alternative wastewater disposal system approved by the Seattle-King County Health Department (such as a community drainfield) or a self-contained sewage conveyance and treatment system approved by the Department of Ecology, provided that:**

a. **The selected system shall be designed and constructed to serve only properties located within the designated SDO;**

b. **The business and commercial property owners in the SDO are responsible for the operation and maintenance of the selected system;**

c. **The County's role should be to provide technical assistance in the development and implementation of the selected system;**

d. **If the selected system fails, and to prevent a potential health hazard, requires connection to the King County regional wastewater system, any such sewer conveyance shall be tight-lined and shall under no circumstance be used to provide sewage disposal service to residential properties in Fall City, except as provided by policy R-508; and**

e. **No costs to implement the selected system or to connect to the County's regional wastewater system shall be borne by properties**

outside the SDO. Funding from grants, loans and other outside sources may be used to help fund the system, and the County may assist in the pursuit of this additional funding.

CP-935 **The zoning for Fall City adopted in the 1999 Fall City Subarea Plan reflects the community's strong commitment to its rural character, recognizes existing uses, provides for limited future commercial development, and respects natural features. Additionally, it recognizes the current and long-term foreseeable rural level of utilities and other public services for the area. The land use implications of a major change in the water supply or a public health requirement for community-wide wastewater collection and treatment may be evaluated in a new community-based planning process; however this does not mean that zoning will change to allow more intense development beyond that adopted in the 1999 Fall City Subarea Plan. The rural character of Fall City should be preserved.**

CP-936 **Within the residential area of Fall City, compatible home occupations and small-scale agricultural pursuits or similar rural land uses can continue.**

CP-937 **King County should work with the State of Washington and the Fall City community to make transportation improvements in Fall City that will favor safe and pleasant pedestrian and other nonmotorized links between downtown businesses, the residential areas, and nearby King County Parks, and safe walkways to schools, rather than rapid through traffic.**

CP-938 **King County should expand the soft surface pedestrian, equestrian and bicycle trail opportunities serving the Fall City area. Trail route options serving the community shall be reviewed to include a route along the left bank levee easement directly adjacent to the Raging River, historically used by the public as a pedestrian, equestrian and bicycle trail. This historically used trail generally follows the "wildlife corridor" along the bank of the Raging River from 328th Way SE approximately NE to the Preston Fall City Road. The selected trail system for the Fall City area shall be identified in the King County Parks and Recreation trail system plan.**

CP-939 **Zoning for the existing industrial and office areas adopted in the 1999 Fall City Subarea Plan should be maintained but not expanded.**

CP-940 **Land uses at freeway interchanges without existing commercial or industrial development, and outside rural neighborhoods and rural cities, are designated rural residential to support development in rural neighborhoods and rural cities, and to preserve the scenic nature of the corridor. (SQP-98)**

CP-941 **New development at the Exit 22 Interchange shall not expand beyond the area designated in this plan and shall not adversely impact surrounding rural residential areas. All uses should be planned and sited to use long-term onsite waste disposal systems. (SQP-99)**

CP-942 **The existing two acres of land currently zoned for commercial use at Preston (Exit 22) is recognized, but no additional land for commercial uses is designated. (SQP-100)**

CP-943 **The presence of the Snoqualmie Tribe in the planning area has important historic and cultural significance for the Puget Sound region. The following places, recognized by the tribe as historically, culturally and archeologically important, should be considered for inclusion in the King County historic sites survey, and designation to local and/or national register of historic places.**

The tribe recognizes the following areas as culturally significant:

- **a. Snoqualmie Falls;**
- **b. The banks of the Snoqualmie River between the falls and the three forks confluence area;**
- **c. Fall City Indian Cemetery;**
- **d. Banks at the confluence of Snoqualmie and Raging Rivers;**
- **e. Banks at the confluence of Snoqualmie and Tolt Rivers;**
- **f. Fall City Park (site of John Sanawa's Council House and the first white school);**
- **g. Mt. Si; and**
- **h. Granite outcropping used as a quarry between North Bend and the City of Snoqualmie on SR-202. (SQP-122)**

CP-944 **King County recognizes the spiritual, historic, cultural and recreational value of the Snoqualmie Falls. Any development adjacent to Snoqualmie Falls shall be designed and sited to protect these values. (SQP-123)**

CP-945 **Because of the spiritual significance of the area at the base of the falls to the various tribes in the Puget Sound region, this area of the falls should remain free of development and open for public access. (SQP-124)**

CP-946 **The community of Preston is a significant cultural and historic reminder of the planning area's roots in the logging industry. The existing land use designation shall be maintained, and new development should respect the existing character of the community. (SQP-125)**

CP-947 **The industrial area adjacent to the Rural Neighborhood of Preston shall be recognized with appropriate zoning for industrial uses. This area is designated for industrial uses to recognize existing industrial use and vested applications for new industrial development.**

The boundaries of this industrial area are permanent. No expansion of the designated industrial area will be permitted, and any effort to expand its boundaries is recognized as contrary to the Growth Management Act, including the 1997 amendments.

Any industrial development or redevelopment in the designated industrial area (excluding reconstruction in the event of accidental damage or destruction, or tenant improvements entirely within the building structures) shall be conditioned and scaled to maintain and protect the rural character of the area as defined in RCW 36.70A.030(14) and to protect sensitive natural features.

New industrial development or redevelopment (excluding structures and site improvements that existed or are vested by applications as of May 24, 1996, or tenant improvements entirely within building structures), on lots not subject to restrictions and conditions consistent with those reflected in Recording No. 9708190805 must be dependent upon being in the Rural Area and must be compatible with the functional and visual character of rural uses in the immediate vicinity and must not encourage or facilitate conversion or redesignation of nearby Rural and Rural Neighborhood lands to commercial, industrial or urban uses.

The boundaries of this industrial area shall be those properties within the Preston Industrial Water System, as set by King County Ordinance 5948, with the exception of parcel #2924079054.

CP-948 **King County supports efforts of the community of Preston to achieve recognition of its historical and cultural significance. Its historic character should be maintained through designation as an historic area. (SQP-126)**

CP-949 **The King County Historic Sites Survey should be updated to include additional sites identified by the Preston Heritage Committee. (SQP-127)**

CP-950 **The development of a regional railroad museum in the Snoqualmie area is encouraged to promote understanding of the regional significance of railroads in the settlement and development pattern of Washington State. (SQP-128)**

CP-951 **King County shall put high priority on the acquisition and development of a regional trail system linking the Snoqualmie Valley planning area to other parts of the county. (SQP-143)**

CP-952 **King County supports designation of the Middle Fork of the Snoqualmie River under either the national or state Wild and Scenic River program. (SQP-151)**

CP-953 **King County supports evaluation of the North Fork of the Snoqualmie River and the main stem of the Tolt River under either the national or state Wild and Scenic River program. (SQP-152)**

CP-954 **King County shall assist the City of North Bend, when requested, to develop a long-term solution and an implementation program which will reduce the risk from flooding and channel migration in the city.**

X. Soos Creek

Soos Creek is one of King County's largest and fastest growing planning areas. The first Soos Creek Plateau Communities Plan (SCCP) commenced during the fall of 1975, and was adopted in November 1979. The process was controversial, partly because Soos Creek served as a laboratory for several emerging planning concepts, including a Rural land use designation implemented with zoning limiting residential density to one home per five acres.

The Soos Creek Community Plan Update commenced in March 1988 and was adopted in December 1991. In 1995 the City of Kent initiated annexation of a very large area between it and Lake Meridian, intended to encompass most of its Potential Annexation Area (PAA) within the planning area. The cities of Maple Valley and Covington have commenced operating and assumed jurisdiction within their territories.

CP-1001 **The continued viability and health of the Soos Creek planning area's stream systems and the fisheries resources dependent upon them should be assured through zoning, special zoning conditions and development regulations. The intent of this policy is to control densities along stream corridors identified by the Soos Creek Basin Plan. This policy will be implemented through the Area Zoning by placing rural and urban densities within 1/4-mile of significant stream systems identified as Types 1, 2, and 3 waters according to the Sensitive Areas Ordinance. (NR-1)**

CP-1002 **Lot coverage limitations for building shall be applied in all stream corridors in urban designated areas of the Soos Creek basin and classified R-1, urban stream protection special district overlay. Total impervious surface should not exceed 8%, and total clearing of forested vegetation should not exceed 30%. Reforestation to achieve sites that are 70% forested should be required. (NR-1A)**

CP-1003 **New development should rehabilitate degraded wetlands and stream channels and banks in the Soos Creek planning area's drainage's to prevent further erosion and water quality problems. These areas include, but are not limited to, May Creek, Garrison Creek, Molasses Creek and Olsen Creek. Where conditions permit, the banks and channels should be restored to a natural state. Where it has been determined that additional standards may be appropriate to control volume, these should be required for new development. (NR-3)**

CP-1004 **Within the Soos Creek basin, bare ground associated with clearing, grading, utility installation, building construction, and other development activity should be covered or revegetated between October 1 and March 31 each year. Earth-moving and land-clearing activity should not occur during this period within the Soos Creek basin except for regular maintenance of public facilities and public agency response to emergencies that threaten the public health, safety and welfare. Landscaping of single-family residences, existing permitted commercial forestry and mining activities and development sites with approved and constructed drainage facilities that infiltrate 100 percent of surface runoff should be exempt from these restrictions. (NR-8)**

CP-1005 **For new subdivisions in the Soos Creek basin Rural Area, a minimum of 20% of the property should be retained as a separate tract of undisturbed indigenous vegetation. (NR-9)**

CP-1006 **All development within 660 feet of the top of the Cedar River Valley and the Green River Valley walls, particularly along the bluffs south and west of the Lea Hill plateau and within the Lake Heights area, should be conditioned to avoid adverse impacts on the environment and risks to life and property. (NR-14)**

CP-1007 **The Soos Creek Community Plan recognizes the importance of existing mobile home parks in providing affordable housing options. Mobile home parks in the urban areas of Soos Creek are designated for mobile home park uses, and should be zoned appropriately. King County should continue to examine the feasibility of funding and developing a replacement mobile home park in south King County for displaced mobile homes on county-owned or privately-owned sites. King County should develop intergovernmental agreements with the cities of Renton, Kent and Auburn for joint development of replacement parks to accommodate mobile home owners if they are displaced from mobile home parks within cities. (R-23)**

CP-1008 **Significant vegetation is a diminishing resource in the Soos Creek community. Significant vegetation contributes significantly to environmental quality, neighborhood character, and the quality of life in Soos Creek. All new residential development shall retain significant existing vegetation. Native vegetation should be utilized wherever possible. (R-33)**

CP-1009 **Multifamily zoned land should not be converted to institutional and commercial/office uses within the Soos Creek Planning Area. (C-5)**

CP-1010 **Equestrian crossings of arterials should be permitted only where they do not greatly disrupt traffic. Where possible, these crossings should be combined with pedestrian and bicycle crossings. There should be no at grade equestrian crossings of SR-516, except at Lake Meridian. (T-29)**

CP-1011 **Crest Airpark is an important local facility and should continue operation at current levels of use. (F-15)**

CP-1012 **Because of noise and public safety concerns, low-density, single-family development should be the primary land use allowed within Crest Airpark's north flight path within 1/2-mile of the airport runway. (F-16)**

CP-1013 **All new subdivisions within 1/4-mile of Crest Airpark should include a covenant. The covenant should state that the property owner and/or resident recognize the existence of Crest Airpark, its value to the community, and the noise and public safety aspects of living in proximity to the airpark. (F-17)**

CP-1014 **The operation of Pacific Raceway is expected to continue indefinitely. The area authorized for racetrack use shall be confined to maximize protection of Soosette Creek and its riparian area. Any future consideration of permits for its operation should be consistent with the spirit and intent of the 1991 rules and conditions which regulate operation of the facility. (F-18)**

CP-1015 **King County should give high priority to expanding the Big Soos Creek trail by linking the City of Covington to the south and Fairwood Center to the north to the existing trail system. (P-15)**

CP-1016 **King County should give high priority to linking the Green River and Cedar River corridors. (P-16)**

CP-1017 **King County should coordinate with the City of Seattle, WSDOT, and other jurisdictions to link major elements of the open space system including the Cedar River, Lake Desire, Big Soos Creek, SR-18 and the Green River trail systems. (P-18a)**

XI. Tahoma/Raven Heights

The Tahoma/Raven Heights planning area is the second largest (149 square miles) and was the second-fastest growing community planning area during 1990-1994. The Tahoma/Raven Heights Communities Plan (T/RH) commenced in August 1979 and was adopted in October 1984. T/RH continued to apply the Growth Reserve and Rural designations and zoning that emerged during the Soos Creek planning process. The planning area is mostly unincorporated Rural or Forest Production District. In the years prior to the Growth Management Act (GMA) the City of Black Diamond completed one large annexation. A final Urban Growth Area for Black Diamond has been determined and may be adopted as part of future amendments to the 1994 King County Comprehensive Plan. The planning area has also been affected by the incorporation of the City of Maple Valley in 1997. The city includes most of the Urban Growth Area in the planning area.

In response to data and recommendations emerging while the Soos Creek Basin Plan was being prepared, interim five acre zoning was applied to portions of the Jenkins and Covington Creek watersheds in July 1989. A T/RH Update covering about one-fifth of the planning area was initiated in March 1991, and adopted in December 1991. The area zoning was changed in some cases, but this action was based on the 1985 King County Comprehensive Plan and applicable basin plan policies, and did not result in any changes to the 1984 T/RH policies.

CP-1101 **Resource activities should be encouraged in areas where such activities are not inconsistent with a rural atmosphere. In order to ensure continued development of natural resources prior to the development of the land for other purposes, extractive industries should be allowed to locate in areas known to have deposits of minerals. Premature urban/ suburban development should not be approved which forecloses the opportunity to use the resources. (T/RH-28)**

CP-1102 **The demand from surrounding land uses and densities should not exceed the capacity of the area's groundwater resources nor otherwise cause deterioration of its quality. (T/RH-45)**

CP-1103 **Existing businesses which qualify as legal uses located at Highway 169 and Cedar Grove Road should be given the same land use map designation as surrounding rural or resource properties, but recognized as Rural Businesses with neighborhood-scale business zoning. Any such development should not be expanded beyond the limits of the existing zoning of the specific parcel on which it is currently located,**

and if the use is abandoned the zoning should be redesignated to a rural zone consistent with that applied to surrounding properties.

C-1104 **King County supports annexation of the lands within the City of Black Diamond's Urban Growth Area subject to the requirements of the Black Diamond Urban Growth Area Agreement as adopted by Ordinance 12534. If the agreement is terminated, the affected lands under King County jurisdiction shall be treated as follows:**

a. Land within the designated Urban Growth Area shall be redesignated to Rural and reclassified to the rural zoning in place prior to the effective date of Ordinance 12534. This zoning shall continue for a period of at least five years from the date of reclassification.

b. The areas identified in the agreement as county open space shall be maintained at the rural zoning in place prior to the effective date of Ordinance 12534. This zoning shall continue for a period of at least five years after the date of termination of the agreement.

CP-1105 **King County supports expansion of the network of regional trails and conservation of natural resource lands and environmentally sensitive areas through community efforts such as the Rock Creek Valley Conservation Plan and the Friends of Rock Creek.**

CP-1106 **King County supports efforts to protect and enhance open space and ensure long-term habitat health and passive recreation opportunities in the Middle Green River through community efforts such as the Middle Green River Coalition.**

XII. Vashon

The Vashon Community Plan commenced in the spring of 1977 and was adopted in June 1981. Due to concerns about Vashon-Maury Island's water supply, which consists of local rain-fed aquifers, a revision to the plan was set for 1986 after completion of the Vashon/Maury Island Water Resources Study. The revision process began in April 1984, and the updated Vashon Community Plan was adopted in October 1986. In addition to responding to the Water Resources Study, the plan update also implemented the 1985 King County Comprehensive Plan's designation of the entire planning area as Rural. In 1996 the Vashon Town Plan repealed or modified several of the 1986 plan's policies, and adopted new policies and area zoning to guide development in the unincorporated Rural Town of Vashon. The Vashon Town Plan was adopted as a subarea plan and therefore is part of the King County Comprehensive Plan, as provided by the Growth Management Act (GMA). The policies below are the issue- or area-specific policies retained from the 1986 plan.

CP-1201 **All of Vashon-Maury Island is recognized for its unique ecological functions as a Puget Sound island, and is designated in this plan as a rural area. Development activities should protect the entire ecological system, including the Puget Sound shoreline, island habitat areas, and ground and surface water resources. (V-1)**

CP-1202 **All land use policies and regulations for Vashon shall reflect the overriding importance of the fact that the whole Island is the recharge area for a single-source aquifer. All of Vashon Island shall therefore be considered a groundwater recharge area. Within the Island, based largely on soil types, there are areas of relatively high, medium, and low susceptibility to groundwater contamination. Areas deemed highly susceptible to contamination in the KCCP should receive extra protection. (V-3)**

CP-1203 **Home occupations should continue to be allowed in residential areas on Vashon Island. (V-27)**

CP-1204 **Development should be minimized and carefully managed in sensitive areas. The most fragile, hazardous or valuable areas, including areas highly susceptible to contamination, landslide hazard areas and wetlands, should remain largely undeveloped through application of a low density designation. (V-31)**

CP-1205 **Protect and preserve the Island's wildlife habitats. (V-33)**

CP-1206 **Where fish or wildlife habitat occur within a proposed short plat or subdivision, the proposal should be reviewed to ensure that the ingredients necessary for the habitat's preservation are not destroyed. Special conditions should be attached to protect the habitat, if necessary. (V-34)**

CP-1207 **Fish and wildlife habitats identified on Vashon Island and considered to be especially unique and valuable or of potential countywide significance should receive special attention. Where these occur within a proposed plat or subdivision, Department of Development and Environmental Services (DDES), or its successor, may require the developer to submit a special report to assess more closely the impacts of the proposal on the habitat and to recommend specific measures to protect them. (V-35)**

Most fisheries in King County are regulated by agencies other than the county. Policies throughout this plan address fish habitat and the response to ESA listings. A harvestable fisheries habitat not otherwise addressed is the intertidal shellfish habitat on Vashon Island. The King County Department of Natural Resources and Parks owns some of this habitat. While the State of Washington governs the harvest of some species in this habitat, the county should take affirmative action to assure long-term productivity and to protect public health. The 1997 report of the Beach Assessment Program documents the degradation of this resource from over-harvesting, increased beach use and other causes.

CP-1208 **Intertidal shellfish habitat on Vashon Island shall be protected for its key role in the marine food chain, to protect public health, and to assure long-term productivity. King County shall explore effective means to protect this fisheries resource.**

CP-1209 **Island water resources should continue to be the sole water-supply source in the future. The plan discourages importing water for domestic uses from off the Island. (V-52)**

CP-1210 **Land uses and development densities should be planned so that demands on the Island's groundwater resources do not exceed its capacity to provide adequate supplies without deterioration of quality. In order to achieve this, ongoing research and monitoring as recommended in the Vashon Maury Island Water Resources Study should be conducted. (V-53)**

CP-1211 **Protection of the groundwater aquifer is of primary importance to Vashon Island. Further water quality degradation which would interfere with or become injurious to existing or planned uses should not be allowed. (V-54)**

CP-1212 **To protect domestic water resource, areas deemed highly susceptible to groundwater contamination and watersheds should be maintained in residential or similarly nonintensive uses at low densities. (V-57)**

CP-1213 **As an additional requirement for the comprehensive plans of public water systems on Vashon Island, the county shall ask that information be included assessing the ability of existing and potential water sources to meet anticipated population growth. Planned expansion of the water system should be prohibited if the analysis reveals a risk to the adequacy of service including quality of water being provided to current users. (V-59)**

CP-1214 **Special consideration should be given to the impacts of new development on the Island's groundwater resources. This should apply to major developments, development in areas highly susceptible to contamination, or development near public water supplies. (V-61)**

CP-1215 **Park-and-Ride lot development both on the Island and at or near the ferry terminals which serve Vashon Island (Fauntleroy, Southworth, Pt. Defiance) should be encouraged. (V-67)**

CP-1216 **Provide a safe and efficient system of commuter and recreational routes for bicyclists, pedestrians, and equestrians. (V-69)**

CP-1217 **Street and highway improvements should be low-cost safety and maintenance projects wherever possible. (V-71)**

CP-1218 **Additional water-related parks and beaches should be acquired along the saltwater shorelines of Vashon-Maury Islands. These parks should be retained as passive, natural areas. (V-83)**

CP-1219 **Additional park sites should be acquired in the island's most environmentally sensitive natural areas. These sites should be retained as passive, open space areas allowing only those uses that would be compatible with sensitive areas. (V-84)**

CP-1220 **A public trail system should be identified and encouraged for preservation on Vashon Island. (V-85)**

CP-1221 **Trails on Vashon Island should serve bicyclists, equestrian and pedestrian uses. (V-85a)**

CP-1222 **Trail systems at parks and on other public land should be encouraged on Vashon Island. Trails on public lands should be officially recognized and preserved. (V-85b)**

CP-1223 **If and when county- and state-owned land on Vashon is logged, trails should be preserved for equestrian and pedestrian use. If possible, an unlogged buffer zone should be left when logging occurs. (V-85c)**

CP-1224 **Voluntary dedication of trails should be encouraged when land is developed for more intensive uses. (V-85d)**

CP-1225 **Trails should provide multiple uses where possible, serving both recreational and commuter needs. (V-85e)**

CP-1226 **Trail corridors on Vashon Island should be established and designed based upon the following criteria:**

- **a. Connect park and open space areas;**
- **b. Provide access to shoreline areas, particularly public parks;**
- **c. Incorporate views and other special features of scenic, historic, or archaeological interest;**
- **d. Traverse development limitation areas where not incompatible with hazard or fragile natural areas;**
- **e. Follow streambanks and ravines;**
- **f. Follow undeveloped rights-of-way or along side existing roads; and**
- **g. Provide access to and connect schools. (V-85f)**

CP-1227 **The quantity and quality of Vashon-Maury Islands' groundwater supply should be monitored, along with building permit and subdivision data, to determine if planned densities can be achieved. If new information indicates the groundwater supply is endangered, the County shall take immediate steps to ensure new development does not impair the groundwater supply.**

Groundwater Management

Vashon-Maury Island is unique within King County in that it is an island community dependent upon a designated sole-source aquifer for its water supply. A Groundwater Management Plan was completed for the Island and approved by both King County and Ecology in 1998. Given that the only source of drinking water is ground water, a higher level of protection of groundwater recharge is warranted on Vashon-Maury Island than in the rest of King County. Land clearing and building activities can reduce groundwater recharge. Low-impact development (LID) practices involve protecting and enhancing native vegetation and soils, reducing impervious surface and managing storm water at the source. These techniques are well suited to development in rural-residential zoned areas and can be an effective way to protect groundwater quality and recharge, particularly on Vashon-Maury Island.

CP-1228 **King County should work with residential builders and developers on Vashon-Maury Island to encourage the use of low impact development practices that protect and enhance native vegetation and soils and reduce impervious surface. King County should promote preservation of at least 65% forest cover on rural-residential zoned parcels. The 65% forest cover goal may be adjusted for parcels less than 2 ½ acres in size. Dispersion of runoff from impervious surfaces into native vegetation in accordance with the Surface Water Design Manual shall be the preferred method of stormwater management in the rural area.**

CP-1229 **King County should include water quality monitoring and reporting in the scope of work for new low impact development projects on public properties to the maximum extent practical.**

In June 2011 the Vashon Maury Island Groundwater Protection Planning Committee recommended new policies to be incorporated into the Comprehensive Plan to further the objectives of the Vashon-Maury Island Watershed Plan and Vashon-Maury Island Groundwater Protection Plan concerning sustainability of the islands groundwater, streams and marine waters.

CP-1230 **The Vashon-Maury Island Groundwater Protection Committee, with King County support should:**

a. Complete and implement measures for the sustainability of water quality, water quantity and ecosystem health on Vashon-Maury Island;

b: Report the findings to the community; and

c. Evaluate the results to help guide ongoing watershed management activities.

Seasonal dissolved oxygen levels within inner Quartermaster Harbor have fallen well below the Washington State marine water quality standard of seven mg per liter over the last four years of monthly monitoring by King County. Quartermaster Harbor is a regionally significant natural resource area that provides rearing and spawning habitat for herring, surf smelt, sand lance, salmon (i.e., Chinook, Coho, chum, and cutthroat) plus shellfish resources, including geoduck clams. Based on the value of the harbor's natural resources and to protect and restore shellfish harvest opportunities, Quartermaster Harbor was included in the Maury Island Marine Reserve designated by the Department of Natural Resources and the Marine Recovery Area designated by Public Health – Seattle & King County.

Excess nutrients, nitrogen compounds in particular, can lead to excessive phytoplankton and algae growth that can then deplete oxygen concentrations when the algae die. Nitrogen and phosphorus are essential nutrients for marine plants and phytoplankton, particularly nitrate, as phytoplankton preferentially take up nitrate and other nitrogen compounds. Potential sources of nitrogen loading include on-site sewage systems, animal manure, fertilizer and other less direct sources like nitrogen-fixing vegetation including alder trees and atmospheric deposition.

In 2009, King County in cooperation with the Washington State Department of Ecology and University of Washington-Tacoma, started a four year study to identify and quantify the sources of nitrogen loading in Quartermaster Harbor. The draft 2010 Washington Water Quality Assessment under review by Ecology proposes to upgrade the Quartermaster Harbor dissolved oxygen listing to "Category 5" based on Ecology ambient monitoring station QMH002 (#10178). Designation as a Category 5 polluted water body means that Ecology has data showing that the water quality standards have been violated for one or more pollutants and there is no Total Maximum Daily Load (TMDL) pollution control plan. TMDLs are required for the water bodies in Category 5 to bring water quality up to standards.

Education and incentives to implement best management practices to reduce nutrient and bacteria loading can improve water quality. Routine on-site sewage system inspection and maintenance can help to control nutrient loading from existing on-site sewage systems. When new on-site sewage systems are installed, using a system rated to provide nitrogen reduction could limit total nitrogen loading on average by approximately 50% or more depending on system loading and site conditions.

CP- 1231 **King County should focus outreach education and incentives to implement best management practices designed to reduce excessive nutrient and bacterial contaminate loading within the Quartermaster Harbor drainage area. The Vashon-Maury Island Groundwater Protection Committee, with King County support, should seek grants to enhance existing outreach education and incentives when funding opportunities occur.**

CP- 1232 **King County should revise regulations to require new on-site sewage systems within the Quartermaster Harbor drainage area to meet the nitrogen reduction treatment standard established by the Washington State Department of Health, where feasible, if the final Quartermaster Harbor Nitrogen loading study demonstrates it would significantly reduce future nitrogen loading in the harbor.**

CP- 1233 **King County should request Ecology assistance to develop a Total Maximum Daily Load water quality improvement plan to reduce point and nonpoint pollution sources to Quartermaster Harbor if the harbor water quality is listed as a Category 5 polluted water body on the 2010 Washington State Water Quality Assessment.**

Island wide there are approximately 5,000 on-site sewage systems used to treat the wastewater for residences, businesses and public facilities not served by the Vashon Sewer District. Failing on-site sewage systems can contaminate surface, ground and marine waters with hazardous bacteria and excessive nutrient loading (nitrogen and phosphorus). Regular inspection and maintenance of on-site sewage systems can ensure system performance, extend system life and identify failing systems so they can be repaired when needed.

CP- 1234 **The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate need and potential sources of funding for an enhanced management program for existing on-site sewage systems on Vashon-Maury Island to ensure they receive routine inspection, maintenance and repair if necessary to protect water quality.**

Water use on Vashon is supplied by rainfall and typically reaches a seasonal peak in the late summer long after the early winter peak in rainfall. Water conservation is the best strategy to reduce peak water use and reduce the need to develop new water supply capacity. Conservation efforts should consider use of

appropriate technology to further conservation strategies including supply supplement alternatives like grey water reuse and rainwater harvest. Incentives, such as providing access to water use efficiency audits or developing model conservation plans for Group A, Group B and individual systems similar to the LEED model, can be useful in encouraging implementation of water conservation.

CP-1235 **The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate setting specific goals for water conservation starting with public facilities under the Vashon-Maury Island Groundwater Protection Committee auspices and promote and partner with public agencies, special districts and non-profit organizations to implement water conservation demonstration projects in new and renovated public facilities.**

CP-1236 **The Vashon-Maury Island Groundwater Protection Committee, with King County, support should evaluate ways to provide or enhance incentives to implement water conservation.**

CP-1237 **King County should evaluate the use of greywater as a supplemental source of water supply for non-potable uses both interior and exterior on Vashon-Maury Island.**

Public Health – Seattle & King County (PHSKC) is considering rule changes to permit use of harvested rainwater for potable supply. This evaluation should consider both the potential benefits, and possible land use and environmental impacts associated with such changes pertaining to Vashon-Maury Island. Islander views should be considered by PHSKC and any water supply policy revisions in the comprehensive plan should address use of rainwater harvest in a manner that is takes into account conditions on Vashon-Maury Island, specifically including the potential for nitrate contamination from increased septic use, consistent with the interests of Group A and Group B water systems.

CP-1238 **The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate allowing use of harvested rainwater as both a supplemental and sole source of potable water supply for individual water supply on Vashon-Maury Island under the following conditions:**

- **a. Any location outside of the designated service area for an existing Group A or Group B water system; and**
- **b. Within the service area of an existing Group A or Group B water system when the system cannot provide potable water in a "timely**

and reasonable manner." Where an existing Group A or Group B water system can provide fire flow if necessary, allow separate services for "potable" water and fire flow, ensuring effective cross-connection control.

There are approximately 1,200 known wells on Vashon-Maury Island and approximately 50 of those wells supply water for Group A water systems. Water produced by Group A water systems is tested routinely for compliance with drinking water standards and the results are reported to the State Department of Health. All Group A water systems will also report the annual quantity of water they produce from their supply source wells. The monitoring performed for Group A water systems protects the public health of their water users and will provide the data necessary for water resource sustainability monitoring.

Of the remaining 1,150 wells, approximately 150 supply Group B water systems (2-15 connections) and the remainder are individual water supplies, most for potable use. Public Health Seattle King County requires that Group B and individual water supply wells (and springs) be tested for nitrate, fecal coliform and arsenic at the time the water system is approved for construction but ongoing monitoring is not required for individual wells and ongoing testing, while required per code for Group B systems is not enforced. The lack of periodic monitoring and metering for Group B water systems and individual water supplies leaves the public health of their water users at risk and creates a significant gap in the data needed for comprehensive monitoring of water resource sustainability.

CP-1239 **The Vashon-Maury Island Groundwater Protection Committee, with King Count support, should evaluate the need and potential sources of funding to establish management programs for individual water systems and Group B water systems on Vashon-Maury Island to periodically monitor water quality and promote water conservation in conjunction with water system and well owners.**

Vashon Maury Island is part of Water Resource Inventory Area 15. The Vashon-Maury Island Watershed Plan was completed in 2005 and accepted for implementation by King County Water and Land Resources. The broader Kitsap County WRIA 15 planning group also completed a draft watershed plan for Kitsap County in June 2005, but was unable to reach consensus due in part to objections of the Squaxin Island Tribe on the Kitsap portion of the overall WRIA 15 plan (including both Kitsap and VMI). As a result King County is unable to get formal Ecology approval and implementation funding for the Vashon-Maury Island Watershed Plan. Vashon Island should develop a pathway to secure Ecology assistance on watershed plan implementation funding.

CP-1240 **The Vashon-Maury Island Groundwater Protection Committee, with King County support, should evaluate options to develop a pathway to secure Ecology assistance on watershed plan implementation funding and seek formal Ecology and King County recognition or adoption of the Vashon-Maury Island Watershed Plan.**

Watershed Planning

For the past 25 years, through several community planning processes, the Island community has been proactive in protecting its water supply. There is broad recognition of the shared responsibility for this common resource, and recognition that each water use can affect the quantity and quality of the water supply of others. Although in many areas of the Island there is not a current problem with water quality and quantity, planning and preparation to secure and protect Island water resources is warranted. The principal reasons for preparing a watershed plan in 2005 was that there is uncertainty about the amount and availability of groundwater, a local trend showing increasing nitrates in some wells, potential for degradation of Island streams and potential for contamination of the Island sole source aquifer. The Vashon Maury Island Watershed Plan completed on June 6, 2005 intends to protect and assure the water supply by making and implementing specific recommendations on water quantity and quality issues affecting the Island.

In April 2007 the Vashon Maury Island Groundwater Protection Planning Committee recommended the following priority action items in the Vashon-Maury Island Watershed Plan be incorporated into the 2008 King County Comprehensive Plan as follows:

CP-1241 **King County should develop an on-going island-wide education program to inform Islanders about groundwater resources, drinking water supplies, water availability, and water quality issues. The education program should include alternative water supply choices such as water retention, rain water harvesting, use of gray water, deepening of wells, groundwater recharge, water rationing in emergencies, reclaimed water and desalinization.**

CP-1242 **King County shall seek funding and work with state agencies to encourage removal of old or failing residential fuel storage tanks on Vashon-Maury Island.**

CP-1243 **King County should encourage the use of demonstrated new and alternative on-site septic treatment technologies on Vashon-Maury Island with priority on Marine Recovery Areas.**

CP-1244 **King County should seek funding to expand the Public Health – Seattle & King County septic education program to inform property owners about septic system failures and steps they may take to ensure effective maintenance and operation of their system**.

CP-1245 **King County and the Vashon-Maury Island Groundwater Protection Committee should continue to collaborate to develop an education program on pesticide and fertilizer use.**

CP–1246 **King County should work with the Vashon Community to define specific actions to implement the stormwater recommendations in the 2005 Vashon-Maury Island Watershed Plan within available resources.**

CP-1247 **New roads or road improvements required for new development in the town of Vashon should use a rural road section when possible, consistent with the King County Road Standards. Although the roadway section within the Vashon Town Center typically includes curb, gutter, and sidewalk, the residential roadway section throughout the Island should generally be rural in character with shoulders and an open ditch/swale on both sides of the roadway. When a roadway project exceeds the thresholds identified in Section 1.1.1 of the County's Surface Water Design Manual, flow control and treatment facilities should mitigate the impacts generated by surface and stormwater runoff. Swales should be used when ecologically appropriate to treat runoff.**

CP-1248 **King County should adopt a "business district design guideline" for the Vashon Town Center calling for installation of a rural type road section with either a road/sidewalk/bio-swale configuration, or a road/swale/trail configuration, where there is sufficient right of way, unless an alternate design that can protect groundwater recharge can be constructed.**

CP-1249 **King County should protect the quality and quantity of groundwater on Vashon/Maury Island by measuring, monitoring, and reporting information on groundwater quality and quantity to provide the information needed to manage groundwater resources**.

XIII. West Hill and White Center

The West Hill and White Center Community Plans, applying to portions of the original Highline Community Plan, were the last adopted by King County (West Hill in 1993, White Center in 1994), and as such were prepared in conformance with the Growth Management Act (GMA), and are already incorporated as part of the 1994 King County Comprehensive Plan. They will be reviewed and possibly revised as part of a future revision to this plan.

CHAPTER 11

IMPLEMENTATION, AMENDMENTS & EVALUATION

I. Regulations

The comprehensive plan guides land use over the long term by applying specific land use designations throughout the unincorporated portion of King County and by providing guidelines for implementing regulations used to evaluate specific development proposals. To ensure that these implementing regulations are effective and warrant a high degree of public trust and confidence, the regulations must be equitable, reasonable, and responsibly administered.

I-101 **King County's regulation of land use should:**

- **a. Protect public health, safety and general welfare, and property rights;**
- **b. Protect consumers from fraudulent practices in land use, land sales and development;**
- **c. Implement and be consistent with the comprehensive plan and other adopted land use goals, policies and plans;**
- **d. Be expeditious, predictable, clear, straightforward and internally consistent;**
- **e. Provide clear direction for resolution of regulatory conflict;**
- **f. Be enforceable, efficiently administered and provide appropriate incentives and penalties;**
- **g. Be consistently and effectively enforced;**
- **h. Create public and private benefits worth their cost;**
- **i. Be coordinated with timely provision of necessary public facilities and services;**
- **j. Encourage creativity and diversity in meeting county goals and policies;**
- **k. Be coordinated with cities, special purpose districts and other public agencies to promote compatible development standards throughout King County;**
- **l. Be responsive, understandable and accessible to the public;**

m. Provide effective public notice and reasonable opportunities for the public (especially those directly affected) to be heard and to influence decisions;

n. Avoid intruding on activities involving constitutionally protected freedoms of speech, petition, expression, assembly, association and economic competition, except when essential to protect public health, safety and welfare (and then the restriction should be no broader than necessary);

o. Treat all members of the public equally regardless of race, culture or class and base regulatory decisions wholly on the applicable criteria and code requirements;

p. Make development requirements readily accessible to the public through up-to-date codes, technical assistance materials and other relevant documents; and

q. Provide for relief from existing regulations when they would deprive a property of uses allowed to similar properties with the same zoning or environmental or other constraints, and when such relief would neither endanger public health and safety nor conflict with adopted use policies. This policy is not intended for relief from rules governing the subdividing of land.

King County wishes to create an equitable relationship with all its residents who own or control potential development or redevelopment of property with critical or significant resource areas. King County provides options that offer property-specific technical assistance and tailored applications of critical areas regulations through Rural Stewardship, Forest Stewardship, and Farm Management Plans. By participating in these programs, property owners may qualify for state tax programs that will reduce the assessed value of their property. However, it is the property owner's choice to participate in these programs.

I-102 **King County property owners are entitled to have their property assessed at the true and fair value of real property for taxation purposes so that those portions of the property that are not developed or redeveloped due to physical or environmental constraints shall be assessed to reflect the presence of such constraints. Property appraisals shall be consistent with the King County Comprehensive Plan, development regulations, zoning, and any other governmental policies or practices in effect at the time of appraisal that affect**

the use of property, as well as physical and environmental influences as required by RCW 84.40.030.

II. Comprehensive Plan Amendments

In the process of implementing the comprehensive plan, there may be a need for amendments to address emerging land use and regulatory issues. The county has established the comprehensive plan amendment process to enable individual residents, businesses, community groups, cities, county departments and others to propose changes to existing comprehensive plan policies and development regulations. This process provides for continuous and systematic review of comprehensive plan policies and development regulations in response to changing conditions and circumstances impacting growth and development throughout King County.

The comprehensive plan amendment process includes an annual cycle and a four-year cycle. The annual cycle generally is limited to those amendments that propose technical changes. The four-year cycle is designed to address amendments that propose substantive changes. This amendment process, based on a defined cycle, provides the measure of certainty and predictability necessary to allow for new land use initiatives to work. By allowing annual amendments, the process provides sufficient flexibility to account for technical adjustments or changed circumstances. The process requires early and continuous public involvement and necessitates meaningful public dialogue.

King County has established a docket process to facilitate public involvement and participation in the comprehensive plan amendment process in accordance with RCW 36.70A.470. Parties interested in proposing changes to existing comprehensive plan policies, development regulations, land use designations, zoning, or other components of the plan can obtain and complete a docket form outlining the proposed amendment. Docket forms are available via the King County Web site at:
http://www.kingcounty.gov/property/permits/codes/growth/CompPlan/amend/docket.aspx

I-201 **The amendment process shall provide continuing review and evaluation of comprehensive plan policies and development regulations.**

I-202 **Through the amendment process, King County Comprehensive Plan policies and supporting development regulations shall be subject to review, evaluation, and amendment according to an annual cycle and a four-year cycle in accordance with RCW 36.70A.130 (1) and (2).**

I-203 **Except as otherwise provided in this policy, the annual cycle shall not consider proposed amendments to the King County Comprehensive Plan that require**

substantive changes to comprehensive plan policies and development regulations or that alter the Urban Growth Area (UGA) Boundary. Substantive amendments and changes to the UGA Boundary may be considered in the annual amendment cycle only if the proposed amendments are necessary for the protection and recovery of threatened and endangered species, or to implement

a. A proposal for a Four-to-One project; or

b. Changes related to a mining site conversion demonstration project. The demonstration project shall evaluate and address:

1. potential options for the use of a reclaimed mine site, including the feasibility of residential use and/or long-term forestry on the demonstration project site;

2. the impacts to carbon sequestration as a result of reforestation, and for residential use, the impacts to carbon sequestration when implementing modified standards for lot clustering or transfer of development rights;

3. the need for a site design that compatibly integrates any proposed residential development on the demonstration project site with uses occurring on the adjacent rural or forest production district lands, especially if the proposed residential development utilizes modified standards for lot clustering and/or transfer of development rights;

4. the levels and standards for reclamation of mining sites that are appropriate to their use either for long-term forestry and/or for residential development; and

5. the need to ensure that the demonstration project provides an overall public benefit by providing permanent protection, as designated park or open space, of lands in the vicinity of the demonstration project site that form the headwaters of critical, high valued habitat areas; or that remove the development potential from nonconforming legal parcels in the forest production district; or that provide linkages with other forest production district lands.

I-204 **The four-year cycle shall consider proposed amendments that could be considered in the annual cycle and also those outside the scope of the annual cycle, proposed amendments relating to substantive changes to comprehensive plan policies and development regulations, and proposals to**

alter the UGA Boundary in accordance with applicable provisions of Countywide Planning Policies.

I-205 **In accordance with RCW 36.70A.140 and the State Environmental Policy Act, as applicable, King County shall ensure public participation in the amendment process for comprehensive plan policies and development regulations. King County shall disseminate information regarding public involvement in the comprehensive plan amendment process, including, but not limited to, the following: description of procedures and schedules for proposing amendments to comprehensive plan policies and development regulations; guidelines for participating in the docket process; public meetings to obtain comments from the public or other agencies; provision of public review documents; and dissemination of information relating to the comprehensive plan amendment process on the Internet or through other methods.**

The following policies guide the preparation of amendments and their review by King County.

I-207 **Proposed amendments to the King County Comprehensive Plan, including the Land Use Map, shall be considered by the King County Council only once each calendar year in accordance with the State Growth Management Act and so that the cumulative effect of the proposals can be determined. All proposed Comprehensive Plan amendments should include the following analysis:**

a. Rationale: a detailed statement of what is proposed to be changed and why;

b. Effect: a statement detailing the anticipated outcome of the change on the: geographic area affected, populations affected, and environment;

c. Compliance: a A statement confirming compliance with the:

1. Growth Management Act, including statutory references where applicable;

2. Countywide Planning Policies, including policy references where applicable;

3. King County Strategic Plan, including policy, objective or strategy references where applicable; and

d. Public Review: an indication that the proposed policy amendment was included in the executive's public review draft or a statement of the public review process used to solicit comments on the proposal.

I-208 **Proposed amendments to the comprehensive plan policies should be accompanied by any changes to development regulations, modifications to capital improvement programs, subarea, neighborhood, and functional plans required for implementation so that regulations will be consistent with the plan.**

A financial analysis is critical to all subarea and functional plans in order to evaluate the resources required and the time frame necessary for full implementation. Plan alternatives and costs should be clearly understood and plans should be financially achievable.

I-209 **King County should identify the financial costs and public benefits of proposed subarea and functional plans prior to adoption to ensure that implementation can be appropriately prioritized.**

III. Review and Evaluation

In accordance with the Growth Management Act (GMA), King County and its cities employ an established review and evaluation program through the *King County Benchmark Program*, as provided by the King County Countywide Planning Policies. The purpose of the program is to determine whether the county and its cities are achieving urban densities within urban growth areas by comparing growth and development assumptions, targets, and objectives contained in the Countywide Planning Policies and the county and city comprehensive plans with actual growth and development in the county and cities.

In partnership with the *King County Growth Report*, the *King County Buildable Lands Report* and supplementary monitoring of the King County Comprehensive Plan, the King County Benchmark Program collects and reviews information relating to and including, but not limited to, the following:

- Urban densities;
- Remaining land capacity;
- Growth and development assumptions, targets, and objectives;
- Residential, commercial, and industrial development;
- Transportation;
- Affordable housing;
- Economic development; and
- Environmental quality.

Objectives relating to this review and evaluation include:

- Determining whether a county and its cities are achieving urban densities within urban growth areas by comparing growth and development assumptions, targets, and objectives contained in the Countywide Planning Policies and the county and city comprehensive plans with actual growth and development in the county and cities;
- Determining whether there is sufficient suitable land to accommodate applicable countywide population projections;
- Determining the actual density of housing constructed within the UGA since the adoption of, or since the most recent evaluation of, the comprehensive plan;
- Determining the actual amount of land developed for commercial and industrial uses within the UGA since the adoption of, or since the most recent evaluation of, the comprehensive plan;
- Reviewing commercial, industrial, and housing needs by type and density range to determine the amount of land needed for commercial, industrial, and housing for the remaining portion of the twenty-year planning period used in the most recently adopted comprehensive plan; and
- Adopting and implementing measures intended to promote consistency between estimates of available land capacity, measures of actual development by type, and goals and objectives of city

and county comprehensive plan policies, development regulations, and Countywide Planning Policies. Such measures include, but are not limited to, possible amendments to Countywide Planning Policies as determined necessary by the county and the cities.

I-301 **Monitor and benchmark the progress of the Countywide Planning Policies and King County Comprehensive Plan toward achieving their objectives, inclusive of those relating to the environment, development patterns, housing, the economy, transportation, and the provision of public services. Use results of such monitoring to encourage implementation actions and inform policy revisions as appropriate to achieve the planning objectives found within the Countywide Planning Policies and King County Comprehensive Plan.**

IV. Land Use Designations and Zoning Classifications/Code

The application of zoning classifications on specific properties is the first step towards implementing the land use designations of the comprehensive plan. Boundaries between different zone classifications may follow property lines, natural features or other dividing lines such as roads. A land use designation is implemented by one or more specific zone classification, as indicated on the table below:

Comprehensive Plan Land Uses	Zoning*
Unincorporated Activity Center : White Center	R-12, R-18, R-24, R-48, NB, CB, O, I
Community Business Center	NB, CB, O
Neighborhood Business Center	NB, O
Commercial Outside of Centers	NB, CB, RB, O, I - this is the range of existing zoning in place when the comprehensive plan was adopted
Urban Planned Development	R-1, R-4, R-6, R-8, R-12, R-18, R-24, R-48, NB, CB, RB, O, I
Urban Residential, High	R-18, R-24, R-48
Urban Residential, Medium	R-4, R-6, R-8, R-12
Urban Residential, Low	R-1
Rural City Urban Growth Area	UR The following two zones were in place in the North Bend UGA when the comprehensive plan was adopted in 1994: I, RB
Rural Town	R-1, R-4, R-6, R-8, R-12, R-18, R-24, R-48, NB, CB, RB, O, I
Rural Neighborhood Commercial Center	NB
Rural Area	RA-2.5, RA-5, RA-10, RA-20
Industrial	I
Forestry	F, M
Agriculture	A
Mining	M
Greenbelt/Urban Separator	R-1
King County Open Space System	All zones
Other Parks/Wilderness	All zones

* This is the range of zoning that may be allowed within each comprehensive plan land use designations subject to comprehensive plan and subarea plan policies. Actual zoning on a specific property is determined through the area-wide zoning process or through a quasi-judicial rezone application.

Zoning Designations

A	Agricultural (10 or 35 acre minimum lot area)
F	Forest (80 acre minimum lot area)
M	Mineral
RA	Rural Area (2.5-acre, 5-acre, 10-acre or 20-acre minimum density)
UR	Urban Reserve
R	Urban Residential (base density in dwelling units per acre)
NB	Neighborhood Business
CB	Community Business
RB	Regional Business
O	Office
I	Industrial

The Zoning Code (Title 21A) establishes precise rules for each zoning classification such as permitted residential densities and activities or allowed commercial and industrial development activities, and striving for separation between incompatible uses. This code includes standards relative to bulk (i.e. lot size and coverage, building heights and setbacks, landscape standards).

I-401 **The King County Zoning Code's zone classifications and development standards and the official zoning maps shall be consistent with the comprehensive plan and functional plans.**

V. Other Implementing King County Codes

In addition to the Zoning Code, King County regulates land development and construction based on the comprehensive plan through a variety of technical code standards resulting in permits and approvals for specific projects.

In terms of land use regulation, the most important of these other implementing codes are Land Segregation (K.C.C. Title 19A) and Shoreline Management (K.C.C. Title 25). The Land Segregation code regulates division of a parcel of land into smaller lots for transfer of ownership. The Shoreline Management code regulates the issuance of substantial development permits for lands abutting waters governed by the Washington State Shoreline Management Act.

Other development approvals include commercial or industrial construction permits. Review of land segregation, substantial development permits and other development proposals are key parts of the development process for making sure facilities and services to support potential development are adequate and for evaluating environmental impacts.

I-501 **When needed infrastructure and facilities are not available in a timely manner, development approvals shall either be denied or divided into phases, or the project proponents should provide the needed facilities and infrastructure to address impacts directly attributable to their project, or as may be provided by the proponent on a voluntary basis.**

I-502 **King County's permitting systems should provide for expeditious review of projects consistent with zoning and adopted policies.**

I-503 **Subdivision, short subdivision and other development approvals, including those requiring detailed environmental review under the State Environmental Policy Act (SEPA) shall be reviewed for consistency with the comprehensive plan, zoning, community, subarea plans, functional plans and capital improvement programs.**

I-504 **King County shall enforce its land use and environmental regulations by pursuing code enforcement complaints, and providing oversight during the process of site development on all sites for which it issues permits.**

I-505 **King County shall develop, as a part of the buildable lands analysis, a zoning yield and housing production monitoring program to determine whether housing capacity is being lost in the context of compliance with the Endangered Species Act, and shall propose revisions to the countywide planning policies to implement such a program.**

VI. Incentives

To ensure that the vision, goals, objectives, and policies of this plan become a reality, it will require adjusting policy and budget priorities by King County government. It will also require individuals to reconsider their daily decisions and choices relating to the management or development of their lands, as well as the decisions and choices of large scale public/private partnerships during the development of major projects will be critical factors contributing to the effective implementation of this plan. Incentives, like the Transfer of Development Rights Program, must encourage the types of growth and development patterns desired by King County and its residents.

I-601 **King County should develop incentives for the Urban Growth Area that encourage the development industry to provide a broad range of housing and business space. Incentives could include:**

- **a. Identification of geographic areas with infill opportunities, granting them budget priority status and subjecting new development in these areas to more flexible standards;**
- **b. Density bonuses for site designs which provide public benefits (for example, grid roads that connect with other developments and limit impacts on arterials);**
- **c. Incentives which lower financial development risk;**
- **d. Joint development opportunities at county-owned or operated facilities, utilization of air rights on county-owned or operated facilities, and the establishment of transit-supportive design guidelines; and**
- **e. County capital improvement funding for public urban amenities including transportation, parks, open space, cultural and other facilities for cities participating in the King County Transfer of Development Rights Program.**

Glossary

Active Recreation Site

Active recreation sites recognize a higher level of public use and will require developed areas for organized or intense recreation. An active recreation site includes both the active recreation uses and all necessary support services and facilities.

Adaptive management

Adaptive management is a systematic approach for continually improving management policies and practices by learning from the outcomes of operational programs.

Agricultural activities

Agricultural activities means agricultural uses and practices including, but not limited to: producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation.

Agricultural Production Districts (APD)

The Growth Management Act requires cities and counties to designate, where appropriate, agricultural lands that are not characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products. The comprehensive plan designates Agricultural Production Districts where the principal land use should be agriculture. Lands within Agricultural Production Districts should remain in parcels large enough for commercial agriculture. (See Chapter 3, Rural Area and Natural Resource Lands.)

Agricultural products

Agricultural products include, but are not limited to: horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within twenty years of

planting; and livestock, including both the animals themselves and animal products including, but not limited to, meat, upland finfish, poultry and poultry products, and dairy products.

Annexation

Annexation is the process of adding or incorporating an area into a city's jurisdiction.

Applicant

An applicant is a property owner, a public agency or a public or private utility that owns a right-of-way or other easement or has been adjudicated the right to such an easement under RCW 8.08.040, or any person or entity designated or named in writing by the property or easement owner to be the applicant, in an application for a development proposal, permit or approval.

Arterial Functional Classification

Arterial functional classification is the division of a road system into a number of categories according to the function of each road. The degree to which the road serves movement of traffic or access to adjacent properties is the basis for its classification. Principal arterials provide for movement across large areas, serving predominantly “through traffic.” Minor arterials provide movement to abutting properties and to arterials within large areas bound by principal arterials. Collector arterials serve smaller areas by “collecting” traffic to or from abutting properties and funneling it to and from the transportation system.

Biodiversity

Biodiversity, or biological diversity, is the variety of living organisms considered at all levels, from genetic diversity through species, to higher taxonomic levels, and includes the variety of habitats, ecosystems, and landscapes in which the species are found.

Brownfields

Brownfields are defined as vacant or underdeveloped industrial/commercial sites with real or perceived contamination.

Buffer

A buffer is a designated area contiguous to a steep slope or landslide hazard area intended to protect slope stability, attenuation of surface water flows and landslide hazards, or a designated area contiguous to and intended to protect and be an integral part of an aquatic area or wetland.

Capital Improvement Program (CIP)

The Adopted Capital Improvement Program budget allocates funds from various revenue sources to improve cultural and recreational opportunities for King County citizens, build needed transportation

facilities, protect our investment in existing buildings, protect the health of our citizens, enhance the management of natural resources, and provide necessary capital resources for our law, safety, and justice system.

Channel migration hazard area, moderate

A portion of the channel migration zone, as shown on King County's Channel Migration Zone maps, which lies between the severe channel migration hazard area and the outer boundaries of the channel migration zone.

Channel migration hazard area, severe

A portion of the channel migration zone, as shown on King County's Channel Migration Zone maps, which includes the present channel. The total width of the severe channel migration hazard area equals one hundred years times the average annual channel migration rate, plus the present channel width. The average annual channel migration rate as determined in the technical report is the basis for each Channel Migration Zone map.

Channel Migration Zone

Channel migration zones are those areas along a river channel within which the channel(s) can be reasonably predicted, based on best available science, to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings.

Clearing

Clearing includes cutting, killing, grubbing or removing vegetation or other organic plant material by physical, mechanical, chemical or any other similar means. For the purpose of this definition of clearing, cutting means the severing of the main trunk or stem of woody vegetation at any point.

Clustering

Clustering means developing a subdivision that reduces the individual lot areas to create permanent open space or a reserve for future development while it maintains the zoned residential density.

Community Business Centers

These are primarily retail developments designed to serve a nearby market area of 15,000 to 40,000 people. (See Chapter 2, Urban Communities.)

Comprehensive Plan

The state of Washington's Growth Management Act requires certain cities and counties of the state to adopt comprehensive land use plans. A comprehensive plan is a generalized, coordinated land use policy statement of the governing body of a county or city that is adopted pursuant to the Growth Management Act. A comprehensive plan consists of a map or maps; descriptive text covering objectives, principles, and standards used to develop the comprehensive plan; and a plan, scheme or design for land use, housing, capital facilities, utilities, rural areas, and transportation. Optional components include elements relating to conservation, solar energy, recreation, and subarea plans.

Concurrency Management System

The Growth Management Act requires jurisdictions to adopt and enforce ordinances that prohibit development approval if the development causes the level of service on a transportation facility to decline below the standards adopted in the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made "concurrent" with the development. Concurrent with development means that transportation improvements or strategies are in place at the time of development or that financial commitment is made to complete the improvements or strategies within six years. The Concurrency Management System of King County establishes a process to manage new development based on transportation impacts on levels of service and the concurrency of needed improvements or actions. (See Chapter 7, Transportation).

Coordinated Water System Plans

Four Critical Water Supply Service Areas have been designated in King County in accordance with the Public Water System Coordinated Act of 1977 (chapter 70.116 RCW): East King County, Skyway, South King County, and Vashon Island. The Coordinated Water System Plan for each area provides an assessment of water supply and a program to meet future demand. Planning areas, within which a water purveyor is obligated to provide service consistent with county land use plans and regulations, were assigned for major purveyors.

Countywide Planning Policies (CPP)

The Growth Management Act requires that counties, as regional governments within their boundaries, prepare countywide planning policies which establish a countywide framework from which county and city comprehensive plans are to be developed and adopted. This framework is to ensure that city and county comprehensive plans are consistent. The King County Countywide Planning Policies were developed and recommended by the Growth Management Planning Council and are to serve as a blueprint for how King County and its cities should grow over the next 20 years. The Metropolitan King County Council adopted these policies in 1992. Since this time, amendments called "Phase II Countywide Planning Policies" have been made to the sections pertaining to affordable housing, economic development and rural character. The County Council has adopted these Phase II amendments. (See Chapter 1, Regional Growth Management Planning.)

Critical Areas

The Growth Management Act requires cities and counties to designate, where appropriate, critical areas which include: 1) wetlands, 2) areas with a critical recharging effect on aquifers used for potable water, 3) fish and wildlife habitat conservation areas, 4) frequently flooded areas, and 5) geologically hazardous areas. (See Chapter 4, Environment, for King County's designation of critical areas.)

Critical Habitat

Critical habitat includes specific areas that possess physical or biological features, which are essential to the conservation of a listed species.

Cultural Resources

Cultural resources include performing and visual arts events, programs and facilities; public art; heritage events, programs and facilities; and historic properties.

Cumulative impacts

Cumulative impacts are the sum total of the current, plus any reasonably foreseeable future disturbances to ecological functions, which can be impacted by both development subject to shoreline permits and by development that is not subject to permits.

Deficiency

Deficiency in a comprehensive plan or development regulation refers to the absence of required or potentially desirable contents of a comprehensive plan or development regulation.

Density

Density is the quantity of structures or buildings per unit area. Density is typically expressed as housing units per acre or square mile.

Density Incentives/Bonuses

Density incentives, or density bonuses, are programs that allow more dwelling units than the number permitted on a site by zoning (sometimes referred to as "base density") in exchange for public benefits provided by the developer. King County has incorporated use of density incentives with standard urban subdivision, mobile home park, and multifamily development projects. (King County Code, Title 21A)

Development

For purposes of the shoreline master program, development means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removing sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to any state of water level.

Development regulations

Development regulations means the controls placed on development or land uses by a county or city, including, but not limited to: zoning ordinances, critical areas ordinances, all portions of a shoreline master program other than goals and policies approved or adopted under chapter 90.58 RCW, planned unit development ordinances, subdivision ordinances, and binding site plan ordinances together with any amendments thereto.

Docket

A list of suggested changes to a comprehensive plan or development regulations maintained by the department.

Docket Process, The

The docket process specifies that dockets are not just to note deficiencies, but also to suggest changes and make written comments. These suggested changes are reviewed by the county and made available for review by the public. Information provided to the public will include the county's response. An Internet docket process is available and can be found at:
http://www.kingcounty.gov/property/permits/codes/growth/CompPlan/amend/docket.aspx.

Docketing

Docketing means compiling and maintaining a list of suggested changes to the comprehensive plan or development regulations in a manner that will ensure such suggested changes will be considered by the county and will be available for review by the public.

Drainage Basin

A drainage basin, like a watershed, is an area that drains to a common outlet or an identifiable water body such as a river, stream, lake or wetland. In King County, 72 drainage basins are contained within six major watersheds. These drainage basins in turn contain numerous individual water bodies with small drainages.

Dredging

Dredging is the removal, displacement, or disposal of unconsolidated earth material such as sand, silt, gravel, or other submerged materials, from the bottom of water bodies, ditches, or natural wetlands. Maintenance dredging and/or support activities are included in this definition.

Dwelling unit

A dwelling unit consists of one or more rooms designed for occupancy by a person or household for living and sleeping purposes, containing kitchen facilities and rooms with internal accessibility, for use solely by the dwelling's occupants. Dwelling units include but are not limited to efficiency and studio apartments, factory-built housing and mobile homes.

Ecological Function

An ecological function refers to physical, chemical, and biological processes or attributes at some level of biological organization. For example, the ecological functions of wetlands includefood chain support, water quality maintenance, flood storage, and wildlife habitat.

Ecoregions

Ecoregions are land areas that contain a geographically unique set of species, communities, and environmental conditions.

Ecosystem

Ecosystem means the complex of a community of organisms and its environment functioning as an ecological unit.

Ecosystem-wide processes

Ecosystem-wide processes means the suite of naturally occurring physical and geologic processes of erosion, transport, and deposition; and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat and the associated ecological functions.

Emissions Trading

Emissions trading means the transfer in ownership of emission reductions. Emission trading occurs when a source of air pollution reduces its emissions and then transfers ownership of the emission reduction to another party. Markets for emission reductions can be created by regulation (the market for sulfur dioxide allowances for example) or voluntarily (the current market for greenhouse gases).

Endangered Species

Endangered species means any species which is in danger of extinction throughout all or a significant portion of its range and which has been designated as such in regulations issued by the U.S. Fish and Wildlife Service or the state of Washington Department of Fish and Wildlife.

Endangered Species Act (ESA)

The Endangered Species Act is an act that was adopted by the U.S. Congress in 1973 to provide a means to conserve ecosystems upon which endangered and threatened species depend and to provide a program for the conservation for such endangered and threatened species.

Endemic Species

Endemic species (or habitats or ecosystems) are those that are native to, and occur only in, a particular area or locale. Endemic species generally have very specific adaptive requirements that are linked to particular habitat or ecosystems that are rare (e.g., Townsend's big-eared bats and caves). Even small changes in the ecosystem are likely to cause localized extinctions of these species.

Enhance

Enhance means to increase or improve one or more of the functions, attributes, or values that an ecosystem or environmental feature possesses. (See Chapter Four, Environment).

Environmentally Sensitive Areas

Environmentally sensitive areas include: coal mines; areas that are prone to erosion, floods, landslides, or seismic activity; steep slopes; volcanic hazard areas; and streams, wetlands and protection buffers.

Fair Housing Ordinance

King County's Fair Housing Ordinance prohibits housing discrimination on the basis of race, color, religion, national origin, age, sex, marital status, parental status, use of Section 8 subsidy, sexual orientation, disability or the use of a trained guide dog.

Family-Wage Jobs

Family-wage jobs are jobs that pay more than the average annual wage for King County in a given year and therefore enable a worker to support a family.

Feasible

Feasible means, for the purpose of this program, that an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions:

(a) The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;
(b) The action provides a reasonable likelihood of achieving its intended purpose; and
(c) The action does not physically preclude achieving the project's primary intended legal use.

In cases where these guidelines require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frames.

FEMA floodway

A FEMA (Federal Emergency Management Agency) floodway is the channel of the stream and that portion of the adjoining floodplain that is necessary to contain and discharge the 100-year flood flow without increasing the base flood elevation more than one foot.

Fill

Fill means the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the ordinary high water mark (OHWM), in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

Flood Hazard Management Plan

The King County Flood Hazard Management Plan contains policies and program and project recommendations that guide floodplain use and development throughout King County.

Floodplain

Floodplain is the total area subject to inundation by the 100-year flood.

Floodway, zero-rise

Floodway zero-rise is the channel of a stream and that portion of the adjoining floodplain that is necessary to contain and discharge the base flood flow without any measurable increase in base flood elevation.

A. For the purpose of this definition, measurable increase in base flood elevation means a calculated upward rise in the base flood elevation, equal to or greater than 0.01 foot, resulting from a comparison of existing conditions and changed conditions directly attributable to alterations of the topography or any other flow obstructions in the floodplain. Zero-rise floodway is broader than that of the FEMA floodway but always includes the FEMA floodway.
B. Zero-rise floodway includes the entire floodplain unless a critical areas report demonstrates otherwise.

Forest practice

Forest practice is any forest practice as defined in RCW 76.09.020.

Forest Production Districts (FPD)

The Growth Management Act requires cities and counties to designate, where appropriate, forest lands that are not characterized by urban growth and that have long-term significance for the commercial production of timber. The Comprehensive Plan designates Forest Production Districts where the primary use should be commercial forestry. Lands within the Forest Production District shall remain in large parcels and in ownership conducive to forestry. (See Chapter 3, Rural Area and Natural Resource Lands).

Fully Contained Community (FCC)

A fully contained community (FCC) is a site-specific development project consisting of conceptual site plan(s), development standards, processing and other elements. It is also consistent with the criteria provided in RCW 36.70A.350 which states that FCCs should be located outside of the initially designated Urban Growth Area.

Functional Classification

See "Arterial Functional Classification"

Functional Planning

Functional plans are detailed plans for facilities and services and action plans and programs for other governmental activities. Some functional plans are operational or programmatic, which means they guide daily management decisions. Others include specific details of facility design and location and must be consistent with the Comprehensive Plan and development regulations. Functional plans are prepared by

King County, independent special purpose districts or other public and private agencies. (See Chapter 9, Implementation)

Geotechnical report or geotechnical analysis

Geotechnical report or geotechnical analysis means a scientific study or evaluation conducted by a qualified expert that includes: a description of the ground and surface hydrology and geology; the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes; conclusions and recommendations regarding the effect of the proposed development on geologic conditions; the adequacy of the site to be developed; the impacts of the proposed development; alternative approaches to the proposed development; and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.

Global Warming

Global warming is an increase in worldwide atmospheric temperature and resulting alterations in climate.

Grading

Grading is any excavation, filling, or removal of the duff layer or any combination thereof.

Groundwater Management Plans

King County has five Groundwater Management Areas (GWMA) for which citizens and technical experts are addressing groundwater issues. For each GWMA, a Groundwater Management Plan (GWMP) has been developed per chapter 173-100 WAC (chapter 90.44 RCW). Each GWMP describes the area's groundwater resource, contains a detailed exploration of groundwater protection issues, and proposes solutions to perceived threats. These plans identify Sensitive Aquifer Areas to receive a special level of protection.

Growth Management Act (GMA)

In 1990 and 1991, the Washington State Legislature passed the Growth Management Act (GMA). The GMA calls for urban counties and cities in the state to develop comprehensive plans to guide growth management decisions. Amendments to the Act in 1991 require that counties, working with the cities within their boundaries, develop Countywide Planning Policies to provide a common vision of the future to serve as the framework for all comprehensive plans throughout the county. (See Chapter 1, Regional Growth Management Planning)

Growth Management Planning Council (GMPC)

The Growth Management Planning Council (GMPC), which was established by an interlocal agreement, is a council of elected officials from Seattle, Bellevue, suburban cities, special purpose districts, the Port of Seattle, and King County. The GMPC is responsible for the preparation and recommendation of the Countywide Planning Policies to the Metropolitan King County Council, which then adopts the policies and sends them to the cities for ratification.

Habitat

Habitat is the area where wildlife normally lives and grows. Habitat components include food, water, cover (security, breeding, thermal) and space.

Habitat Network

Habitat network is a system of fish and wildlife habitat where connections between large habitat blocks and open spaces are necessary for the support of fish and wildlife through their life cycles.

Healthy Community

Healthy community (communities) means a community that makes it easier for people to live healthy lives by: encouraging mixed land use and greater land density to shorten distances between housing, workplaces, schools and recreation so people can walk or bike more easily to them; incorporating good pedestrian and bicycle infrastructure, including sidewalks and bike paths that are safely removed from automobile traffic; providing opportunities for people to be physically active and socially engaged as part of their daily routine; including access to open space and parks; allowing people, if they choose, to age in place and remain in their community as their lifestyle changes or they face changing physical capabilities; and ensuring access to affordable and healthy food, especially fruits and vegetables.

Healthy Housing

Healthy housing means housing that protects all residents from exposure to harmful substances and environments, reduces the risk of injury, provides opportunities for safe and convenient daily physical activity, and assures access to healthy food and social connectivity.

Historic Properties

Historic properties include historic buildings, sites, objects, districts and landscapes, prehistoric and historic archaeological resources, and traditional cultural places.

Historic Property, Significant

Significant historic properties are those properties that meet the criteria for designation as County landmarks and/or listing in the National Register of Historic Places.

Impervious surface

An impervious surface is a surface that prevents, retards, or otherwise alters the entry of water into the soil mantle as compared to natural conditions prior to development; and/or a hard surface area that causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots and gravel roads.

Incorporated Areas

Incorporated areas are those areas within a city or a city's jurisdiction. King County contains the entirety of 39 incorporated cities and parts of two others.

Infill

Infill means development or redevelopment on small properties or groups of properties within existing built-up areas.

Initial Project Needs

Initial project needs are road improvement projects needed to address the impacts of a specific development. The projects must be concurrent with the development.

Keystone Species

Keystone species are those that exert a significant effect on the structure of the biological community of which they are a part. These species often prevent dominance by a single species and thereby maintain diversity in the community.

Landfill

Landfill is a disposal site or part of a site at which refuse is deposited.

Land Use Map

The land use map for the Comprehensive Plan designates the general location and extent of the uses of land for agriculture, timber production, housing, commerce, industry, recreation, open spaces, public utilities, public facilities, and other land uses as required by the Growth Management Act. The Land Use Map is not included in the Plan because it is very large; however a smaller representation of it is reproduced at the end of Chapter 1 of this Comprehensive Plan. The full size map is available for review at the Department of Development and Environmental Services and at the Clerk of the King County Council.

Level of Service – Transportation (LOS)

Transportation LOS is a qualitative measure describing the operational conditions of the transportation system as experienced by travelers.

Locally Significant Resource Areas (LSRAs)

LSRAs contribute to the aquatic resources within a specific basin, when compared to aquatic and terrestrial systems of similar size and structure elsewhere in the basin. They also provide wetland and stream habitat that is important for wildlife and salmonid diversity and abundance within the basin. (See Chapter 4, Environment)

Long term commercial signifcance

Long-term commercial significance is defined in WAC 365-190-030(11) to include the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land's proximity to population areas, and the possibility of more intense uses of land. Long-term commercial significance means the land is capable of producing the specified natural resources at commercially sustainable levels for at least a twenty-year planning period, if adequately conserved. Designated mineral resource lands of long-term commercial significance may have alternative post-mining land uses, as provided by the Surface Mining Reclamation Act, comprehensive plan and development regulations, or other laws.

Low Impact Development (LID)

LID is an approach to land development that works to match a site's natural hydrologic function by protecting native vegetation and soils, reducing impervious surface and managing stormwater at the source.

Master Planned Resorts

RCW 36.70A.360 defines a Master Planned Resort as a self-contained and fully integrated planned unit development, in a setting of significant natural amenities, with primary focus on destination resort facilities consisting of short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreation facilities. A master planned resort may include other residential uses within its boundaries, but only if the residential uses are integrated into and support the on-site recreational nature of the resort.

May

See definition for “shall”

Median Household Income

The median household income is the income level at which half of all households has higher income and the other half haslower income.

Mineral Resource Sites

The Growth Management Act requires cities and counties to designate, where appropriate, mineral resource lands that are not already characterized by urban growth and that have long-term significance for the extraction of minerals. The comprehensive plan designates as Mineral Resource Sites existing, approved mining sites, and also designates as Potential Mineral Resource Sites properties on which King County expects some future mines may be located. (See Chapter 3, Rural Area and Natural Resource Lands)

Mitigation Bank

A mitigation bank is a property approved by the appropriate county, state and federal agencies for restoration, creation, or enhancement to compensate for adverse impacts to wetlands caused by the development of public agency facilities and utility facilities.

Mitigation Payment System

This impact fee system establishes a requirement that new growth and development pay a proportionate share of the cost of needed transportation improvements. The mitigation payment system is authorized by state growth management legislation. (See Chapter 7, Transportation)

Mixed Use

Mixed use refers to a development with combined commercial and residential uses.

Mode Split

Mode split is the percentage of a specific mode's use from among all modes of travel. For example, if 25 trips out of 100 total trips are made by bus, the bus mode split is 25 percent. Modes of travel include single-occupant vehicles, transit, carpooling, bicycling, walking, and other modes.

Multifamily Housing

Multifamily housing structures are those with more than one unit. Multifamily housing includes duplexes, apartments and condominiums.

Must

See definition for "shall"

Natural Area

Natural areas are those properties in the county's natural lands inventory whose primary purpose is to conserve and restore ecological value. They may not be completely natural and undisturbed but may be important in preserving rare or vanishing flora, fauna, geological sites or features of scientific, traditional, cultural, or educational value. These sites may allow public use that does not harm the ecological resources of the site. Also referred to as Ecological Lands or Ecological sites.

Neighborhood Business Centers

Neighborhood Business Centers are shopping areas that offer convenience goods and services to local residents. They primarily contain retail stores and offices. (See Chapter 2, Urban Communities)

New Growth

New growth is growth that occurs subsequent to pipeline development for which no application is currently pending review/approval in the King County permitting process, but which is forecasted to occur over the next 20 years in this comprehensive plan.

Nondegradation

Nondegradation means to prevent the decline to a lower state, to keep from reducing the complexity, functions, or integrity of ecological processes or values.

Nonmotorized Transportation

Nonmotorized transportation refers to pedestrian, bicycle, and equestrian travel, and the facilities needed to support such travel. For purposes of this Comprehensiove Plan, wheelchairs, personal assistive mobility devices or scooters powered by electricity and used by physically impaired persons shall be considered nonmotorized transportation. Any motorized foot scooter, motor-driven cycle, moped, motor-powered bicycle, a motorcycle or, except as provided above, personal assistive mobility device shall be considered motorized transportation.

Non-point Pollution

Non-point pollution is pollution that enters any waters of the state from any dispersed land-based or water-based activities, including but not limited to atmosphere disposition, surface water runoff from agricultural lands, urban areas, or forest lands, subsurface or underground sources, or discharges from boats or marine vessels.

Open Space System, King County

King County's Open Space System is a regional system of *county-owned* parks, trails, natural areas, working agricultural and forest resource lands, and flood hazard management lands. This regional

network of open spaces provides benefits to county residents including recreation, conservation of natural and working lands, flood hazard management, wildlife habitat, and connection of critical areas. (See Chapter 6, Parks, Open Space and Cultural Resources)

Opportunity Mapping

Opportunity mapping assesses the conditions present in neighborhoods across a region by examining indicators of opportunity in areas such as education, economy, transportation, housing, environment, and health. Opportunity mapping provides a comprehensive analytical framework to measure opportunity in the region and to determine who has access to opportunity-rich areas. Analysis of opportunity mapping can provide valuable information about where more affordable housing needs to be located, and what needs to be remedied in areas where these types of opportunities are currently very limited.

Particulate Matter

Particulate matter is solid or aerosol particles dispersed in the air including dust, soot, and oil. The major sources are industrial activities, fugitive road dust, motor vehicle emissions, and wood smoke.

Passive Recreation Site

Passive recreation sites require a lower level of development and provide areas for informal, self-directed activities for individuals and groups.

Pervious surface

A pervious surface is an area that allows the entry of water into the soil mantle, as under natural conditions prior to development.

Pipeline Development

Pipeline Development is comprised of land use development applications, whether vested or unvested, that were submitted prior to adoption of the King County Comprehensive Plan and are pending review/approval in the permitting process.

Pipeline transportation needs

Pipeline transportation needs are associated with growth that is pending through the county's development review process.

Point Pollution

Point pollution is pollution that enters any waters of the state from an identifiable source such as a pipe.

Potential Annexation Area (PAA)

A Potential Annexation Area is an area in unincorporated King County adjacent to a city that is expected to annex to the city and to which that city will be expected to provide services and utilities within the next two decades. (See Chapter 2, Urban Communities)

Precautionary Action

Precautionary action, also referred to as the "no risk approach," means in such instances where an absence of valid scientific information or incomplete scientific information relating to the county's critical areas, leading to uncertainty about whether development and land uses could lead to harm of critical areas or uncertainty about the risk to critical area function, such development and land use activities are strictly limited until the uncertainty is sufficiently resolved.

Preserve/Preservation

Preserve/preservation, as used in Chapter 2, Urban Communities, and Chapter 8, Services, Facilities and Utilities, regarding affordable housing, means the process of protecting the availability of affordable housing, especially publicly-assisted affordable housing, for low and moderate income households when transitions from current assistance programs or affordable housing uses are planned. Preservation may occur through acquisition of the housing by a non-profit or public agency or through funding mechanisms that include a covenant or similar legal agreement requiring that the units in the property remain affordable to a designated household income-level for an extended period of time, such as 15 years, 30 years or 50 years. (See “Rehabilitate”)

Priority habitat

Priority habitat means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes:

- Comparatively high fish or wildlife density;
- Comparatively high fish or wildlife species diversity;
- Fish spawning habitat;
- Important wildlife habitat;
- Important fish or wildlife seasonal range;
- Important fish or wildlife movement corridor;
- Rearing and foraging habitat;
- Important marine mammal haul-out;
- Refugia habitat;
- Limited availability;
- High vulnerability to habitat alteration;
- Unique or dependent species; or
- Shellfish bed.

A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows). A priority habitat may also be described by a successional stage (such as old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as a consolidated marine/estuarine shoreline, talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or nonpriority fish and wildlife. [WAC 173-26-020 (24)]

Priority Species

Priority species means species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed below.

(a) Criterion 1. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by the department of fish and wildlife (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.

(b) Criterion 2. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate. Examples include heron colonies, seabird concentrations, and marine mammal congregations.

(c) Criterion 3. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.

(d) Criterion 4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

Protect

Protect means to keep from harm, attack, injury, or destruction; to maintain the integrity of, especially through environmental care.

Public Benefit Rating System (PBRS)

The Public Benefit Rating System (PBRS) is a current use taxation program whereby property taxes are reduced by an amount determined by a scoring system related to the numbers and quality of open space resources located on all or portions of the property.

Puget Sound

Puget Sound is an estuary—a semi-enclosed, glacial fjord where salt water from the ocean is mixed with fresh water. Puget Sound is bordered by about 1,300 miles of shoreline with a mix of beaches, bluffs, deltas, mudflats, kelp forests and eelgrass meadows. Approximately 100 miles of this saltwater shoreline lie within King County. King County's immediate responsibilities include those portions of Puget Sound which lie within the county, roughly between Point Wells to the north and Dumas Bay to the south. King County shares responsibility for the health of the main basin of Puget Sound with its neighbors—Pierce County, Kitsap County, and Snohomish County.

Puget Sound Regional Council (PSRC)

The PSRC is the designated metropolitan planning organization for the four-county region that includes King, Pierce, Snohomish and Kitsap counties, and is responsible for regional growth management and transportation planning. The PSRC's General Assembly includes mayors, county executives, and council commission members from the four counties, as well as representatives from local tribes, ports, transit agencies, the State Department of Transportation and Transportation Commission. The PSRC prepared Multi-county Planning Policies for the four-county region.

Rare Species

Rare species, habitats, and ecosystems are those that are few in number or are poorly represented in an area. Rare species often lack the capability to resist changes in environmental conditions or lack the resilience to recover after a change. Species, habitats, and ecosystems may be rare because of the following reasons: changing natural conditions have reduced their range, abundance, or distribution; they depend on specific environmental conditions that are not commonly represented in this area (species or habitats at the edge of their range or occurring as relicts); and anthropogenic (human-related) actions have caused habitat loss or severe decreases in range or abundance.

Reclaimed Water

Reclaimed water means effluent from a wastewater treatment system that has been adequately and reliably treated, so that as a result of that treatment it is suitable for a beneficial use or a controlled use that would not otherwise occur, and is no longer considered wastewater. Reclaimed water may be used for beneficial purposes such as landscape and agricultural irrigation, heating and cooling, industrial processing, and environmental enhancement or restoration of streams, wetlands, and aquifers.

Regionally Significant Resource Area (RSRA)

RSRAs are those portions of watersheds that contribute to the resource base of the entire Puget Sound region by virtue of exceptional species and habitat diversity and abundance when compared to aquatic

and terrestrial systems of similar size and structure elsewhere in the region. RSRAs may also support rare, threatened or endangered species or communities. (See Chapter 4, Environment)

Regional Wastewater Services Plan (RWSP)

King County adopted the Regional Wastewater Service Plan (RWSP) in 1999. The RWSP outlines a number of important projects, programs, and policies for King County to implement through 2030 to continue to protect public health and water quality and ensure sufficient wastewater capacity to meet future growth needs. RWSP policies guide the phasing and size of treatment facilities and improvements to the conveyance system, as well as improvements to control combined sewer overflows. The RWSP also includes policies that guide the production and use of biosolids and reclaimed water.

Rehabilitate/Rehabilitation

Rehabilitate or rehabilitation, as used in Chapter 2, Urban Communities, and Chapter 8, Services, Facilities and Utilities, regarding affordable housing, means as repairs, improvements, replacements, alterations, and additions to existing properties that bring them into full compliance with existing building and health codes. Rehabilitation may be minor, moderate, or substantial; or it may involve adaptive reuse from nonresidential to residential uses. Rehabilitation of housing is undertaken to improve and revitalize housing stock that is aging or in poor condition. When public funding is used for rehabilitation it is usual to require a covenant or other legal mechanism to preserve the affordability of the rehabilitated property. (See “Preserve”)

Resource Lands, designated

The Growth Management Act requires cities and counties to designate natural resource lands which include the following: 1) agricultural lands that have long-term significance for the commercial production of food or other agricultural products; 2) forest lands that have long-term significance for the commercial production of timber; and 3) mineral resource lands that have long-term significance for the extraction of minerals. The Comprehensive Plan designates Agricultural Production Districts, Forest Production Districts, and Mineral Resource Sites. (See Chapter 3, Rural Area and Natural Resource Lands)

Restore

Restore means to return land and water resources from a disturbed or altered condition to an approximation of their condition prior to disturbance or alteration. Restoration projects are conducted by public agencies through capital improvement projects and by developers as a means to mitigate adverse impacts of their proposals. (Restoration of land is not required of developers when they protect land and water resources according to King County regulation.) (See Chapter 4, Environment)

Rezones

Rezoning is the term that refers to the process of individual requests and applications to change the zoning classification of land.

Riparian

Pertains to the banks of rivers and streams, and also sometimes wetlands, tidewater and lakes.

Rural Area (See also Rural Zoning)

The Growth Management Act requires that counties designate a rural area in order to conserve the rural character and quality of the existing rural lands in Washington. King County's Rural Area refers to all of rural unincorporated King County. The rural area contains very low-density residential development, commercial and industrial development, farms, forests, watersheds crucial for both fisheries and flood hazard management, mining areas and towns, historic sites and buildings, archaeological sites and regionally important recreation areas. (See Chapter 3, Rural Area and Natural Resource Lands)

Rural Character

Rural character refers to the pattern of land use and development established by a county in the rural element of its comprehensive plan:

(a) In which open space, the natural landscape, and vegetation predominate over the built environment;
(b) That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;
(c) That provide visual landscapes that are traditionally found in rural areas and communities;
(d) That are compatible with the use of the land by wildlife and for fish and wildlife habitat;
(e) That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;
(f) That generally do not require the extension of urban governmental services; and
(g) That are consistent with the protection of natural surface water flows and groundwater and surface water recharge and discharge areas

Rural Cities

King County's rural cities are incorporated areas within the rural area whose local governments are involved in the region's planning processes on an equal legal basis with the suburban cities and Seattle. The incorporated rural cities are Black Diamond, Carnation, Duvall, Enumclaw, North Bend, Skykomish and Snoqualmie. (See Chapter 3, Rural Area and Natural Resource Lands)

Rural Growth

Rural Growth refers to residential, commercial, and industrial growth that is scaled to be compatible with, and maintains the traditional character of the Rural Area. Rural growth typically does not require urban governmental services except in the case of some rural towns and to protect the environment as provided in this Comprehensive Plan. The basic elements of "Rural Character," as defined by the King County Countywide Planning Policies, are natural features, resource-based industries, rural towns, rural neighborhoods, rural infrastructure and services, open space system, rural housing, rural economy, and rural cities.

Rural Neighborhood Commercial Centers

Rural Neighborhood Commercial Centers are small commercial developments, or in some cases, historic towns or buildings, that are too small to provide more than convenience shopping and services to surrounding residents. They generally do not have services such as water supply or sewage disposal systems any different from those serving surrounding rural residential development. (See Chapter 3, Rural Area and Natural Resource Lands)

Rural Towns

Rural towns are unincorporated towns governed directly by King County. They provide a focal point for community groups such as chambers of commerce or community councils to participate in public affairs. The purposes of rural town designations within the Comprehensive Plan are to recognize existing concentrations of higher density and economic activity in rural areas and to allow modest growth of residential and economic uses to keep them economically viable into the future. (See Chapter 3, Rural Area and Natural Resource Lands)

Rural Zoning

The rural zone is meant to provide an area-wide, long-term, rural character and to minimize land use conflicts with nearby agricultural, forest or mineral extraction production districts. These purposes are accomplished by: 1) limiting residential densities and permitted uses to those that are compatible with rural character and nearby resource production districts and are able to be adequately supported by rural service levels; 2) allowing small scale farming and forestry activities and tourism and recreation uses which can be supported by rural service levels and which are compatible with rural character; and 3) increasing required setbacks to minimize conflicts with adjacent agriculture, forest or mineral zones. "Rural Area" is a land use classification as designated on the Comprehensive Plan Land Use Map.

Salmonid

A member of the fish family Salmonidae. In King County, salmonid species include Chinook, Coho, chum, sockeye, and pink salmon; cutthroat, rainbow, and brown trout and steelhead; Dolly Varden, brook trout, char, kokanee, and whitefish.

Satellite System Management

When large water utilities oversee the operations of smaller water systems, not connected to their own system, it is called satellite system management. The satellite system manager is hired by the smaller system to operate and maintain the system in accordance with local, state and federal health regulations.

Sediment Transport

Sediment transport is the process of taking soil from one place and depositing it in another via the flow of water. Deposition of the soil occurs when sediment in the water flow is more than the flow can transport.

Sensitive Areas Map Folio

The folio displays the location of environmentally sensitive areas in unincorporated King County. It identifies sensitive areas for wetlands, streams, flood hazards, erosion hazards, landslide hazards, seismic hazards, and coal mine hazards.

Sensitive Species

Sensitive species means any species that is likely to become an endangered species within the foreseeable future throughout all or significant portion of its range and which has been designated as such in regulations issued by the U.S. Fish and Wildlife Service or the Washington State Department of Fish and Wildlife.

Sewer Availability

Sewer availability means the presence of sewers now or within six years through extensions included in adopted sewer comprehensive plans. In the case of Urban Planned Development, 1) the capacity to intercept and treat waste water as evidenced by a King County approved sewer system plan or a Metro utility plans, 2) a firm commitment to serve an area with sewer as evidenced by either a sewer availability certificate, utility extension agreement, or an approved sewer system plan and 3) a firm financial commitment to provide sewer, as evidenced by either a capital improvement program or utility extension agreement.

Sewer Tightline

Tightlining of sewers means that a sewer line is designed and sized to only serve a particular structure.

Shall

To guide King County, the use of the terms “shall,” “will,” “should,” and “may” in policies determine the level of discretion the county can exercise in making future and specific land use, budget, development regulation and other decisions. “Shall” and “will” in a policy mean that it is mandatory for the county to carry out the policy, even if a timeframe is not included. “Shall” and “will” are imperative and nondiscretionary–-the county must make decisions based on what the policy says to do. “May” in a policy means that it is in the county’s interest to carry out the policy, but the county has total discretion in making decisions. "Must" in a policy means a mandate; the action is required. "Should" in a policy means: noncompulsory guidance, in which cost, availability of funding, and public benefit associated with the policy’s purpose are considered as part of the implementation decision; establishes that the county has discretion in making decisions.

Shoreline Environment

Shoreline environment or master program environment means the categories of shorelines of the state established by the King County shoreline managmenet master program to differentiate between areas whose features imply differing objectives regarding their use and future development.

Shoreline Master Program

The Shoreline Master Program is the comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020.

Should

See definition for “shall”.

Significant Adverse Environmental Impact

Significant as used in State Environmental Policy Act means a reasonable likelihood of more than a moderate adverse impact on the environment. Significance involves context and intensity and does not lend itself to a formula or quantifiable text. The context may vary with the physical setting. Intensity depends on the magnitude and duration of an impact. The severity of an impact should be weighed along with the likelihood of its occurrence. An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.

Significant vegetation removal

Significant vegetation removal means the removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not

constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

Single-Family Housing

Single-family housing units are individual structures including conventional houses and mobile homes.

Species of Local Importance

Species of local importance include priority species as identified by the state of Washington Department of Fish and Wildlife; bird species whose populations in King County are known to have declined significantly over the past 150 years; anadromous salmonids; and aquatic species whose populations are particularly vulnerable to changes in water quality and water quantity.

Subarea Planning

This level of planning brings the policy direction of the comprehensive plan to a smaller geographic area. Subarea plans are meant to provide detailed land use plans for local geographic areas. These plans are meant to implement the King County Comprehensive Plan and be consistent with the County's Comprehensive Plan's policies, development regulations, and Land Use Map.

Subdivision

A subdivision is land that has been divided into legal lots, or is the process of dividing land into lots.

Sustainable economic development

Sustainable economic development means economic development that does not exceed the ability of the natural or built environments to remain healthy while sustaining growth over the long term.

Substantially degrade

Substantially degrade means to cause significant ecological impact.

Totalizing source meter

A totalizing source meter is a device that will measure the volume of water withdrawn from a well over time and provide a sum total of the water extracted. This type of meter is different than a meter that would measure just the instantaneous volume of water being withdrawn.

Traditional Rural Development

In King County, traditional rural land uses could include, but are not limited to: low density residential uses; small scale farming, forestry and mineral extraction; small, neighborhood churches; feed and grain stores; the keeping of horses and livestock; cottage industries, crafts and trades that support the

residents of the rural area and/or the needs of the natural resource production areas; and public and private facilities necessary to serve rural homes such as utility installations or public schools. In general, the rural development pattern in King County has historically been comprised of houses, barns, fences and cultivated fields, but natural features and open spaces are the predominant visual image.

Transfer of Development Rights (TDR)

Transfer of development rights means the ability to transfer allowable density, in the form of permitted building lots or structures, from one property (the "sending site") to another (the "receiving site") in conjunction with conservation of all or part of the sending site as open space or working farm or forest. King County allows transfers of development rights as part of standard subdivision, mobile home park and multifamily project review processes through its TDR Program. (King County Code, Title 21A)

Transit Oriented Development (TOD)

A private or public/private real estate development project that creates, expands, maintains or preserves a mixed-use community or neighborhood within walking distance of a transit center, or stop, that is designed to encourage transit use and pedestrian activity. TOD projects support transit by increasing the density of residents, shoppers, visitors or employees per acre. New TOD projects are often coupled with an increase in transit service to the area.

Transportation Demand Management (TDM)

TDM is a strategy to reduce the number of automobile trips, particularly trips taken in single-occupant vehicles. TDM encourages public transportation over automobile use and specifically refers to policies, programs and actions implemented to increase the use of high-occupancy vehicles (public transit, car-pooling and van-pooling) and spread travel to less congested time periods through alternative work hour programs (See Chapter 7, Transportation).

Transportation Facilities and Services

Transportation facilities and services are the physical assets of the transportation system that are used to provide mobility. They include roads, sidewalks, bike lanes and other facilities supporting nonmotorized travel, transit, bridges, traffic signals, ramps, buses, bus garages, park and ride lots and passenger shelters.

Transportation needs for new growth

Transportation needs for new growth are associated with growth that has been planned for 2012 in this comprehensive plan.

Transportation Needs Report (TNR)

The TNR is a comprehensive list of recommended county transportation needs through the year 2022 needed to implement the land use element. It includes transportation needs for unincorporated King County, and some city, state, and adjacent county projects. It does not include transit service or capital needs. (See Chapter 7, Transportation)

Unemployment Rate

The unemployment rate is the percentage of the civilian labor force that is unemployed and actively seeking work.

Unincorporated Activity Centers

Unincorporated Activity Centers are the primary locations for commercial and industrial development in urban unincorporated King County. Currently, White Center is the only designated Unincorporated Activity Center, as other such centers are now parts of cities. (See Chapter 2, Urban Communities)

Unincorporated Areas

Unincorporated areas are those areas outside any city and under King County's jurisdiction.

Unique Wetland

The term unique wetland refers to bogs and fens, which have unusual and sensitive water chemistries.

Universal Design

Universal design as used in Chapter 2, Urban Communities, means the design of products, buildings, and environments to be usable by all people, to the greatest extent possible, and which allows people to age in place in their home without the need for adaptation or specialized design.

Urban Centers

Urban Centers are centers of concentrated employment and housing located within the Urban Growth Area designated by the Phase II Countywide Planning Policies. Urban Centers are to be serviced directly by high-capacity transit and are to contain a wide variety of land uses, including retail, recreational, cultural and public facilities, parks and open spaces. Unincorporated Urban Centers are represented on Urban Centers Map included at the end of Chapter 2, Urban Communities.

Urban Growth

Urban growth refers to residential, commercial and industrial growth that makes intensive use of land for the location of buildings, structures and impermeable surfaces to such a degree as to be incompatible with the primary use of such land for the production of food, other agricultural products, or fiber, or the

extraction of mineral resources. Urban growth typically requires urban governmental services. "Characterized by urban growth" refers to land having urban growth located on it, or to land located in relationship to an area with urban growth.

Urban Growth Area (UGA)

The Growth Management Act requires King County's Comprehensive Plan to designate an Urban Growth Area, where most future urban growth and development is to occur to limit urban sprawl, enhance open space, protect rural areas and more efficiently use human services, transportation and utilities. The Comprehensive Plan designates an UGA which includes areas and densities sufficient to permit the urban growth that is projected to occur in the county for the succeeding 20-year period. (See Chapter 1, Regional Growth Management Planning, and Chapter 2, Urban Communities)

Urban Growth Target

The Growth Management Act and the Countywide Planning Policies require King County and its cities to plan for a 20-year population and employment growth target for each jurisdiction, based on designation of the Urban Growth Area, Urban Centers and the criteria of the Countywide Planning Policies. (See Chapter 2, Urban Communities)

Urban Planned Developments (UPD)

Urban Plan Developments are site specific projects consisting of conceptual site plans, development stands, processing and other elements.

Urban Separator

Urban separators are areas planned for permanent low-residential density within the Urban Growth Area. Urban separators protect adjacent resource land, environmentally sensitive areas, or rural areas and create open space corridors within and between urban areas which provide environmental, visual, recreations and wildlife benefits.

Utilities Technical Review Committee (UTRC)

The Utilities Technical Review Committee (UTRC) is an interdepartmental committee with responsibility for ensuring that water and sewer plans comply with county and state health requirements and county land use policies. The committee reviews the plans of all water and sewer utilities that operate in unincorporated King County and then recommends the plans to King County Executive and the Metropolitan King County Council for approval.

Variable Tolling

Variable tolling or pricing is any form of collecting a direct user fee on a roadway.

Water Availability

Water availability means the presence of a water source with applicable water rights that can serve the projected demand for the planning horizon, as shown in water comprehensive plans approved by King County. In the case of Urban Planned Developments, water availability is defined as: 1) presence of a water source with water rights that can serve the projected average daily demand; 2) a firm commitment to serve an area with water, as evidenced by either a water availability certificate, utility extension agreement or a King County approved water system plan; and 3) a firm financial commitment to provide water, as evidenced by either a capital improvement plan or utility extension agreement.

Water Quality

Water quality means the physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related and biological characteristics. Where used in this chapter, the term water quantity refers only to development and uses regulated under this chapter and affecting water quantity, such as pollution generating surfaces and storm water handling practices. Water quantity, for purposes of this comprehensive plan, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340.

Water Reuse

Water reuse refers to the use of reclaimed water or the reuse of other wastewater, such as greywater, as allowed under relevant state or local standards.

Water Supply Availability

Water supply availability is the presence of a water source with applicable water rights that can serve the projected demand through the planning horizon shown in adopted water comprehensive plans.

Water System Classifications

Water System Classifications define the level of service for different water systems. A public water system is defined as any system that has more than one connection. A well serving one house is a private system. Group A water systems have fifteen or more service connections. Group B water systems have two through fourteen service connections.

Water System Plan

Water system plans are planning documents that include water system plans as referred to in Chapter 43.20 RCW, comprehensive plans of water supply systems (including combined water and sewer plans) as referred to in RCW 57.16.010, water system plans and coordinated water system plans as referred to in RCW 70.116.050, and all other water system plans, comprehensive plans and plan elements that may

be required under KCC 13.24 and this King County Comprehensive Plan for any special district or any other public or private entities that distribute or obtain water in unincorporated King County.

Watershed

A watershed, like a drainage basin, is an area that drains to a common outlet or an identifiable water body such as a river, stream, lake or wetland. The six major watersheds in King County are Cedar River, Green River, Skykomish River, Snoqualmie River and White River and the Puget Sound. These watersheds contain a total of 72 individual drainage basins. (See Chapter 4, Environment)

Well Head Protection

Well head protection is another way that King County can protect its groundwater resource. This program directs purveyors to identify 1, 5, and 10-year time of travel to their well(s) to identify contamination sources, and to propose methods to reduce or eliminate contamination sources.

Wetland

The term wetland means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, landscape amenities, or those wetlands created after July 1, 1990 that were unintentionally created as a result of the construction of a road, street or highway. Wetlands shall include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands.

Wetland Banking

Wetland banking is a process that allows certain wetlands to be developed if the development is accompanied by the restoration or creation of wetlands in other areas. (See Chapter 4, Environment)

Wetland Functions

Functions refer to the ecological (physical, chemical and biological) workings or attributes of a wetland regardless of their importance to society. Food chain support or the transport and transformation of chemicals in ecosystems are examples of wetland functions. Water quality maintenance, flood storage, and wildlife habitat are examples of ecological functions to which society attributes a value. (See Chapter 4, Environment)

Wetland Values

Values are estimates, usually subjective, of the worth, merit, quality, or importance of wetland attributes that are valuable and beneficial to society. Values vary by watershed or human community. Education, research, aesthetics, and recreation are examples of other wetland attributes that may be considered values in that they are beneficial to society.

Will

See definition for “shall”.

Frequently Used Acronyms

APD	Agricultural Production District
CIP	Capital Improvement Program
CPP	Countywide Planning Policy
ESA	Endangered Species Act
FCC	Fully Contained Community
FPD	Forest Production District
GMA	Growth Management Act
GMPC	Growth Management Planning Council
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
ITS	Intelligent Transportation Systems
KCCP	King County Comprehensive Plan
KCSP	King County Strategic Plan
LID	Low Impact Development
LOS	Level of Service
LSRA	Locally Significant Resource Area
MPP	Multi-county Planning Policies
MPS	Mitigation Payment System
PAA	Potential Annexation Area
PBRS	Public Benefit Rating System
PSRC	Puget Sound Regional Council
RSRA	Regionally Significant Resource Area
RWSP	Regional Wastewater Services Plan
SCAP	Strategic Climate Action Plan
SPPT	Strategic Plan for Public Transportation
SPRS	Strategic Plan for Road Services
SEPA	State Environmental Policy Act
TAM	Transportation Adequacy Measure
TDR	Transfer of Development Rights
TDM	Transportation Demand Management
TNR	Transportation Needs Report
TOD	Transit Oriented Development
UGA	Urban Growth Area
UGB	Urban Growth Boundary
UPD	Urban Planned Development
UTRC	Utilities Technical Review Committee

King County Comprehensive Plan

Land Use and Zoning Map Revisions
Striking Amendment

December 3, 2012

Map Amendment	Name	Page
1	West Hill Renton at 76th Avenue South	MA-1
2	Reserve Silica DELETED	MA-5
3	Taylor Mountain	MA-6
4	Soaring Eagle Park	MA-10
5	Snoqualmie Mining Site	MA-14
6	Fall City Subarea Plan	MA-16
7	Pacific Raceways	MA-18
8	KCDOT Technical Corrections	MA-21
9	Maple Valley Technical Correction	MA-34
10	Melki	MA-36

Map Amendment # 1

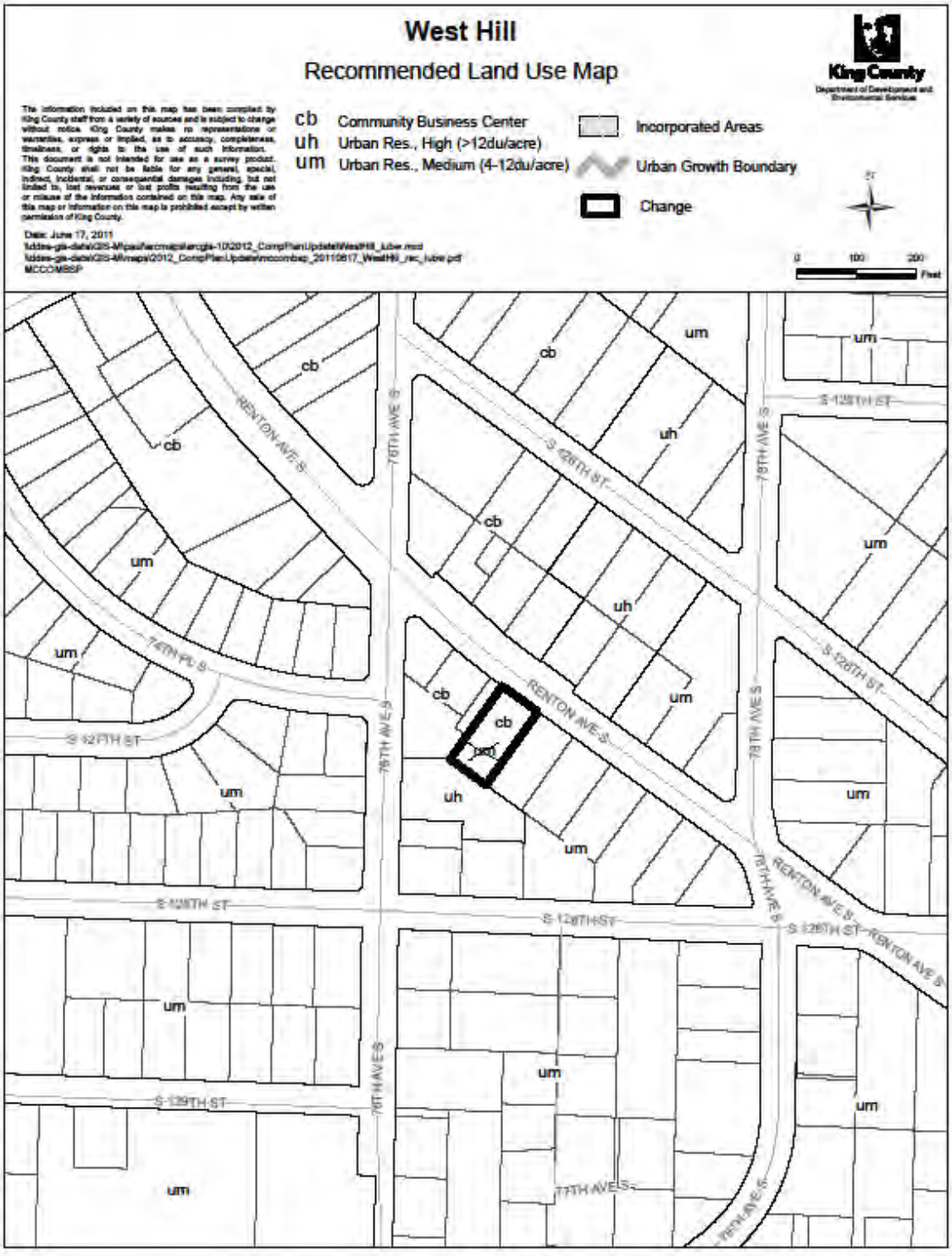
West Hill @ 76th Ave South

AMENDMENT TO THE KING COUNTY COMPREHENSIVE PLAN – LAND USE MAP

Amend Map # 8, Section 12, Township 23, Range 4 as follows:

Redesignate the parcel 7580200440 from Urban Residential, 4-12 homes per acre to Community Business

Effect: Adds this small parcel, adjacent to the existing community business center, to this community business center.


West Hill
Recommended Land Use Map
King County
Department of Development and Environmental Services
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Date: June 17, 2011
cb Community Business Center
uh Urban Res., High (>12du/acre)
um Urban Res., Medium (4-12du/acre)
Incorporated Areas
Urban Growth Boundary
Change
0 100 200 Feet
RENTON AVE S
S 125TH ST
S 126TH ST
S 127TH ST
S 128TH ST
S 129TH ST
74TH PL S
75TH AVE S
77TH AVE S
78TH AVE S

Map Amendment # 1

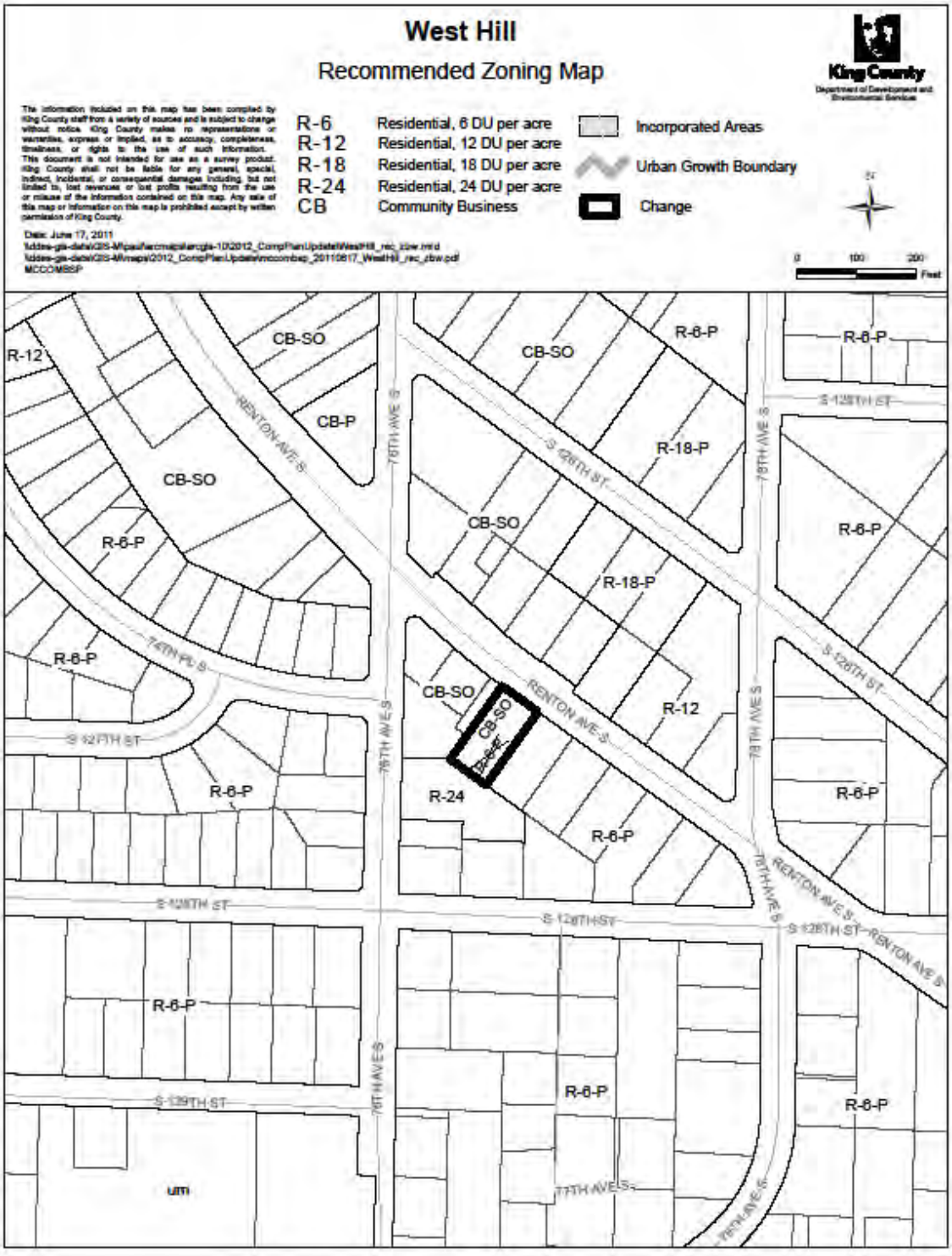
West Hill @ 76th Ave South

AMENDMENT TO THE KING COUNTY ZONING ATLAS

Amend Map # 8 Section 12 , Township 23, Range 4 as follows:

Reclassify the parcel 7580200440 from R-6-P to CB-SO:

Effect: Applies commercial zoning to a small parcel adjacent to an existing commercial center that is proposed to be added to this commercial center.


West Hill
Recommended Zoning Map
King County
Department of Development and Environmental Services
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Date: June 17, 2011
R-6 Residential, 6 DU per acre
R-12 Residential, 12 DU per acre
R-18 Residential, 18 DU per acre
R-24 Residential, 24 DU per acre
CB Community Business
Incorporated Areas
Urban Growth Boundary
Change
0 100 200 Feet
R-12
CB-SO
CB-P
R-6-P
R-18-P
R-24
RENTON AVE S
S 126TH ST
S 128TH ST
S 129TH ST
74TH PL S
76TH AVE S
77TH AVE S
78TH AVE S

Map Amendment # 2

DELETED

Map Amendment # 3

Taylor Mountain

AMENDMENT TO THE KING COUNTY COMPREHENSIVE PLAN – LAND USE MAP

Amend Map # 27, Sections 32, and 33 Township 23, Range 7 - and Section 5, Township 22, Range 7 as follows:

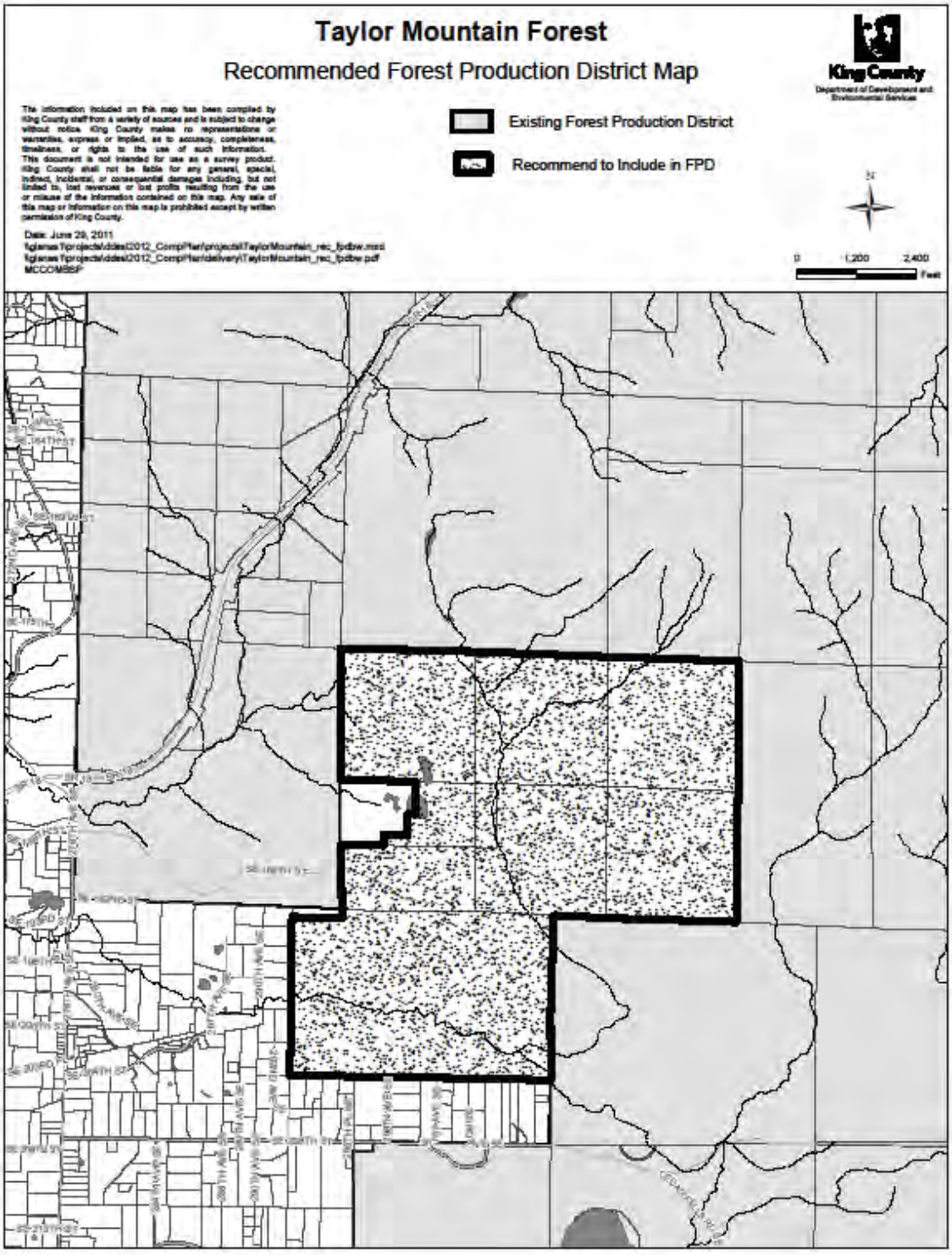
Retain the existing Open Space Land Use designation; include the following parcels in the Forest Production District:

3223079027, 3223079021, 3323079009, 3323079005, 3223079001, 3223079014, 3223079011, and 0522079001.

Pre-Effective Condition

The inclusion of the above parcels into the Forest Production District shall not be effective until an easement agreement that at a minimum allows for vehicular ingress and egress across the above referenced county-owned parcels to parcel 3223079015 is executed by the owner of parcel 3223079015 and King County; and that executed easement agreement is recorded.

Effect: Includes all of these King County-owned parcels within the Forest Production District, recognizing the intent to manage the property for Forestry and open space. Requires recording of a permanent easement to formalize current grant of vehicular access to a parcel essentially landlocked by county lands.


Taylor Mountain Forest
Recommended Forest Production District Map
King County
Department of Development and Environmental Services
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Existing Forest Production District
Recommend to Include in FPD
Date: June 29, 2011
MCCOMBSP
N
0
1,200
2,400
Feet

Map Amendment # 3

Taylor Mountain

AMENDMENT TO THE KING COUNTY ZONING ATLAS

Amend Map # 27, Sections 32, and 33 Township 23, Range 7 - and Section 5, Township 22, Range 7 as follows:

Reclassify the following parcels from RA-10, rural Area one home per 10 acres, to F, Forest

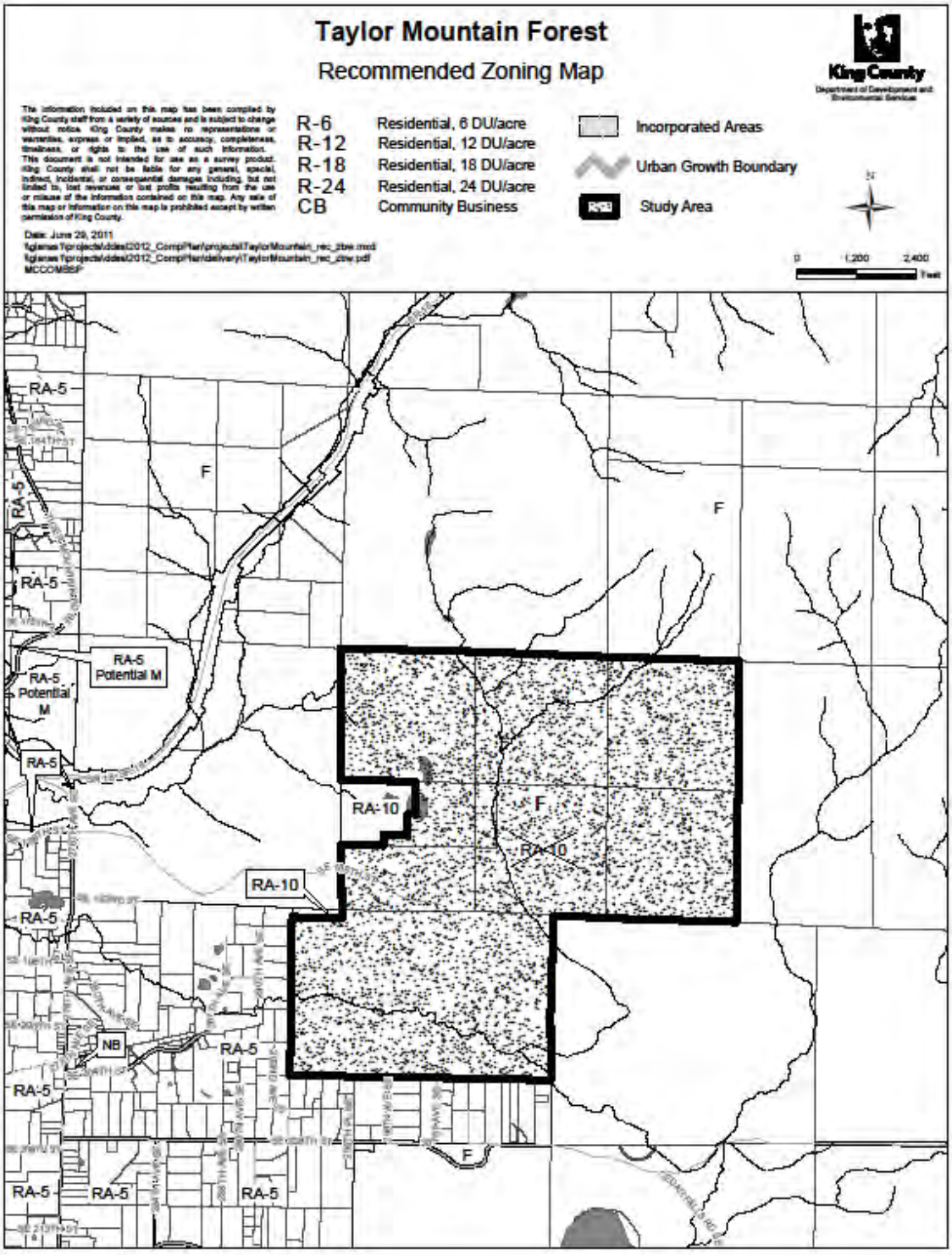
3223079027, 3223079021, 3323079009, 3323079005, 3223079001, 3223079014, 3223079011, and 0522079001.

Pre-Effective Condition

The reclassification of the above parcels shall not be effective until an easement agreement that at a minimum allows for vehicular ingress and egress across the above referenced county-owned parcels to parcel 3223079015 is executed by the owner of parcel 3223079015 and King County; and that executed easement agreement is recorded.

Effect:

Effect: Recognizes the intent to manage the property for Forestry. Requires recording of a permanent easement to formalize current grant of vehicular access to a parcel essentially landlocked by county lands.


Taylor Mountain Forest
Recommended Zoning Map
King County
Department of Development and Environmental Services
R-6 Residential, 6 DU/acre
R-12 Residential, 12 DU/acre
R-18 Residential, 18 DU/acre
R-24 Residential, 24 DU/acre
CB Community Business
Incorporated Areas
Urban Growth Boundary
Study Area
N
0 1,200 2,400
Feet
Date: June 29, 2011
RA-5
RA-5 Potential M
RA-10
NB
F

Map Amendment # 4

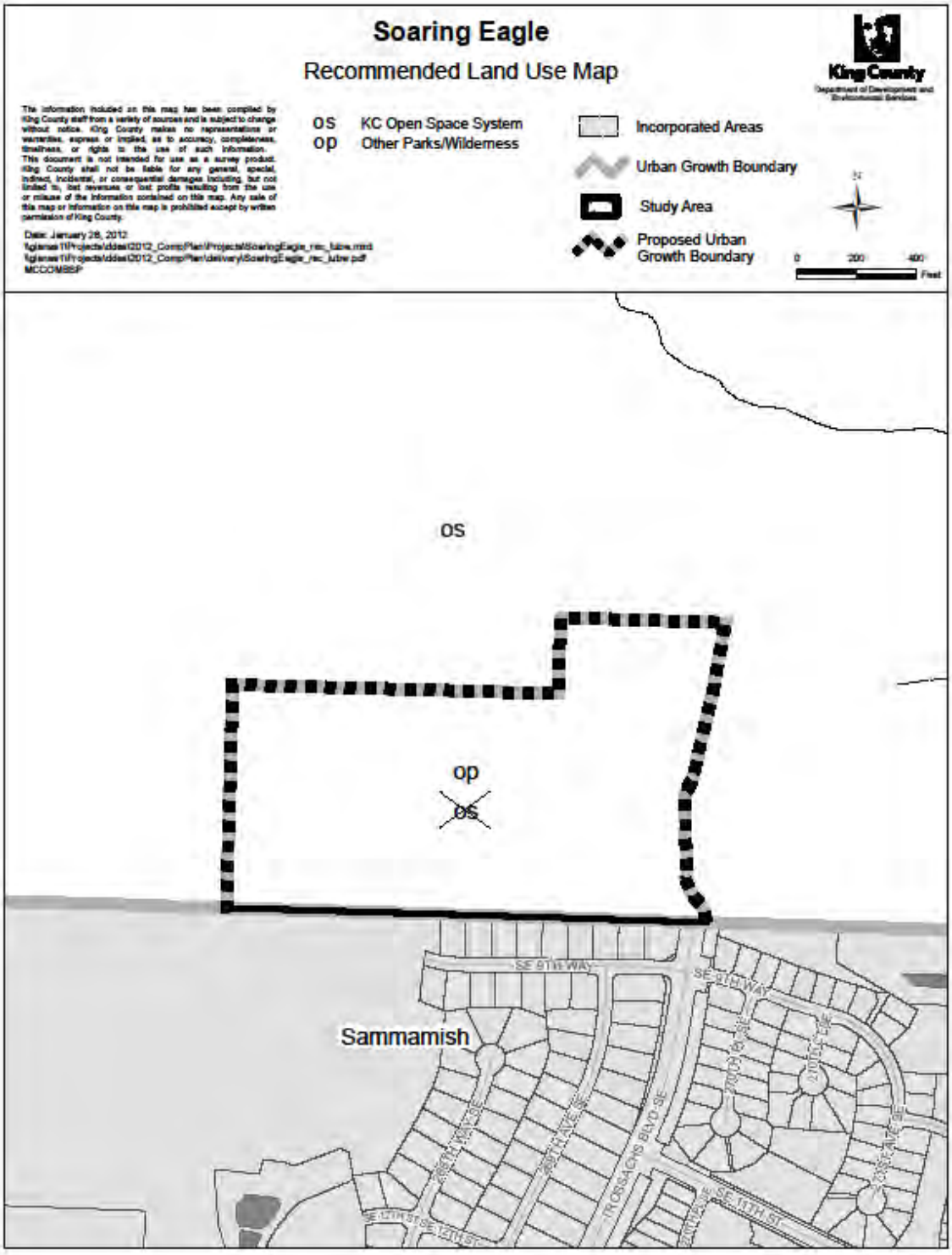
Soaring Eagle Park

AMENDMENT TO THE KING COUNTY COMPREHENSIVE PLAN – LAND USE MAP

Amend Map # 18 Section 36, Township 25, Range 6 as follows:

Retain the Other Parks and Open Space land use designation; include parcel 3625069023 within the Urban Growth Area.

Effect: Applies an Urban land use designation in anticipation of annexation by the City of Sammamish for development as a city park.


Soaring Eagle
Recommended Land Use Map
King County
The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.
Date: January 26, 2012
os KC Open Space System
op Other Parks/Wilderness
Incorporated Areas
Urban Growth Boundary
Study Area
Proposed Urban Growth Boundary
0 200 400 Feet
os
op
os
Sammamish
SE 9TH WAY
SE 8TH WAY
TROSSACHS BLVD SE
SE 12TH ST
SE 11TH ST

Map Amendment # 4

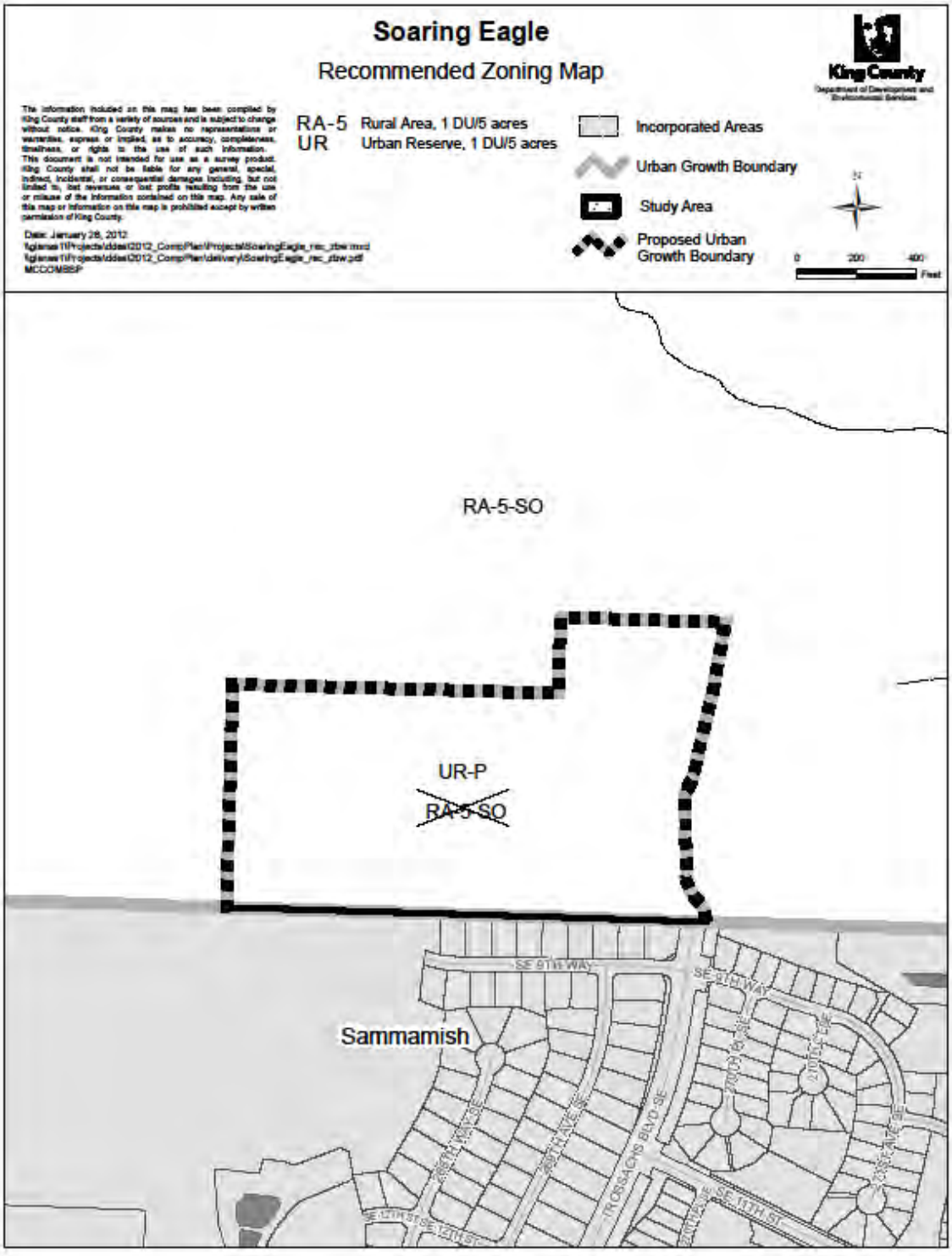
Soaring Eagle Park

AMENDMENT TO THE KING COUNTY ZONING ATLAS

Amend Map # 18 Section 36, Township 25, Range 6 as follows:

Reclassify parcel 3625069023 from RA-5, Rural Area, one home per 5 acres, to UR-P, Urban Reserve with a P-suffix condition limiting the use of this parcel to park and park facilities only:

Effect: Applies an Urban zone with a use limitation in anticipation of annexation by the City of Sammamish for development as a city park.


Soaring Eagle
Recommended Zoning Map
King County
RA-5 Rural Area, 1 DU/5 acres
UR Urban Reserve, 1 DU/5 acres
Incorporated Areas
Urban Growth Boundary
Study Area
Proposed Urban Growth Boundary
0 200 400 Feet
RA-5-SO
UR-P
RA-5-SO
Sammamish
SE 9TH WAY
SE 8TH WAY
TROSSACHS BLVD SE
SE 12TH ST
SE 11TH ST

Map Amendment # 5

Snoqualmie Mining Site

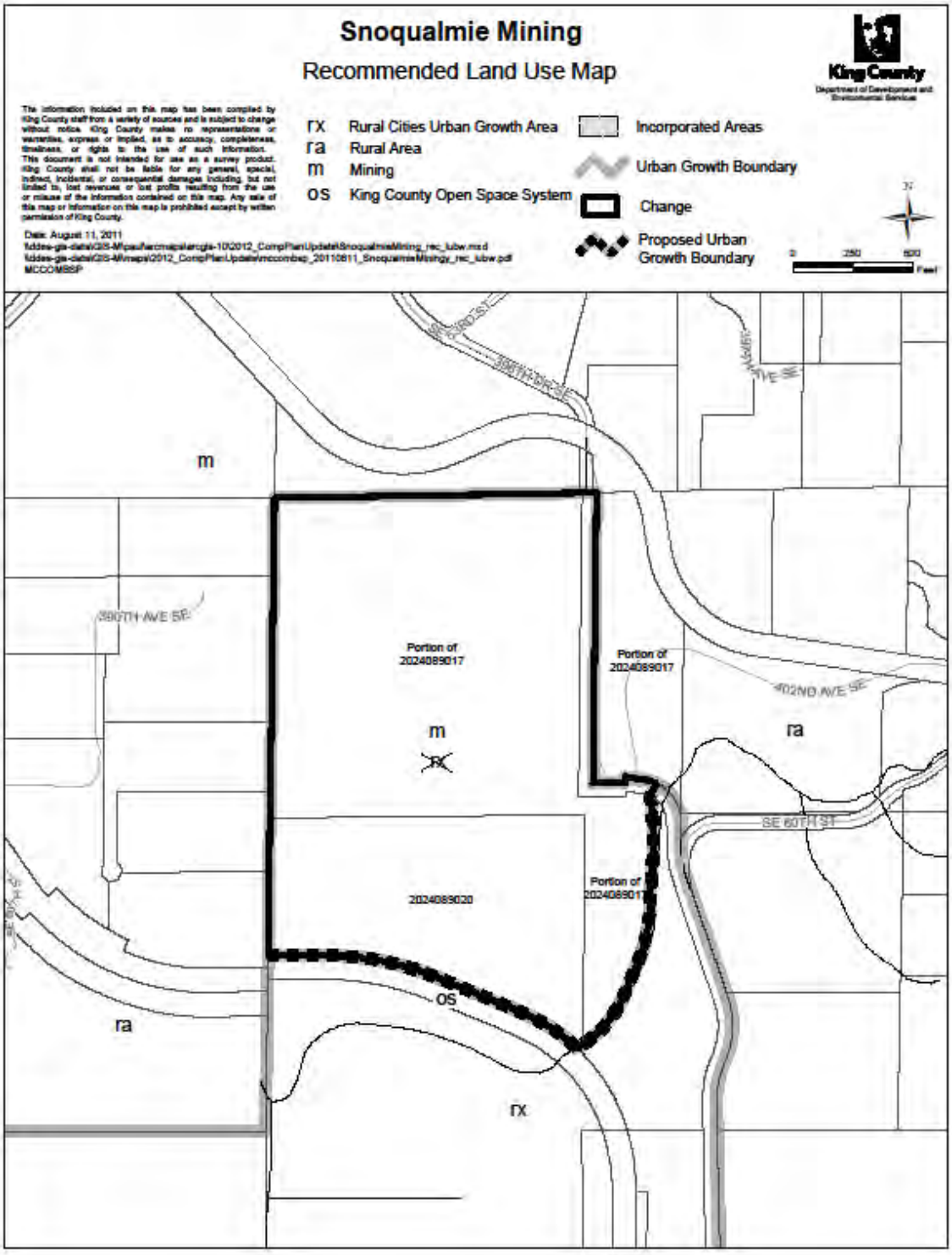
AMENDMENT TO THE KING COUNTY COMPREHENSIVE PLAN – LAND USE MAP

Amend Map # 31, Section 20, Township 24, Range 08 as follows:

Redesignate the following parcels from Rural City Urban Growth Area to Mining:

2024089017 and 2024089020

Effect: Removes an active mining site from the Urban Growth Area and the Potential Annexation Area for the City of Snoqualmie.


Snoqualmie Mining
Recommended Land Use Map
King County
Department of Development and Environmental Services
The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.
Date: August 11, 2011
rx Rural Cities Urban Growth Area
ra Rural Area
m Mining
os King County Open Space System
Incorporated Areas
Urban Growth Boundary
Change
Proposed Urban Growth Boundary
0 250 500 Feet
m
390TH AVE SE
Portion of 2024089017
Portion of 2024089017
402ND AVE SE
m
ra
SE 60TH ST
2024089020
Portion of 2024089017
os
ra
rx

Map Amendment # 6

Fall City Subarea Plan

AMENDMENT TO THE KING COUNTY ZONING ATLAS

Amend Map # 26 Section 15, Township 24, Range 7 as follows:

Reclassify the following parcels from NB to CB-SO:

0943100005	1524079079	1524079004
1524079059	152407HYDR	

Reclassify the following parcels from CB to CB-SO:

6730700005	6730700050	2475900810	2475900405
2475900807	2475900805	2475900395	2475900810
2475900052	2475900054	2475900050	2475900385
2475900005	2475900025	2475900030	2475900330
2475900080	2475900085	2475900105	2475900320
2475900110	2475900120	2475900125	2475900305
2475900240	2475900210	2475900195	
2475900194	2475900190	2475900340	

Reclassify the following parcels from CB-P to CB - P -SO:
1424079050 (existing P-Suffix conditions are retained)

Reclassify the following parcels from R-4, potential CB to CB-SO:

2475900445	2475900356	2475900355
2475900370	2475900250	2475900285
2475900280	2475900265	2475900266
2475900155	2475900170	2475900140
2475900075	2475900065	

Reclassify the following parcels from R-4 to CB-SO:

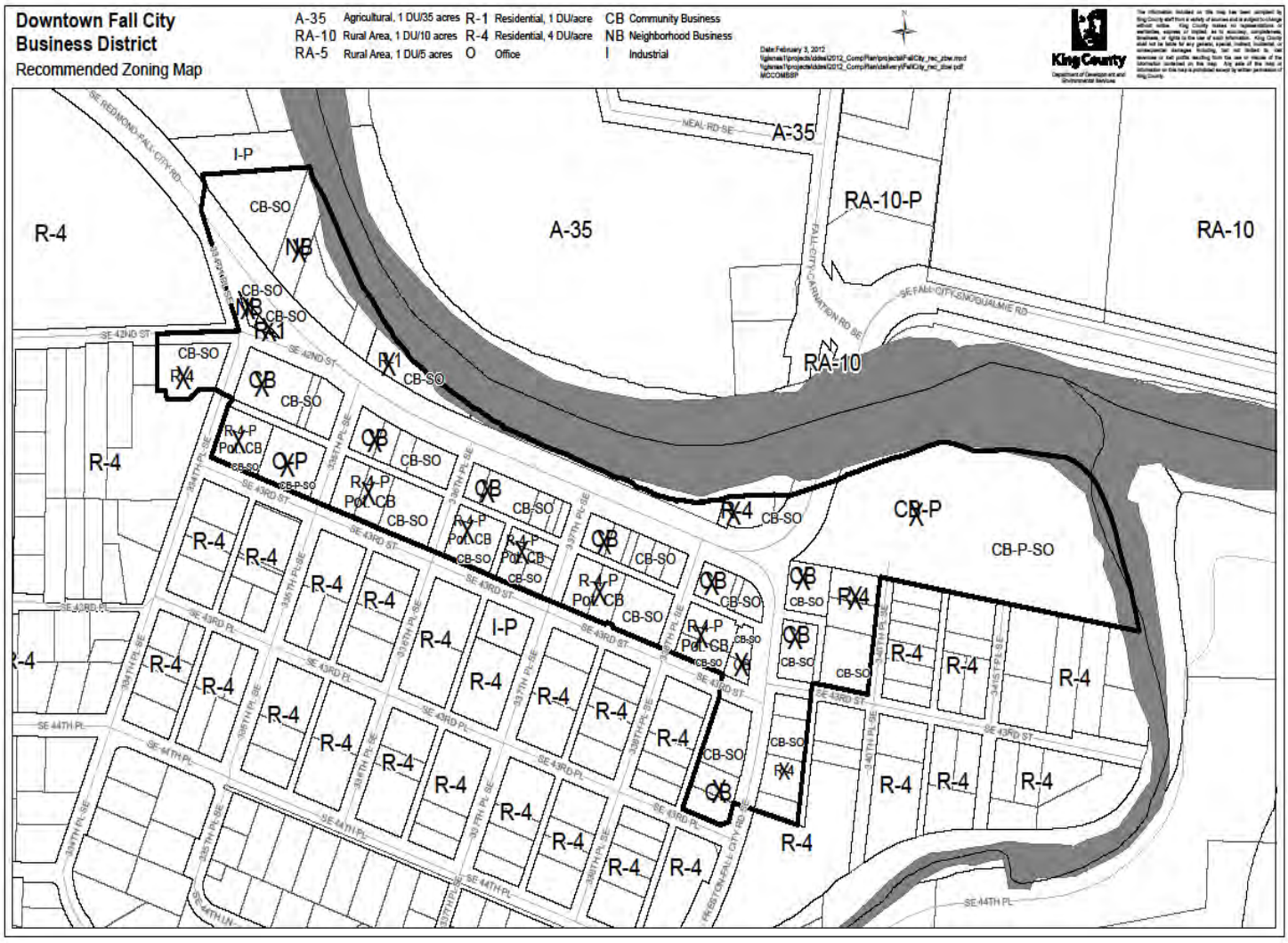
0943100420	1524079007	1524079161
6730700081	6730700075	6730700060
6730700275	6730700285	6730700305
6730700315		

Reclassify the following parcels from O-P, potential CB to CB-SO:
2475900460 (existing P-Suffix conditions are retained)

Reclassify the following parcels from R-1, to CB-SO:

1524079182	1524079006

Effect: Establishes the boundaries for a downtown Fall City business district and includes all properties within this business district within a new special district overlay. All properties within the downtown business district are proposed to have the same CB-SO zoning and all P-Suffix conditions within the downtown business district are repealed except as noted above.


Downtown Fall City
Business District
Recommended Zoning Map
A-35 Agricultural, 1 DU/35 acres
RA-10 Rural Area, 1 DU/10 acres
RA-5 Rural Area, 1 DU/5 acres
R-1 Residential, 1 DU/acre
R-4 Residential, 4 DU/acre
O Office
CB Community Business
NB Neighborhood Business
I Industrial
King County
A-35
RA-10-P
RA-10
R-4
I-P
CB-SO
CB-P
CB-P-SO
SE 42ND ST
SE 43RD ST
SE 43RD PL
SE 44TH PL
SE 44TH LN
SE REDMOND-FALL CITY RD
FALL CITY-CARNATION RD SE
SE FALL CITY-SNOQUALMIE RD
MEAL RD SE
PRESTON-FALL CITY RD SE

Map Amendment # 7

Pacific Raceway

AMENDMENT TO THE KING COUNTY ZONING ATLAS

Amend Map # 16 Sections 3 and 10, Township 21, Range 5 as follows:

Reclassify any portion of the following parcels within the recommended conservation easement – about 32 acres - from I-P (Industrial with conditions) to RA-5 (Rural Area, one lot per five acres)::

1021059002
1021059008
0321059190
1021059003

Reclassify the remainder of parcels 1021059002 and 0321059190 that are outside of the recommended easement – about 1.6 acres – from RA-5 to I-P, industrial with a P-Suffix condition SC-PO-2, which reads as follows:

> "The site is limited to racetrack uses only; no other industrial uses are allowed which are not permitted by the SIR Special Use Permit. The Rural land use designation will remain; should the racetrack use be terminated, this property should continue to be designated Rural and the zoning shall revert to RA-5."

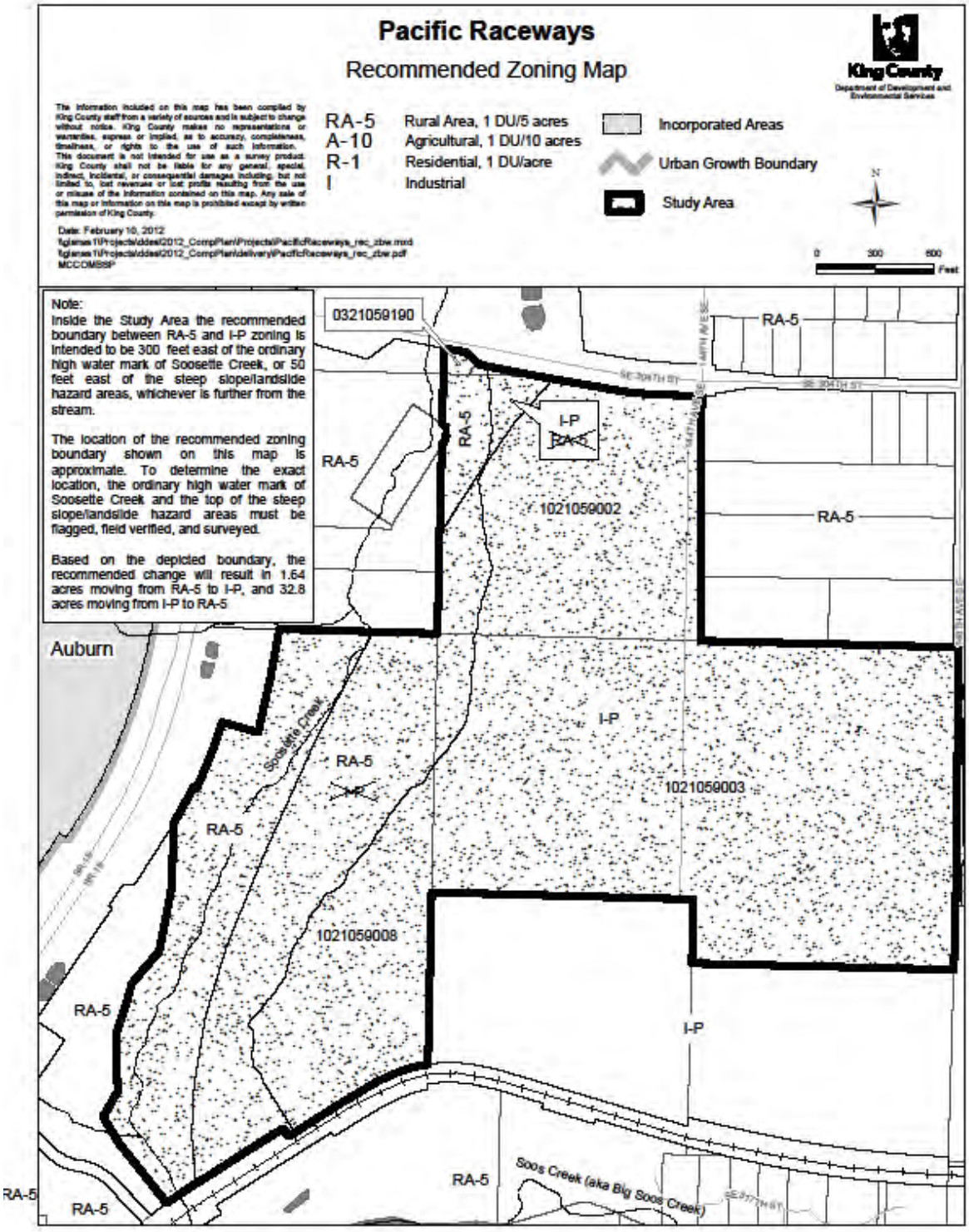
Pre-effective Condition

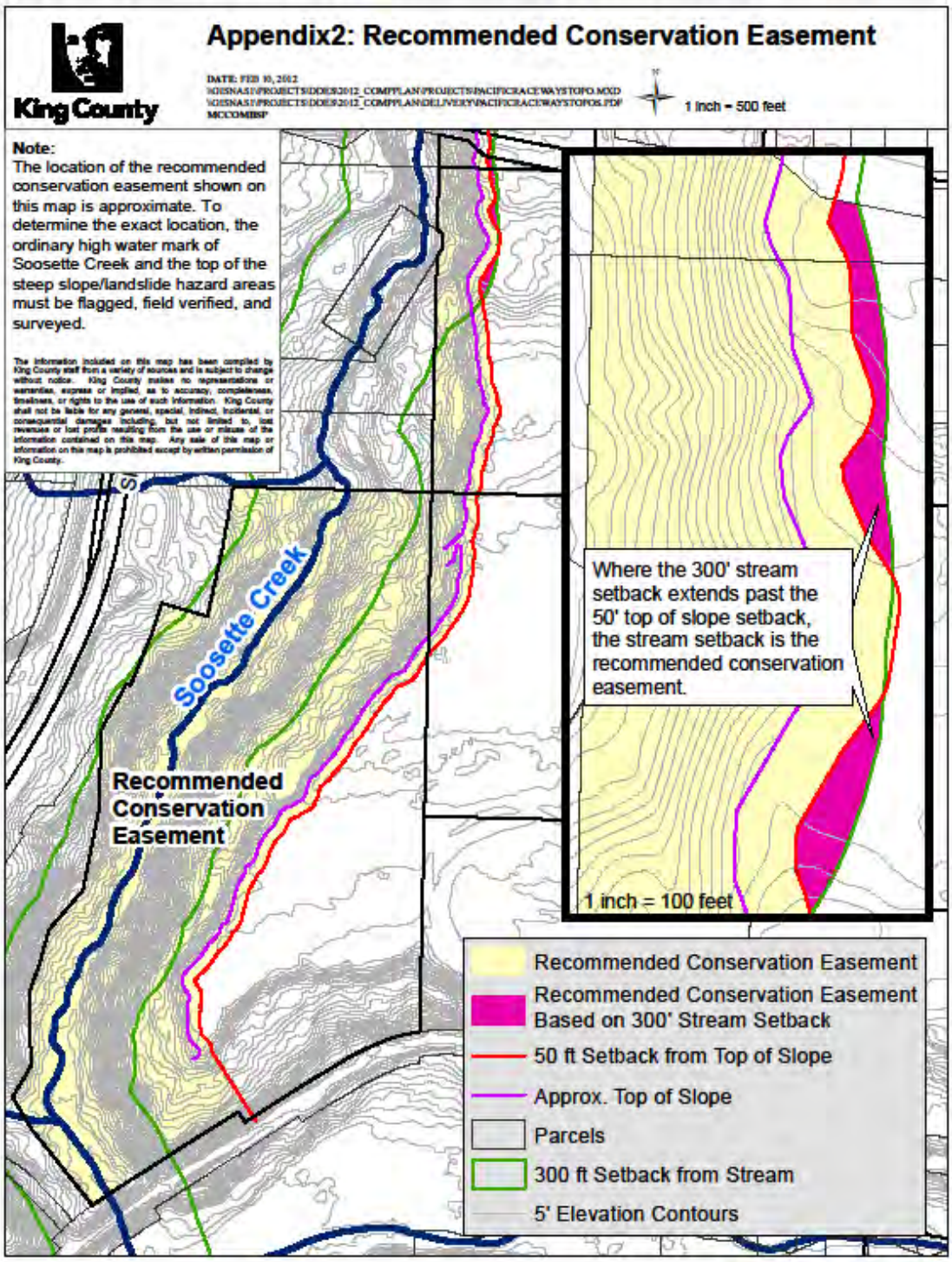
The zoning amendments shall not become effective until the property owner of Pacific Raceway has recorded a permanent conservation easement with King County that meets the following criteria, on all of the land under Pacific Raceway ownership:

a. The conservation easement shall extend the greater of either (1) three hundred feet from the ordinary high water mark on both sides of Soosette Creek or (2) fifty feet beyond the top of the steep slope or landslide hazard area of Soosette Creek;

b. The conservation easement shall be re-vegetated using native tree and shrub species within any currently disturbed areas.

Effect: The revision will result in a net increase of 30.4 additional acres of RA-5 zoning (32 acres of land being rezoned from I-P to RA-5 and 1.6 acres rezoned from RA-5 to I-P. The reclassifications are not effective until the owner of Pacific Raceways has dedicated a conservation easement the greater or 300' from the OHWM of Soosette Creek or 50' beyond the top of the steep slope or landslide hazard area of Soosette Creek.


Pacific Raceways
Recommended Zoning Map
King County
Department of Development and Environmental Services
The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.
Date: February 10, 2012
RA-5 Rural Area, 1 DU/5 acres
A-10 Agricultural, 1 DU/10 acres
R-1 Residential, 1 DU/acre
I Industrial
Incorporated Areas
Urban Growth Boundary
Study Area
N
0 300 600 Feet
Note:
Inside the Study Area the recommended boundary between RA-5 and I-P zoning is intended to be 300 feet east of the ordinary high water mark of Soosette Creek, or 50 feet east of the steep slope/landslide hazard areas, whichever is further from the stream.
The location of the recommended zoning boundary shown on this map is approximate. To determine the exact location, the ordinary high water mark of Soosette Creek and the top of the steep slope/landslide hazard areas must be flagged, field verified, and surveyed.
Based on the depicted boundary, the recommended change will result in 1.64 acres moving from RA-5 to I-P, and 32.8 acres moving from I-P to RA-5
0321059190
RA-5
I-P
1021059002
1021059003
1021059008
Auburn
Soosette Creek
Soos Creek (aka Big Soos Creek)


Appendix2: Recommended Conservation Easement
King County
DATE: FEB 10, 2012
\\DESNAS1\PROJECTS\DDES\2012_COMPPLAN\PROJECTS\PACIFICRACEWAYSTOPO.MXD
\\DESNAS1\PROJECTS\DDES\2012_COMPPLAN\DELIVERY\PACIFICRACEWAYSTOPOS.PDF
MCCOMBSP
1 inch = 500 feet
Note:
The location of the recommended conservation easement shown on this map is approximate. To determine the exact location, the ordinary high water mark of Soosette Creek and the top of the steep slope/landslide hazard areas must be flagged, field verified, and surveyed.
The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.
Soosette Creek
Recommended Conservation Easement
Where the 300' stream setback extends past the 50' top of slope setback, the stream setback is the recommended conservation easement.
1 inch = 100 feet
Recommended Conservation Easement
Recommended Conservation Easement Based on 300' Stream Setback
50 ft Setback from Top of Slope
Approx. Top of Slope
Parcels
300 ft Setback from Stream
5' Elevation Contours

Map Amendment # 8

Department of Transportation technical corrections

AMENDMENT TO THE KING COUNTY COMPREHENSIVE PLAN – LAND USE MAP

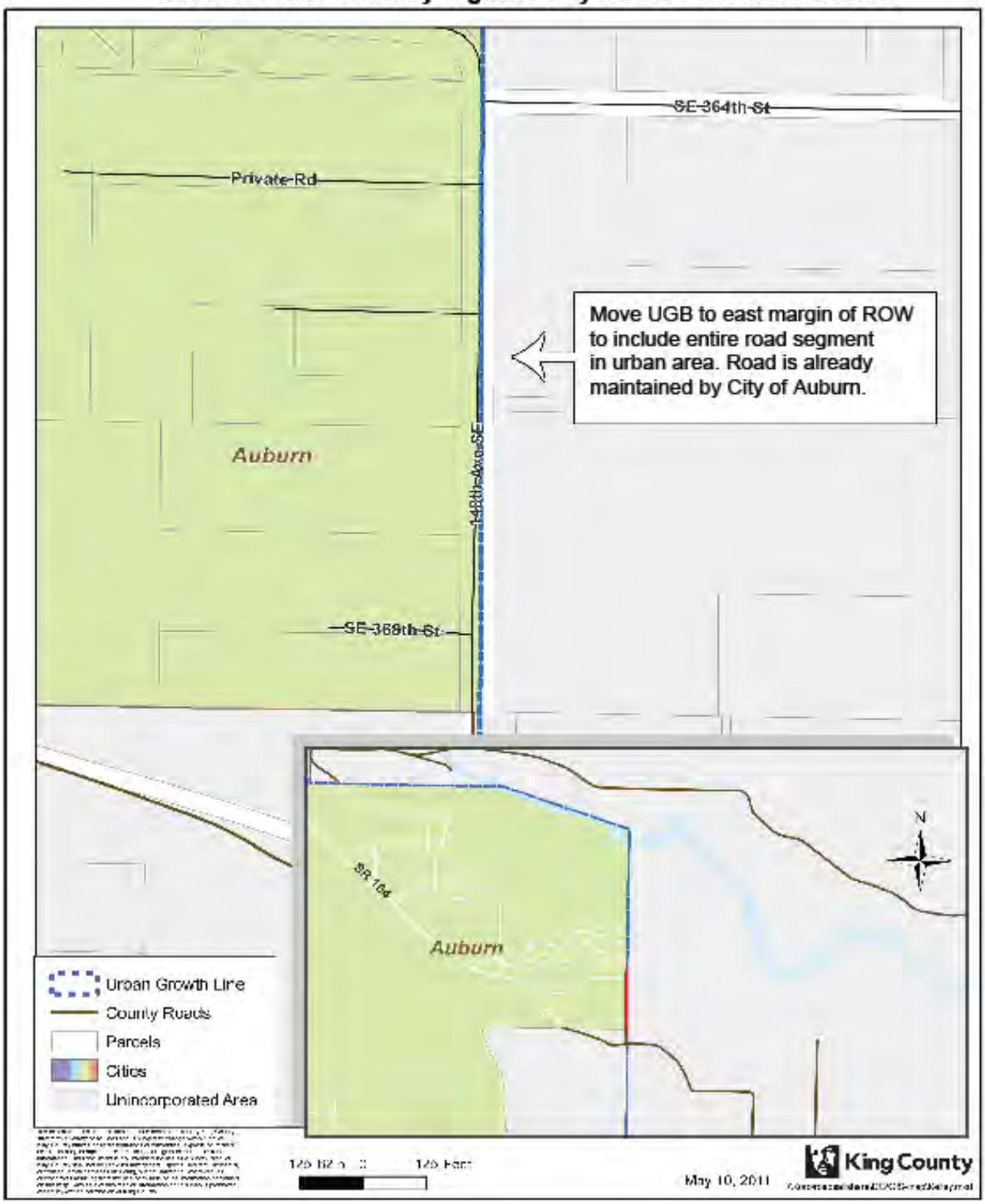
This is a series of countywide technical amendments to the Urban Growth Area that only affects segments of county road rights of way. No private property is affected. Please see the area zoning study for maps and more details.

Redesignate the following segments of road right of way from Rural to Urban:
148th Ave SE, adjacent to Auburn;
212th Ave SE, west of Black Diamond;
NE Union Hill Road, east of Redmond;
Lake Sawyer road SE, west of Black Diamond;
SE Old Petrovitsky Road, east of Renton;
SE 281st Way, east of Maple Valley;
SE 288th Street, south of Maple Valley;
SE 440th Street, north of Enumclaw;
SR 203 at NE 140th Street, south of Duvall.

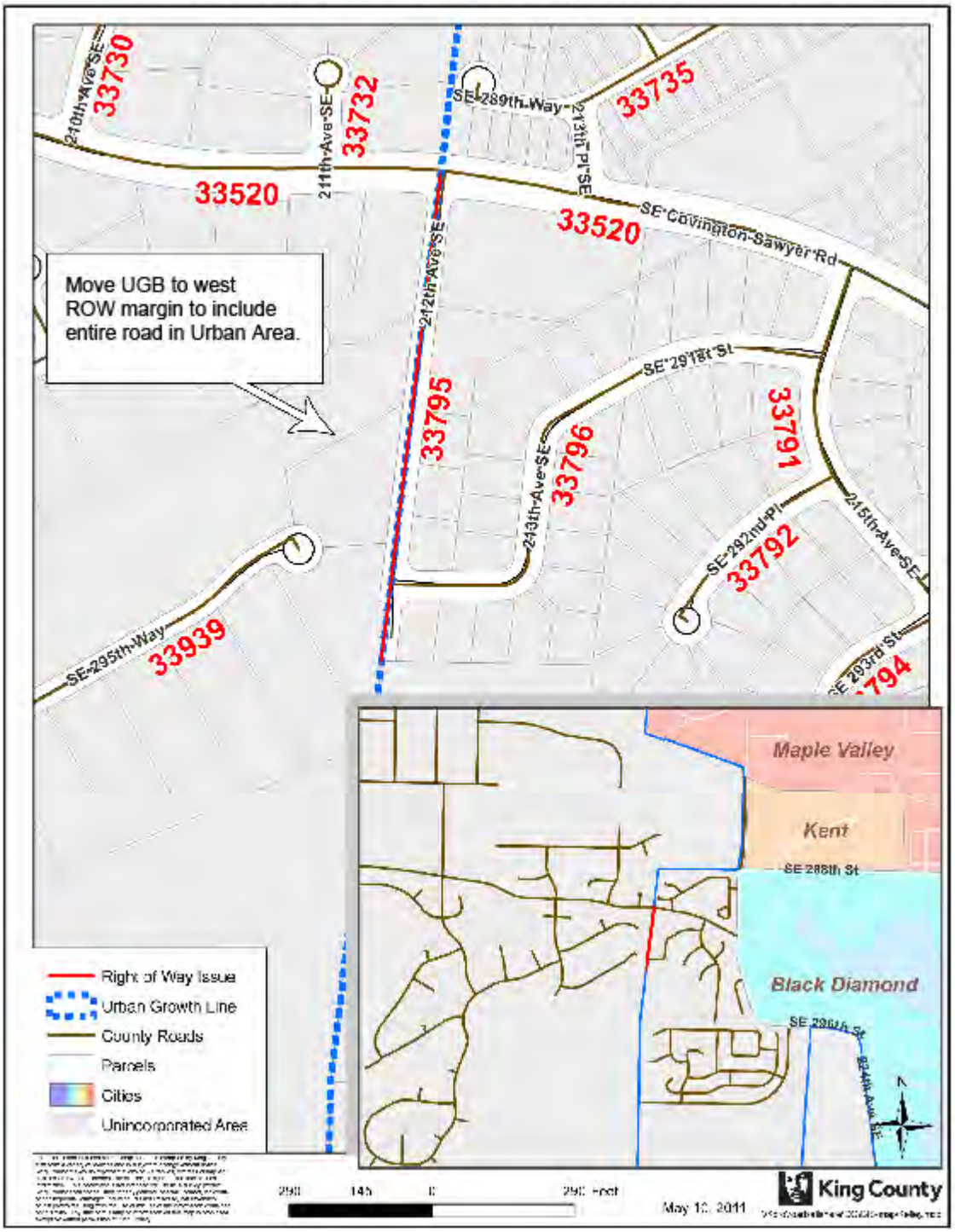
Redesignate the following segments of road right of way from Urban to Rural:
196th Ave NE, east of Redmond;
SE 142nd Street, south of North Bend;
SE 150th Street, south of North Bend;
SE Green Valley Road, northeast of Auburn.

Effect: the purpose of these proposed technical amendments is to facilitate maintenance of right of way by the appropriate jurisdiction. In most cases, right of way adjacent to a city is proposed to be added to the UGA so that it may eventually be annexed and maintained by the city. In some cases, the right of way is more appropriate to be in the Rural Area, where it will be maintained by King County.

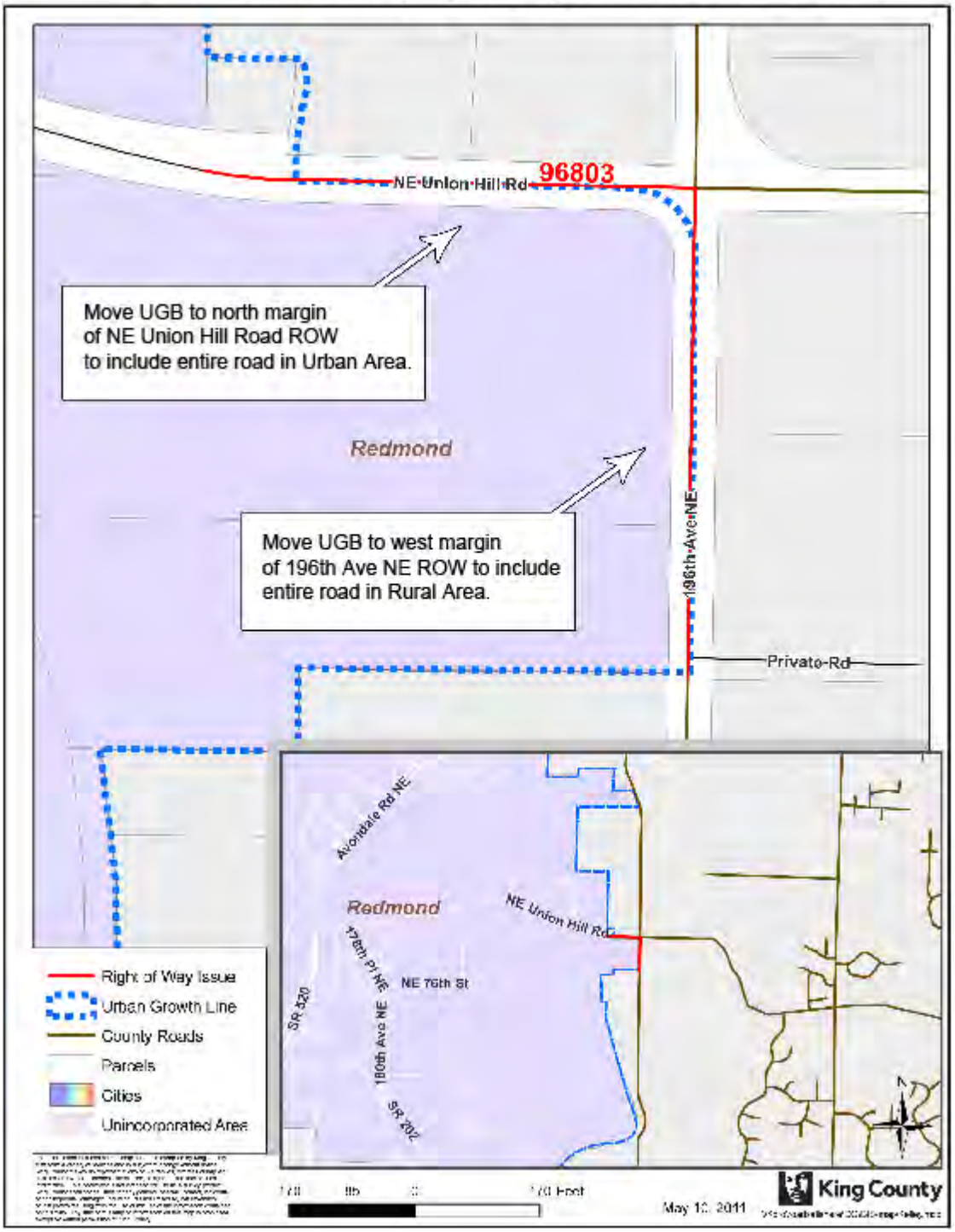
Urban Growth Boundary Right of Way Issues - 148th Avenue SE



Urban Growth Boundary Right of Way Issues - 212th Avenue SE



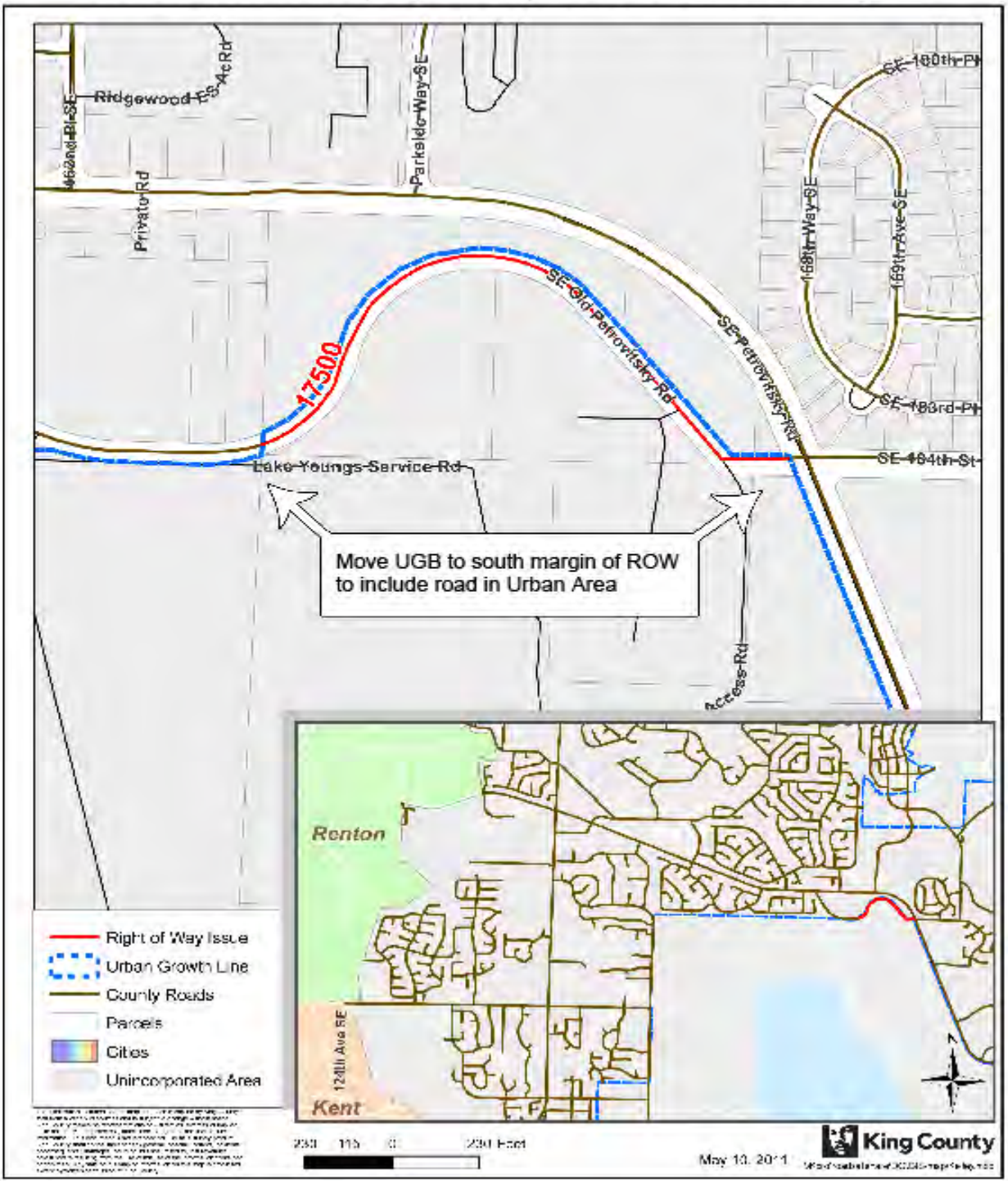
Urban Growth Boundary Right of Way Issues - NE Union Hill Road



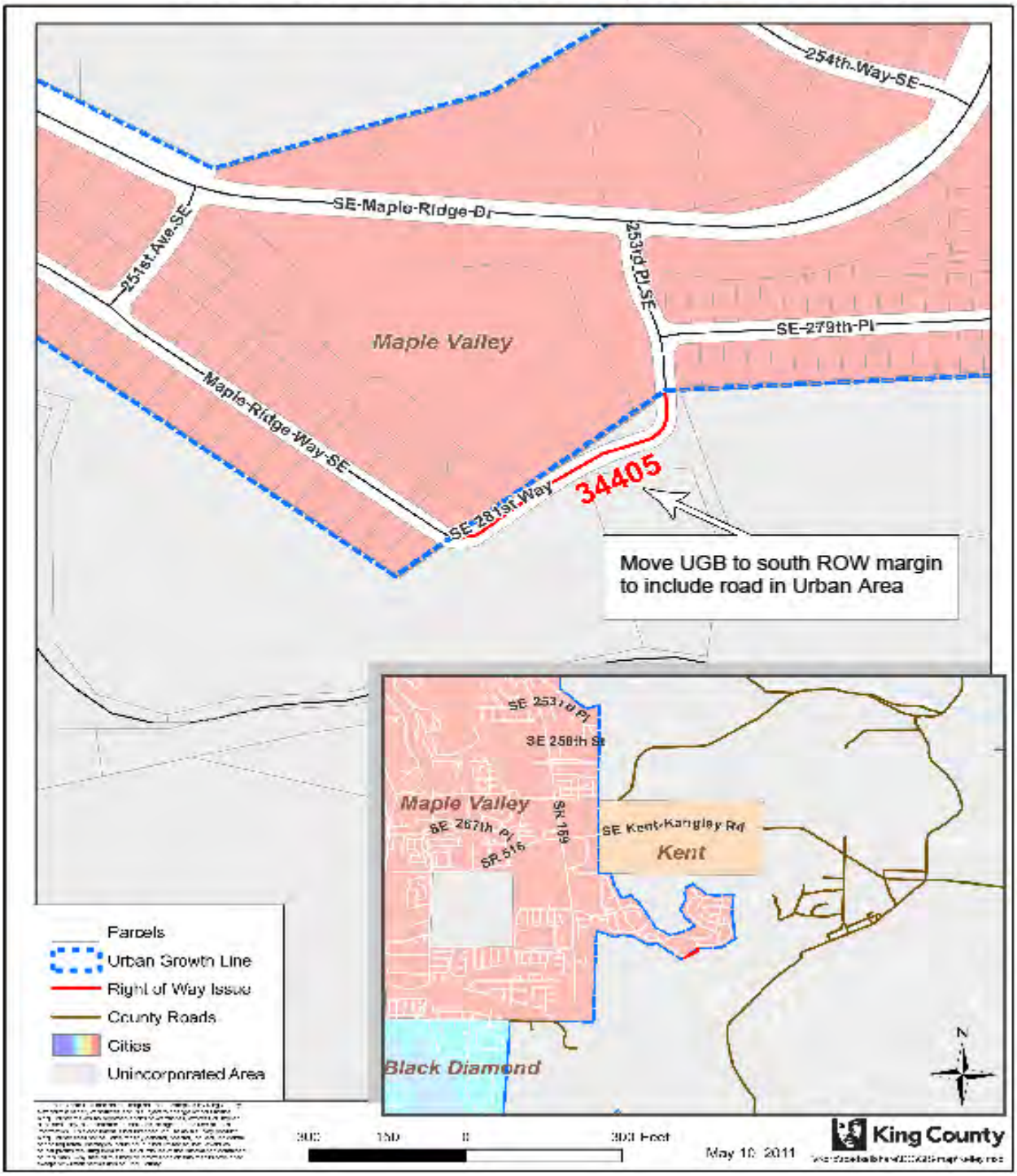
Urban Growth Boundary Right of Way Issues - Lake Sawyer Rd SE



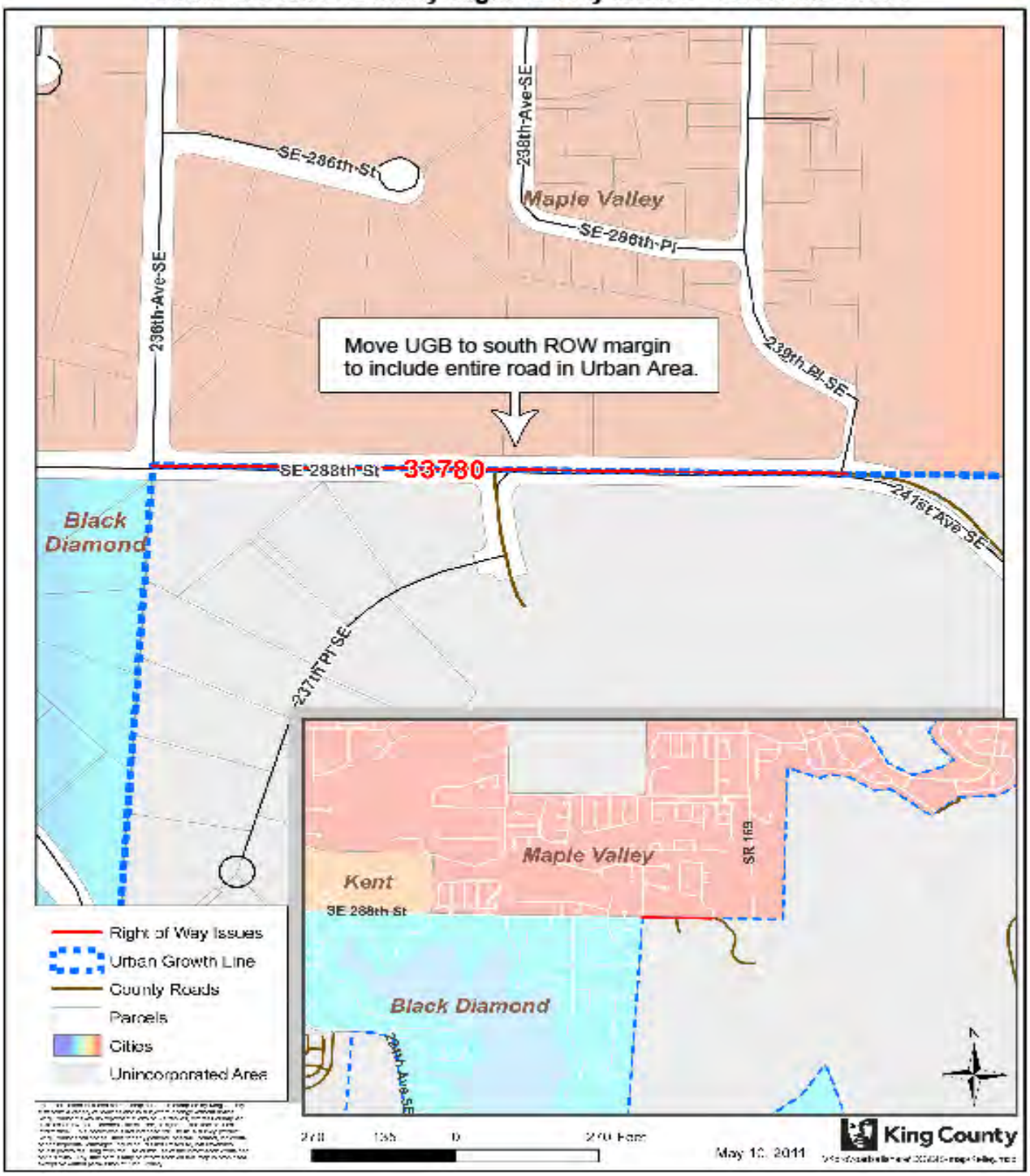
Urban Growth Boundary Right of Way Issues - SE Old Petrovitsky Road



Urban Growth Boundary Right of Way Issues - SE 281st Way

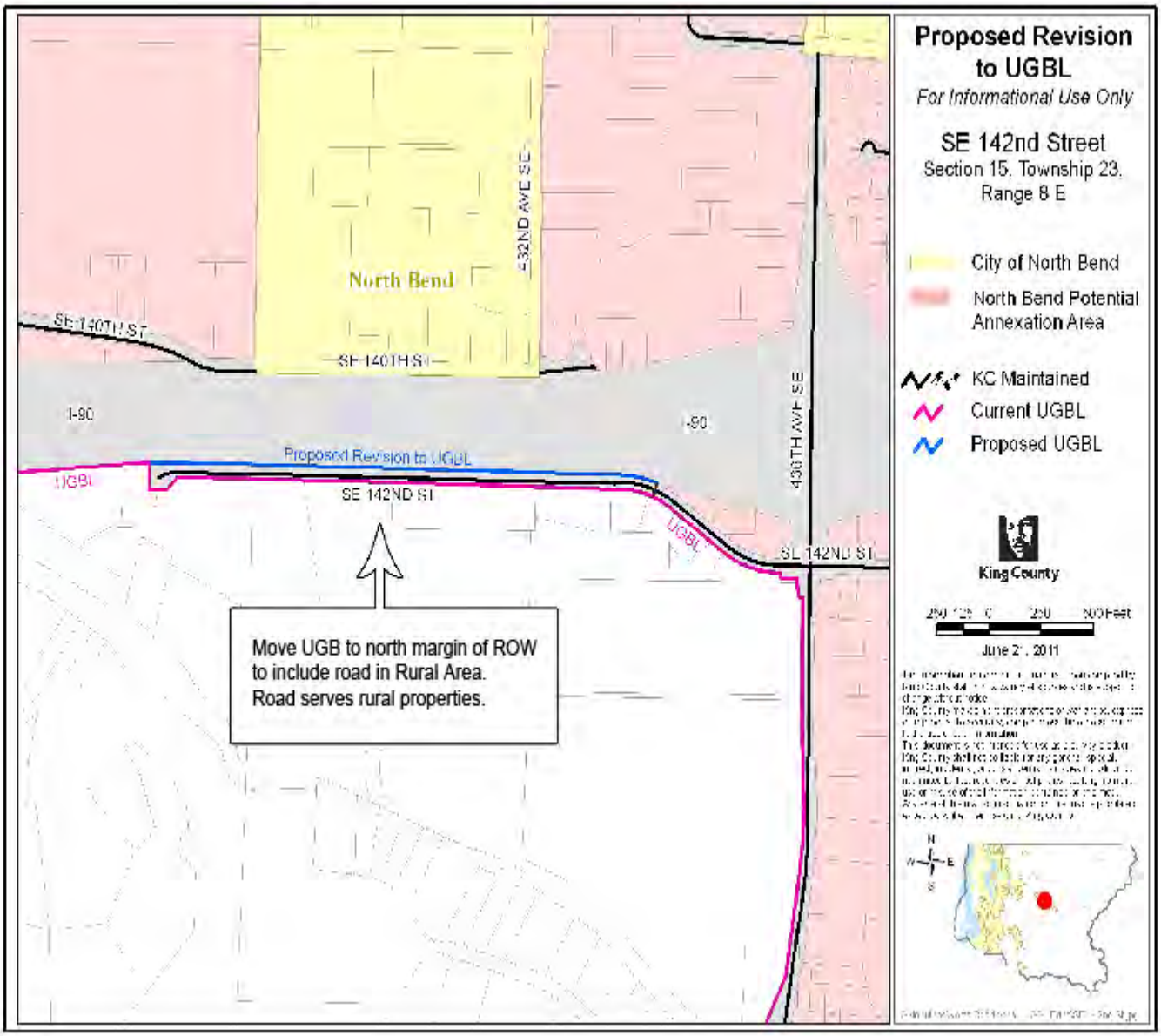


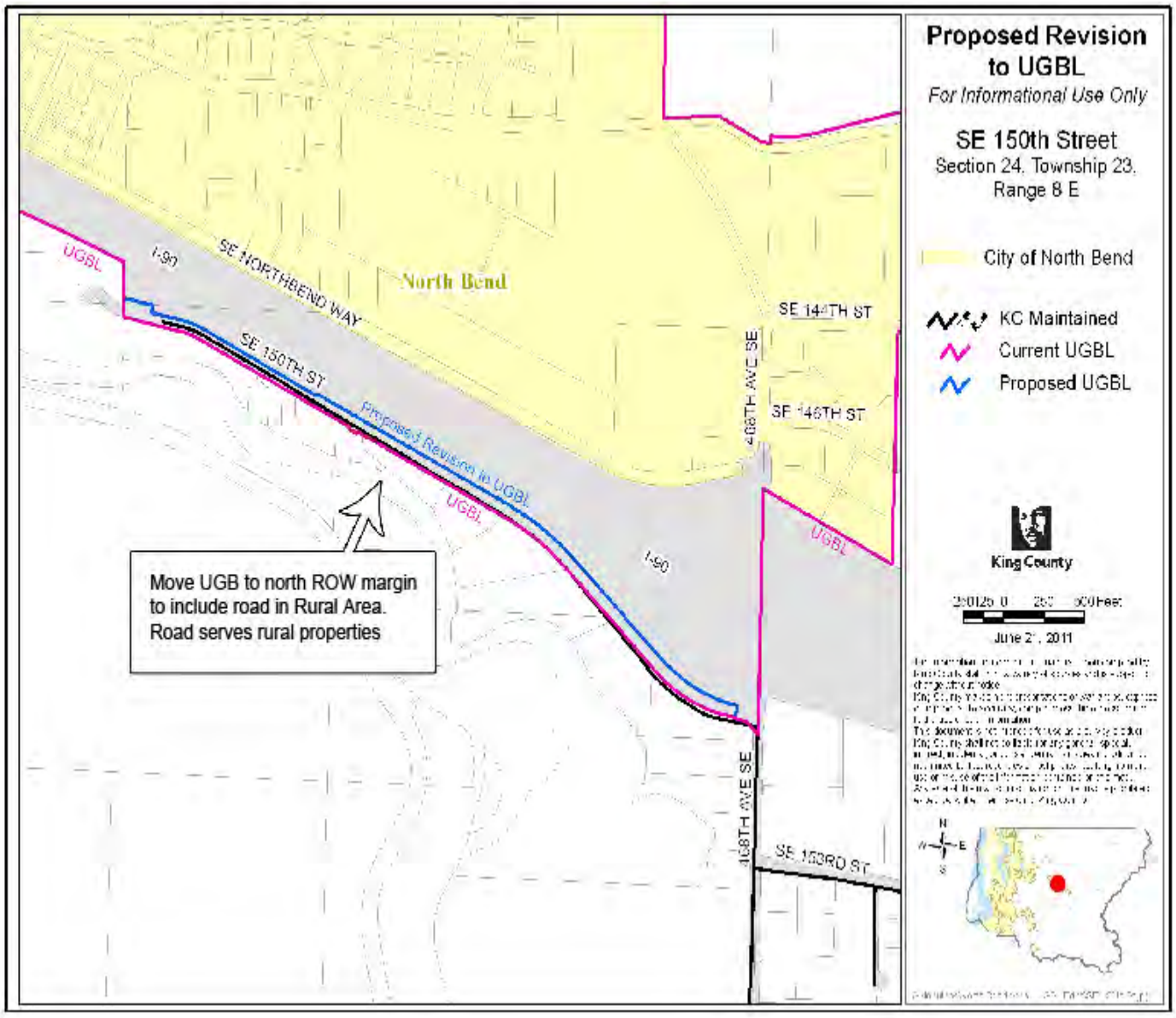
Urban Growth Boundary Right of Way Issues - SE 288th Street



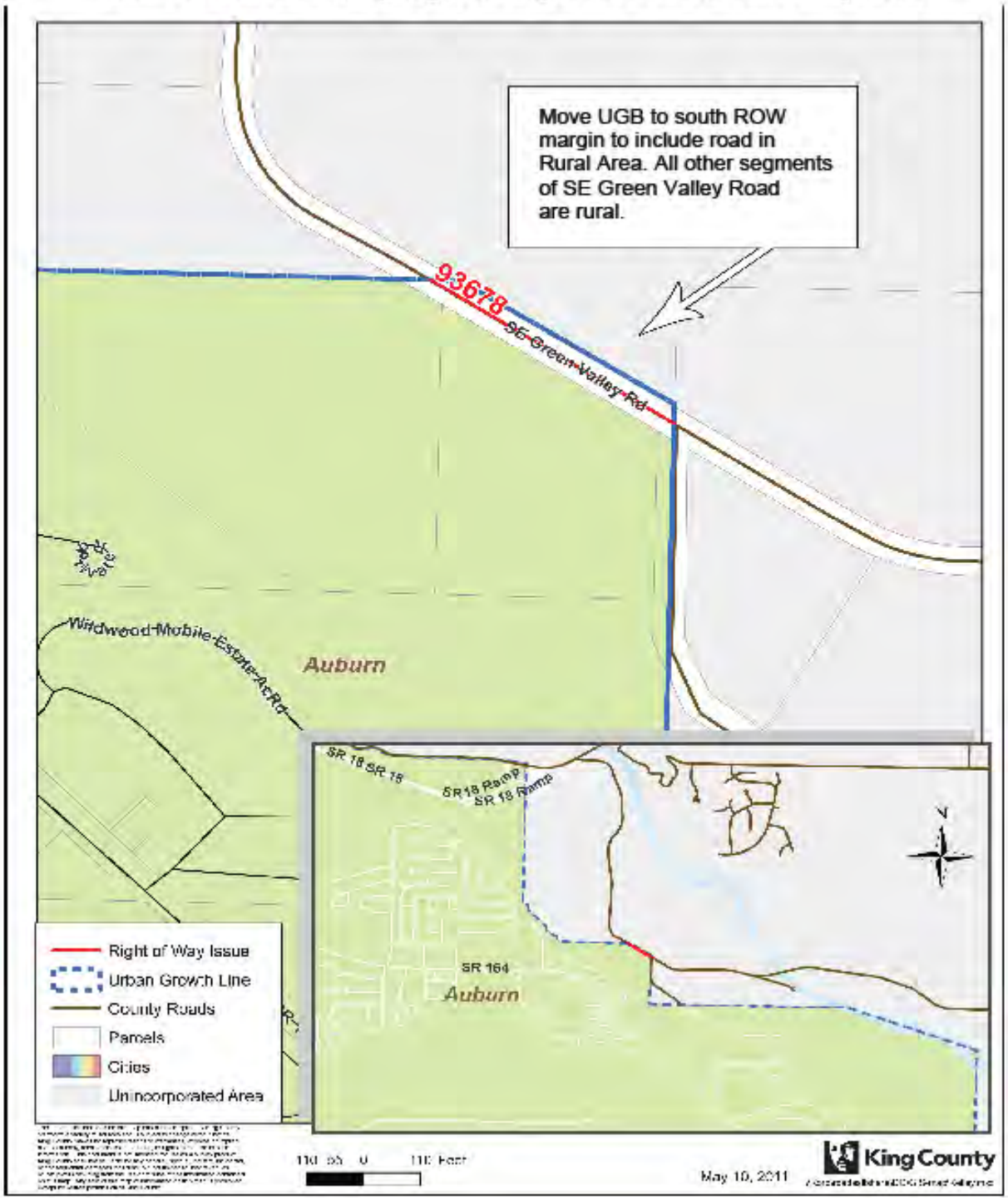
Urban Growth Boundary Right of Way Issues - SE 440th Street



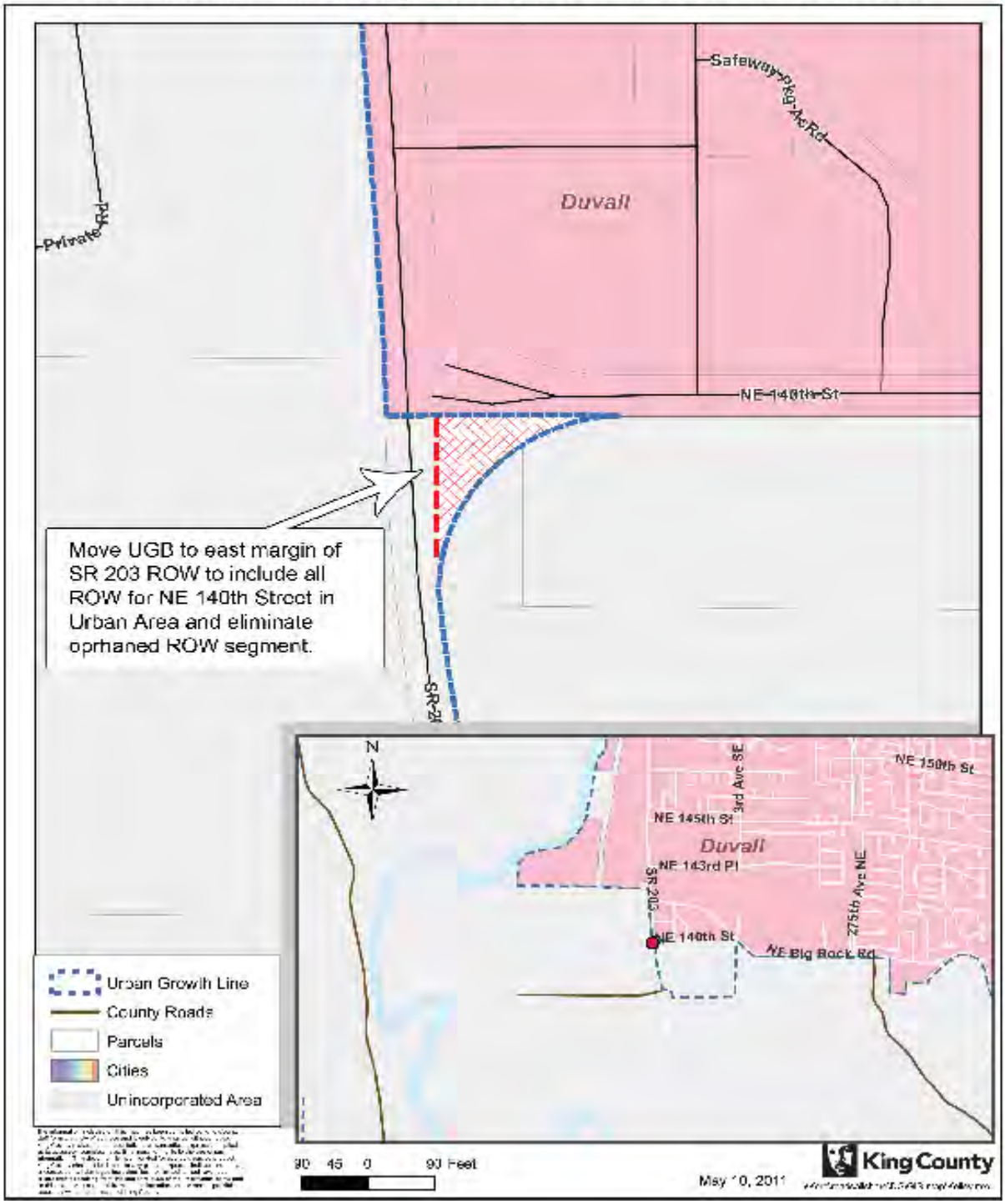

Proposed Revision to UGBL
For Informational Use Only
SE 142nd Street
Section 15, Township 23, Range 8 E
City of North Bend
North Bend Potential Annexation Area
KC Maintained
Current UGBL
Proposed UGBL
King County
June 2, 2011
North Bend
SE 140TH ST
I-90
Proposed Revision to UGBL
UGBL
SE 142ND ST
436TH AVE SE
Move UGB to north margin of ROW to include road in Rural Area. Road serves rural properties.


Proposed Revision to UGBL
For Informational Use Only
SE 150th Street
Section 24, Township 23, Range 8 E
City of North Bend
KC Maintained
Current UGBL
Proposed UGBL
King County
June 21, 2011
North Bend
SE NORTHBEND WAY
SE 150TH ST
SE 144TH ST
SE 146TH ST
468TH AVE SE
SE 153RD ST
I-90
UGBL
Proposed Revision to UGBL
Move UGB to north ROW margin to include road in Rural Area. Road serves rural properties

Urban Growth Boundary Right of Way Issues - SE Green Valley Road



Urban Growth Boundary Right of Way Issues - SR 203 & NE 140th Street



Map Amendment 9

Maple Valley UGA – Technical Correction

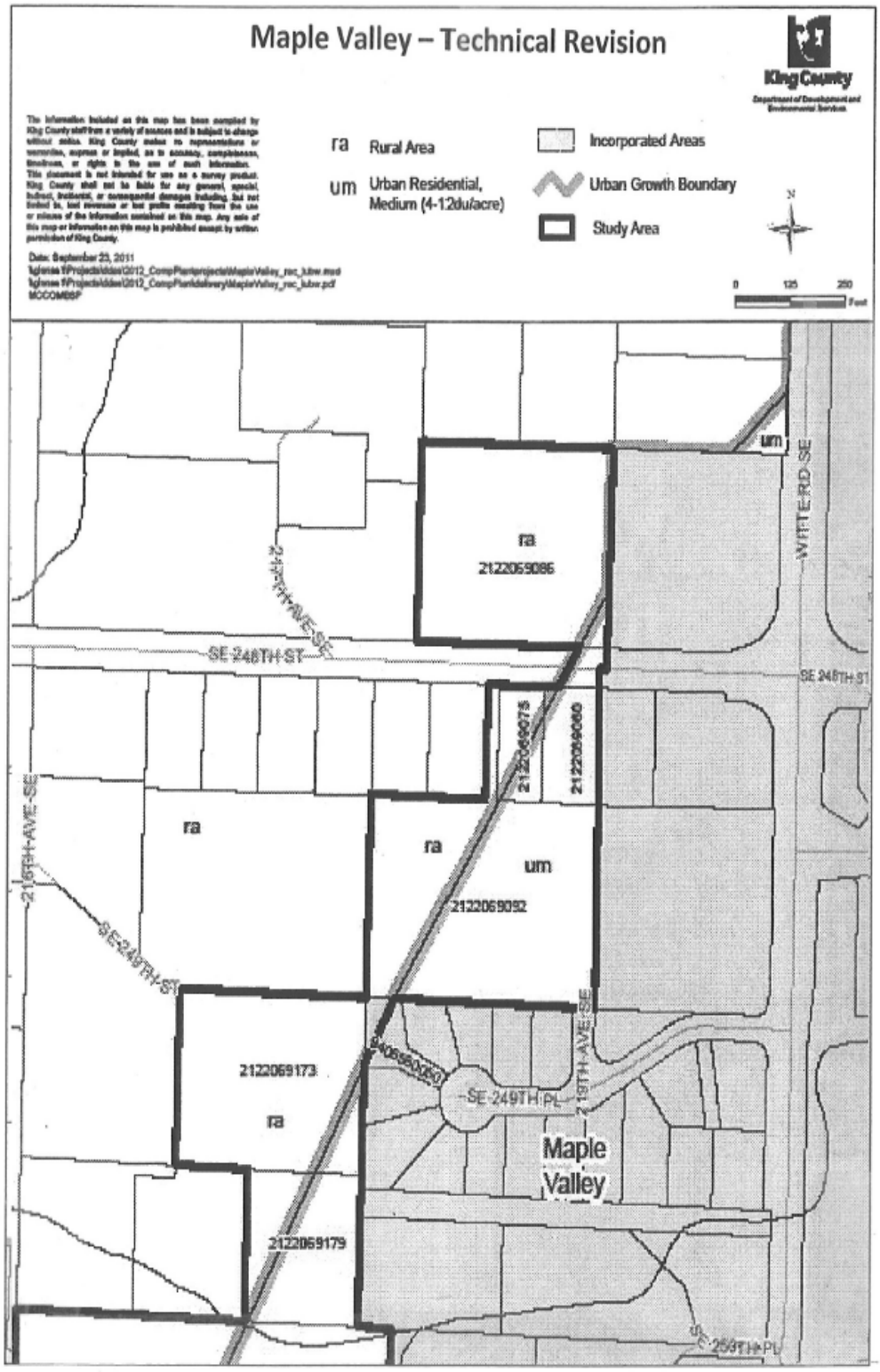
AMENDMENT TO THE KING COUNTY LAND USE ATLAS

Amend Map #21, Section 21, Township 22, Range 6, as follows:

Redesignate the northwest corner of parcel 9406580050 from Rural Area to Incorporated City.

Amend all other KCCP and Technical Appendix maps that include the Urban Growth Area to be consistent with this change.

Effect: Fixes a technical mapping error. The parcel is totally located within the boundaries of the City of Maple Valley.


Maple Valley – Technical Revision
King County
ra Rural Area
um Urban Residential, Medium (4-12du/acre)
Incorporated Areas
Urban Growth Boundary
Study Area
Date: September 23, 2011
0 125 250
Feet
ra
2122069086
um
WITTE RD SE
SE 248TH ST
216TH AVE SE
2122069075
2122069080
ra
ra
um
2122069092
SE 249TH ST
219TH AVE SE
2122069173
ra
SE 249TH PL
Maple Valley
2122069179
SE 250TH PL

Map Amendment 10

Melki – Zone Change

AMENDMENT TO THE KING COUNTY ZONING ATLAS

Amend Map #14, Section 14, Township 23, Range 5, as follows:

Rezone the northerly 246.14 feet of parcel 1457500005 (exclusive of the area that lies within the wetland demarcation area established through code enforcement action E08G0099) from O (Office)- Potential RB (Regional Business) to RB-P.

Apply the following property-specific (p-suffix) conditions:

- This reclassification shall be effective only after a conservation easement has been recorded with the King County Recorder's Office for the:
  - RB-zoned portion of parcel 1457500005 that lies within the wetland demarcation area established through code enforcement action E08G0099, and
  - Remaining R-4 zoned portion of the parcel,

- The uses of the RB-zoned portion of the parcel shall be limited to the:
  - Sale, lease or rental of used (pre-owned) automobiles, and
  - Uses allowed for the Office zone,

- The number of automobiles for sale, lease or rental shall not exceed 45,

- No repair or maintenance of automobiles shall be permitted on-site,

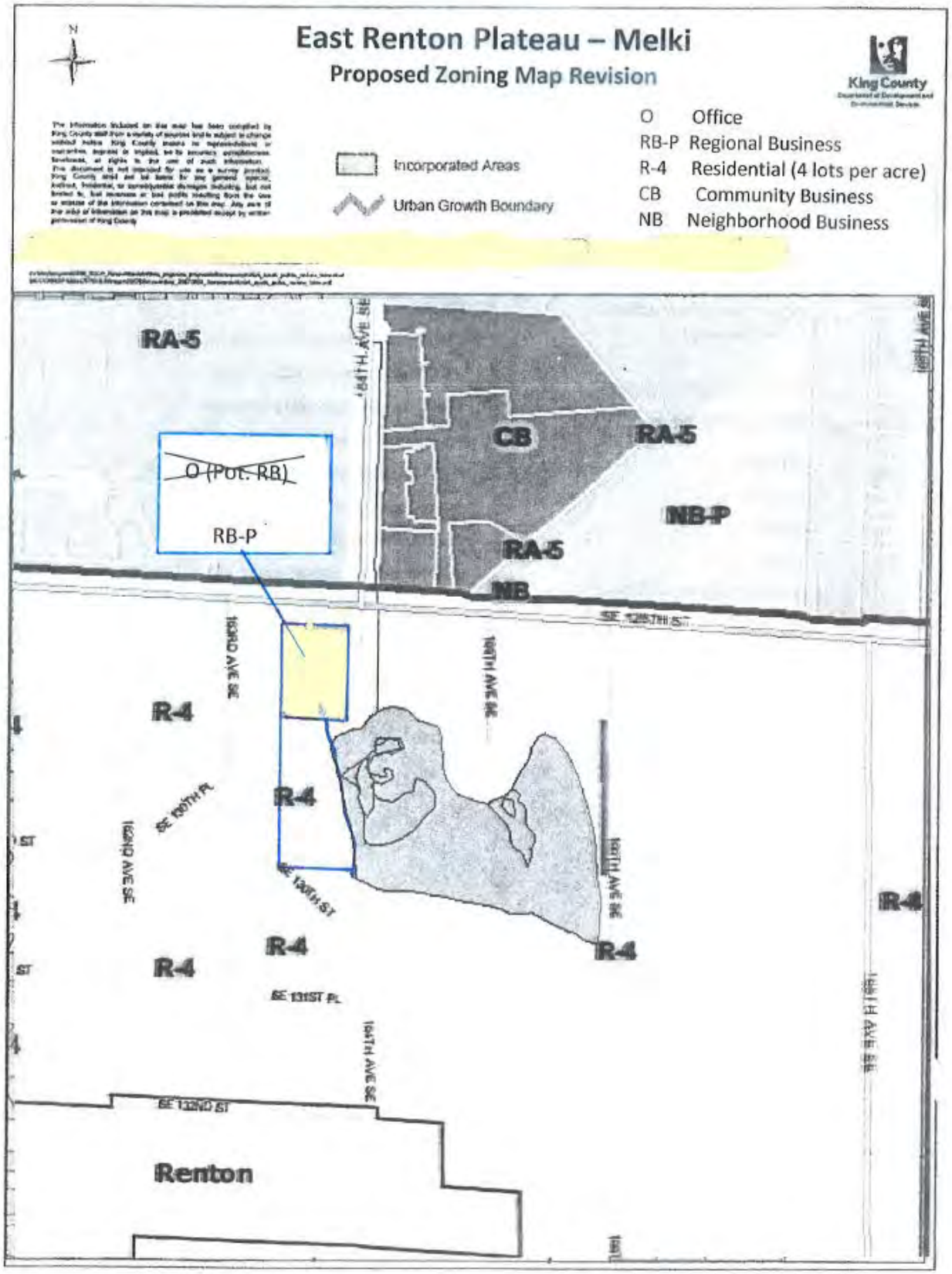
- The parking area and storm water retention facilities shall be upgraded to comply with current county regulations, including but not limited to the county's surface water management standards,

- Landscaping shall be provided pursuant to K.C.C. chapter 21A.16,

- Lighting for the parking area shall be positioned in a manner to direct light only to the parking area and away from residential properties to the west and east, and

- Automobiles shall be washed only within an area where contaminated waste water cannot escape to the natural drainage system.

Effect: The proposed zoning amendment actualizes the potential RB zoning for the property and applies conditions related to uses, design and dedication of a conservation easement.


East Renton Plateau – Melki
Proposed Zoning Map Revision
King County
O Office
RB-P Regional Business
R-4 Residential (4 lots per acre)
CB Community Business
NB Neighborhood Business
Incorporated Areas
Urban Growth Boundary
RA-5
O (Pot. RB)
RB-P
CB
RA-5
NB-P
RA-5
NB
R-4
R-4
R-4
R-4
R-4
R-4
Renton
SE 128TH ST
SE 130TH ST
SE 131ST PL
SE 132ND ST
184TH AVE SE
183RD AVE SE
182ND AVE SE
181ST AVE SE