

Goal Area 3: Forests and Agriculture

INTRODUCTION. Forests and farms absorb and store carbon dioxide in trees and soils. The use of sustainable practices on these resource lands can add to their value in reducing GHG emissions.



- Forests.** As trees grow, they absorb carbon dioxide from the air and convert it into carbon, which is stored in tree trunks, roots, foliage and soil. Forests in the Pacific Northwest store more carbon than almost anywhere else in the world. There are more than 800,000 acres of forest land in King County and it is estimated that approximately 800,000 to 900,000 additional MTCO_{2e} were sequestered and stored over the last decade by new local forest growth. This total does not include all the rural residential and urban forests, which also contain significant carbon.
- Agriculture.** Approximately 50,000 acres in King County are in agricultural production, much of it in perennial pasture. Active agricultural uses result in GHG emissions—especially from tillage, nitrogen fertilizers, animal digestive processes, manure management, and vehicles—but agricultural soils also store significant amounts of carbon.

EXISTING COUNTY ACTIONS AND PROGRAMS. King County has taken significant action to preserve forest and agricultural land and to practice and encourage careful stewardship. Preserving forest land and managing forests for health and resilience can significantly increase the quantity of carbon stored on these lands. These actions can also reduce the risk of catastrophic loss of carbon through wildfire, windfall, and mortality caused by insects or pathogens. Sustainable farming techniques can enhance soil health, reduce use of fossil fuel based resources, and add significant carbon to agricultural lands. In addition, new research shows that the production of some types of food, for example fruits and vegetables, results in fewer GHG emissions than the production of other foods. Efforts to increase access to and availability of these locally produced low-impact foods can help reduce GHG emissions associated with food consumption.

- Forests.** King County has preserved forest land through the designation and zoning of 824,000 acres in the Forest Production District and through the permanent protection of more than 140,000 acres of private forestland through transfers of development rights. In addition, King County owns and manages approximately 24,000 acres of



Chinook Bend Natural Area—part of the more than 26,000 acres of open space and forest land King County owns and manages

forest land, including 780 acres acquired in 2011. The County has developed a number of stewardship programs, both for its own properties and to support private forest land owners.

- **Agriculture.** King County has protected farmland through the designation and zoning of 42,000 acres in the Agricultural Production Districts and has ensured long-term conservation of more than 13,000 acres in the Farmland Preservation Program. The County provides technical and financial assistance with sustainable farming practices and supports marketing of local farm products around the region.



A field of corn growing on a farm near Kent.

COORDINATION WITH OTHER PLANS AND PROGRAMS. The Forests and Agriculture goals are coordinated with the following plans:

- King County Strategic Plan
- King County Comprehensive Plan
- 2010 King County Open Space Plan
- 2009 King County FARMS Report
- King County Parks and Recreation Division Forest Stewardship Plans
- King County Transfer of Development Rights Program
- King County Conservation Futures Program
- King County Current Use Taxation Programs

ACCOUNTABLE AGENCIES. The *Department of Natural Resources and Parks* is the overall lead for this goal area. The *Water and Land Resources Division* is responsible for strategies focused on working with private forest and farm owners. This work is led by staff in the *King County Forestry Program* and the *King County Agriculture Program*. The *Parks and Recreation Division* leads efforts related to acquiring, managing and restoring King County *Natural Resource Lands*.

COUNTY SERVICES

GOAL S.3: King County will support healthy, productive farms and privately owned forests that maximize biological carbon storage, promote public health, and are resilient to changing climate conditions.

- ▶ **Measure 1:** Privately owned rural acreage that has stewardship plans or is enrolled in Open Space (RCW 84.34) and Forest Land (RCW 84.33) designated current use taxation incentive programs
 - ★ **Target 1:** 500 additional acres per year of privately owned rural acreage that has stewardship plans or is enrolled in current use taxation incentive programs⁵
- ▶ **Measure 2:** Privately owned forest lands permanently conserved through easements that remove the development rights
 - ★ **Target 2:** 200,000 forest acres permanently conserved through easements that remove the development rights by 2016⁶
- ▶ **Measure 3:** King County agricultural lands permanently conserved through easements that remove the development rights
 - ★ **Target 3:** In 2013, the Water and Land Resources Division will collaborate with the King County Agriculture Commission to establish a goal for the number of acres preserved in Farmland Preservation Program.

OBJECTIVES	STRATEGIES
<p>Objective S.3.1: King County will encourage sustainable agriculture and forestry</p>	<p>Strategy A: Conserve working forests and encourage private forestry through the acquisition of development rights in the Forest Production District</p> <p>Strategy B: Provide incentives, technical assistance, and streamlined permitting to keep land in agriculture and forestry use and to support sustainable farm and forestry practices including the growth of low-impact foods such as fruits and vegetables</p> <p>Strategy C: Protect agricultural land and encourage farming through the purchase or transfer of development rights</p> <p>Strategy D: Work with others to support farmers markets and programs that help new farmers get started and market their products</p>

⁵ Developed as part of the SCAP process in consultation with staff from Water and Land Resources Division and the Parks and Recreation Division

⁶ Builds on the “Cascade Foothills Initiative” (CFI). In 2004 a letter of intent (LOI) in support of the CFI was signed between King County, Snohomish County, Pierce County, Washington State Department of Natural Resources, The Trust for Public Land and Forterra (then known as the Cascade Land Conservancy). This LOI established a goal for, among other things, permanent protection of approximately 600,000 acres across the three counties. This SCAP target builds on that goal and sets a target date for King County’s share of the commitment.

COUNTY OPERATIONS

GOAL O.3: King County will acquire, manage and restore its parks and other natural lands in ways that maximize biological carbon storage and are resilient to changing climate conditions.

- ▶ **Measure 1:** Percentage of King County Parks forested sites over 200 acres in size that have developed and are implementing Forest Stewardship Plans
 - ★ **Target 1:** 100% by 2025⁷
- ▶ **Measure 2:** Number of native trees and shrubs planted in restoration of King County Parks forest lands
 - ★ **Target 2:** A combined total of 30,000 native trees and shrubs per year⁸

OBJECTIVES	STRATEGIES
Objective O.3.1: Acquire and preserve forest lands	Strategy A: Acquire, protect and conserve high-priority open space through a variety of means including fee-simple purchase, donations and purchase of conservation easements and covenants
Objective O.3.2: Protect and improve the health of King County-owned forest lands	Strategy A: Assess, maintain, enhance, and restore forests and soils on King County-owned lands, including developing and implementing Forest Stewardship Plans for forested sites

⁷ Developed as part of the SCAP process in consultation with staff from Water and Land Resources Division and the Parks and Recreation Division

⁸ Same as above

PRIORITY ACTIONS:

- Assist forest and farm owners.** The Water and Land Resource Division’s (WLRD) Forestry Program will continue to offer forest stewardship planning courses and forestry workshops, and to offer forest management assistance to landowners, including through the new Urban and Community Forestry Climate Preparedness and Response website. The Forestry Program will also work with communities and fire districts on community Firewise plans to reduce the risk of wildfire. WLRD’s Agriculture Program will continue to provide technical assistance and cost sharing to support sustainable farming practices, and will promote local production of and access to fruits and vegetables. The County will also continue to offer property tax incentives that support privately owned forests and farms.
- Preserve forests.** King County will continue to conserve natural lands that have high ecological value and that enhance the connectivity of its existing open space inventory. The County will also follow through on its commitment under the Cascade Foothills Initiative to permanently protect 200,000 acres of privately owned forest land from development. The near-term focus of these efforts will be to explore potential sites in southeastern King County.
- Improve soils.** The Wastewater Treatment Division will continue to use its new biosolids brand Loop™ to increase community support and understanding of the County’s biosolids product. The application of Loop™ biosolids to forest land adds large quantities of carbon to soils, stimulates forest growth, and can displace use of fossil fuel-based fertilizers. King County will also pursue opportunities for soil management and restoration projects on King County-owned lands, including using biosolids, compost, and other organic materials that are byproducts of County operations.



Grand Ridge Park—1,300 acres of pristine forest rising above Issaquah and Lake Sammamish



Loop soil amendment is made from solids extracted during the wastewater treatment process. It helps create healthy, carbon-rich soils

- **Restore parks.** The Parks and Recreation Division has completed preliminary forest stand assessments on all of its forest land and forest stewardship plans for seven sites, and also has conducted six harvests for long-term forest health. Over the next few years, Forest Stewardship Plans will be developed or updated for eight different sites including the Henry's Ridge Open Space, Black Diamond Natural Area, Mitchell Forest, and Taylor Mountain Forest. The Parks and Recreation Division and Water and Land Resources Division will also continue their focus on developing opportunities for volunteers to plant native trees and shrubs and remove invasive species from County-owned lands. Examples of priority sites over the next several years include Maury Island Marine Park, Soos Creek Regional Park, Juanita Woodlands Park, Taylor Mountain Forest, and Chinook Bend Natural Area.



Volunteers plant trees at Vashon's Island Center Forest as part of a pilot project exploring the carbon sequestration potential of soils