

Water and Land Resources Division

Department of Natural Resources and Parks King Street Center 201 South Jackson Street, Suite 600 Seattle, WA 98104-3855

206-296-6519 Fax 206-296-0192

TTY Relay: 711

Determination of Non-Significance

Name of Proposal: King County Alluvial Fan Demonstration Project in the Snoqualmie Watershed Inside Areas of Shoreline Designation

Description of Proposal:

King County proposes to adopt the Alluvial Fan Demonstration Project, which consists of an ordinance authorizing the demonstration project under K.C.C. 21.55 and up to five individual projects. Under the ordinance, sediment management facilities will be "allowed alterations" under K.C.C. 21A.24.045. The ordinance will expire twelve months after adoption.

The individual projects will involve property owners constructing sediment management facilities designed by the Department of Natural Resources and Parks on alluvial fans with existing infrastructure or farm fields. These pilot projects will test different designs, identify best management practices, and determine whether sediment management facilities are a viable way to address the buildup of deposited materials on alluvial fans. Evaluation of the projects will inform potential future code amendment proposals.

Location of Proposal:

The demonstration project will be limited to the King County portion of the Snoqualmie River Watershed inside the shoreline designation.

Responsible Official:

Mark Isaacson

Position/Title:

Division Director, Water and Land Resources Division

Address:

201 South Jackson Street, Suite 600

Seattle, WA 98104-3855

Phone:

206-477-4601

DATE

SIGNATURE

Proponent and Lead Agency:

King County Department of Natural Resources and Parks

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Water and Land Resources Division

Contact Person(s):

Brian Sleight, Supervising Engineer, 206-477-4826

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under Revised Code of Washington (RCW) 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. THIS INFORMATION IS AVAILABLE TO THE PUBLIC ON REQUEST (for a nominal photocopying fee or by email).

THIS DETERMINATION OF NON-SIGNIFICANCE (DNS) is issued under Washington Administrative Code (WAC) 197-11-340(2). The lead agency will not act on this proposal until after **May 8, 2014.** Comments must be submitted or postmarked by that date.

For additional information, please contact:

Brian Sleight
Supervising Engineer
Stormwater Services Section
King County Water and Land Resources Division
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855
206-477-4826
Brian.Sleight@kingcounty.gov

Or visit:

http://www.kingcounty.gov/environment/waterandland/stormwater/agricultural-drainage-assistance/adap-sepa.aspx



KING COUNTY ENVIRONMENTAL CHECKLIST

Alluvial Fan Demonstration Project in the Snoqualmie River Watershed Inside Areas of Shoreline Jurisdiction

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Alluvial Fan Demonstration Projects Inside Areas of Shoreline Jurisdiction

Note that in this checklist, answers labeled A will pertain to the Ordinance and answers labeled B will pertain to the projects authorized by the Ordinance.

2. Name of applicant:

King County Department of Natural Resources and Parks (DNRP), Water and Land Resources Division (WLR Division).

3. Address and phone number of applicant and contact person:

Brian Sleight, Supervising Engineer King County Water and Land Resources Division 201 South Jackson Street, Suite 600 Seattle, WA 98104-3855 Phone: (206) 477-4826

4. Date checklist prepared:

April 23, 2014

- 5. Agency requesting checklist:
- A) King County Department of Permitting and Environmental Review
- B) Washington Department of Fish and Wildlife King County Department of Natural Resources and Parks – Water and Land Resources Division
- 6. Proposed timing or schedule (including phasing, if applicable):
- A) The goal is to adopt the Ordinance in the spring of 2014.
- B) Projects authorized by the Ordinance would have to be permitted within one year of adoption of the Ordinance. Permitted projects would be constructed within one year of permit issuance.
- 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
- A) Projects completed under the Ordinance will be evaluated to determine if a change to King County Code is needed and what a potential code change would entail.
- B) None anticipated.
- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Environmental checklist: Alluvial Fan Demonstration Project in the Snoqualmie River Watershed Inside Areas of Shoreline Jurisdiction

A report documenting the success/failure of the Demonstration Project Ordinance and the individual projects will be prepared for the King County Council per King County Code 21A.55.

- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
- A) N/A
- B) None known.
- 10. List any government approvals or permits that will be needed for your proposal, if known.
- A) Adoption by the King County Council. Approval of this temporary amendment to the King County Shoreline Master Program by the Department of Ecology.

- B) Washington Department of Fish and Wildlife Hydraulic Project Approval King County Grading Permit Shoreline Substantial Development Permit Exemption Review King Conservation District Farm Plan
- 11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

This checklist addresses both the adoption of an ordinance that authorizes the Alluvial Fan Demonstration Project, and up to five individual projects that would be allowed under the ordinance.

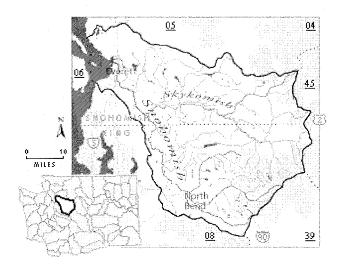
A) The ordinance authorizes an alluvial fan demonstration project pursuant to K.C.C. chapter 21A.55. King County's existing regulations and the lack of approved management practices make it difficult to remedy the impacts of alluvial fan deposits on farm operations, infrastructure, and residential and recreational uses. This demonstration project authorizes sediment management facilities as "allowed alterations" under K.C.C. 21A.24.045, subject to satisfying all other code requirements, and allows construction of up to five individual projects.

The demonstration project will consist of up to five individual projects located within the Snoqualmie River watershed basin inside areas of shoreline jurisdiction. Projects will be implemented within streams with mean annual flows of less than twenty cubic feet per second. The individual projects will involve construction of sediment management facilities designed by the Department of Natural Resources and Parks on alluvial fans with existing infrastructure, including but not limited to structures, utilities, roads, fences and pipe systems, or cleared alluvial fans used for agricultural or recreational purposes. These pilot projects will test different designs, identify best management practices, and determine whether sediment management facilities are a viable way to address alluvial fans and the buildup of deposited materials.

B) The individual projects will be located within the Snoqualmie River watershed inside areas of shoreline jurisdiction and will be implemented within streams with mean annual flows of less than twenty cubic feet per second. Individual projects will construct a sediment management facility designed by the Department of Natural Resources and Parks on developed alluvial fans. The goal of the pilot projects will be to test different sediment management facility designs and determine whether using a sediment management facility to address the problems associated with alluvial fans has less impact to the aquatic area and the fish and animals that use the aquatic area than dredging long stretches of the aquatic area. Sediment removed from a sediment management system can be placed on other areas of the alluvial fan, similar to how it would be deposited on an unmanaged alluvial fan, or hauled off site.

There are currently two types of sediment management facilities that are proposed to be constructed as pilot projects, although other types of facilities may be constructed if they can meet the goals of the demonstration projects. One type is a sedimentation pool of calm water with a residence time long enough to allow larger sediment to settle out of the water column. A sedimentation pool must be constructed to prevent fish stranding at various levels of sediment retention and flow in the stream. A sedimentation pool must be situated or shaded to prevent a rise in the water temperature that could be harmful to fish. Another type is a dual channel concept where two somewhat parallel channels are dug. The stream is directed into one of the channels and excluded from the other by a control structure. When the active channel is full of sediment, water is directed into the other channel and excluded from the channel that is full of sediment. The channel full of sediment is excavated back to its original dimensions after the water is directed to the other channel in preparation to receive the stream again when the other channel gets full of sediment.

- 12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.
- A) This Ordinance will apply to demonstration projects in the King County portion of the Snoqualmie River Watershed inside areas of shoreline jurisdiction.
- B) Demonstration projects will be constructed in the King County portion of the Snoqualmie River Watershed inside areas of shoreline jurisdiction. Alluvial fans occur where the gradient of a stream changes from steeper to flatter. Sediment management facilities are more effective when situated at or near the apex, or highest point, on the alluvial fan, although actual siting of the sediment management facility will depend on where there is sufficient space on the developed alluvial fan.



B. ENVIRONMENTAL ELEMENTS

1. Earth

- A) N/A
- B) See below.
- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other.
- b. What is the steepest slope on the site (approximate percent slope)?

Alluvial fans occur where the gradient of a stream changes from steeper to flatter. Since the creation of an alluvial fan depends on a change in gradient and not a specific gradient, alluvial fans exist on a variety of slopes. The gradient above an alluvial fan is typically above 5 percent. The gradient of the area on which the fan is deposited is typically less than 5 percent prior to the creation of the fan.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Alluvial fans consist mainly of cobbles, gravels, and sands. Silts and clays typically stay suspended in the water as it flows over an alluvial fan and are not deposited in great quantity on an alluvial fan. The actual composition is determined by the composition of the soil eroding above the alluvial fan and the magnitude of the change in gradient of the stream.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Alluvial fans are made up of sediment eroded above the alluvial fan. Typically a ravine exists above an alluvial fan. Ravines can show signs of instability in a number of ways including, but not limited to, down-cutting of the stream channel, side slope slumps, and side slope block failures. The actual alluvial fans are relatively stable after the material has been deposited.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of fill.

No fill is required for the construction of a sediment management facility. Construction of a sediment management facility involves the excavation of soil on the alluvial fan. The amount of excavation depends on the available area, the type of facility, and the desired average length of time of the maintenance cycle. A smaller facility may require the excavation of about 50 cubic yards while a larger facility could require the excavation of several hundred cubic yards of material.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

The possibility of erosion occurring during clearing, construction, or use of a sediment management facility is low. Alluvial fans are areas of deposition, not erosion. The materials that will be excavated for construction were previously deposited on the site so there is a low potential to remobilize them. Construction and use of a sediment management facility will not occur in flowing water so the potential for mobilizing sediment is low. During maintenance, there could be short-term turbidity during set up of a water bypass system. Turbidity will be minimized and controlled by appropriate best management practices.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Standard designs for sediment management facilities do not exist but it is anticipated that less than 30% of the total project footprint will be impervious surface. Impervious surfaces that could be associated with a sediment management facility include, but are not limited to, access roads, control structures, and containment walls.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Construction and maintenance of sediment control facilities will not take place in flowing water. Water will be bypassed or otherwise directed away the work area for both construction and maintenance. Appropriate best management practices will be implemented to minimize turbidity during the setup and removal of the bypass system. After construction, exposed areas will be treated with approved temporary erosion control measures, such as covering with straw or hydroseeding.

- 2. Air
- A) N/A
- B) See below.
- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

During construction and maintenance of a sediment management facility, heavy equipment will be used to excavate and transport material. Typical heavy equipment exhaust will be created during construction and maintenance. Most roads on agricultural lands have a dirt surface and dust can be created when equipment uses the roads to access the sediment management facility. Other than emissions for heavy equipment during construction and maintenance, no other emissions to the air will be produced by a sediment management facility.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Typical construction practices like not letting equipment idle for long periods will be used.

3. Water

- A) N/A
- B) See below.
- a. Surface:
 - 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.
 - The individual projects will be constructed in streams that ultimately flow into the Snoqualmie River. The streams where the projects will be constructed have a mean annual flow of less than 20 cubic feet per second and may be perennial or seasonal.
 - 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.
 - Depending on the design, all or a portion of each individual project will be constructed in the stream flowing on an alluvial fan.
 - 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
 - No fill will be imported to project sites and no fill or dredged material will be placed in surface water or wetlands during the construction or maintenance of sediment management facilities unless required by a permitting agency for spawning or other purposes.
 - During construction and maintenance of sediment management facilities, accumulated sediment will be removed from the stream associated with the alluvial fan. No sediment will be removed from wetlands as part of the construction of maintenance of sediment management facilities.
 - 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.
 - No surface water withdrawals will be required for construction or maintenance of sediment management facilities.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes. The projects may take place in areas of shoreline jurisdiction which includes the 100-year floodplain of streams with a mean annual flow above 20 cubic feet per second.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No. A spill response kit will be kept on the project sites at all times, to respond to any accidental fuel or lubricant spill. If this occurs, equipment operation will be stopped, and the permit agencies will be contacted immediately in the event of a fuel or lubricant spill.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Streams typically receive groundwater input or discharge to groundwater depending on the amount of water in the surrounding soil. The construction, use, and maintenance of sediment management facilities will not change the interaction of the stream and groundwater.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None

- c. Water runoff (including stormwater):
 - 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Construction, use, and maintenance of a sediment control facility will not change the quantity of runoff that flows into the stream associated with the alluvial fan.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Approved temporary erosion and sedimentation control measures will be implemented during construction and maintenance of a sediment management facility.

4. Plants

- A) N/A
- B) See below.
- a. Check or circle types of vegetation found on the site:

The vegetation on alluvial fans can vary, but typically developed alluvial fans are covered with grass or pasture. If trees are present, alder is usually the first species to grow.

<u>X</u>	Deciduous trees: alder, maple, aspen, cottonwood, willow, other
	Evergreen trees: fir, cedar, pine, other
X	Shrubs
X	Grass
X	Pasture
	Crop or grain
	Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
	Water plants: water lily, eelgrass, milfoil, other
	Other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Typically, some grass and small shrubs and/or trees will be removed during the construction of a sediment management facility.

c. List threatened or endangered species known to be on or near the site.

It is unlikely that any rare or endangered plants occur at the proposed project sites. The projects are on developed alluvial fans which are typically managed in a way that restricts plant growth such as mowing, haying, grazing, etc.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Native plants may be used to shade a sediment management facility if needed.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other
mammals: deer, bear, elk, beaver, other
fish: bass, salmon, trout, herring, shellfish, other

b. List any threatened or endangered species known to be on or near the site.

Fall Chinook (Endangered Species Act (ESA) threatened listing), coho (ESA species of concern), summer and winter steelhead (ESA threatened listing), bull trout (ESA threatened listing) and cutthroat trout are all documented in the Snoqualmie River. The tributaries provide rearing habitat for these species. The most abundant salmonid species likely to occur in the waterways is Coho followed in abundance by cutthroat trout. It is also possible to find Chinook salmon and steelhead trout, but they are not expected to be present, if at all, in other than very low numbers during the summer when a sediment management facility would be constructed and maintained.

c. Is the site part of a migration route? If so, explain.

Migratory birds utilize the Snoqualmie River Watershed, primarily the floodplain, during migration for rest and feeding. Individual projects will take place inside the floodplain but are not expected to impact the resting or feeding habits of migrating birds.

d. Proposed measures to preserve or enhance wildlife, if any:

None.

6. Energy and Natural Resources

- A) N/A
- B) See below.
- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Once completed, the projects will have no energy needs.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Maintenance and refueling of equipment will occur at least 25 feet from the agricultural waterway. A spill response kit will be kept on the site at all times. Equipment operation will be stopped, and the permit agencies will be contacted immediately in the event of a fuel or lubricant spill.

7. Environmental Health

- **A)** N/A
- B) See below.
- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

A minimal chance of hazardous spills from construction equipment will exist during construction. A spill response kit will be kept on the site at all times. Equipment operation will be stopped and the permit agencies contacted immediately in the event of a fuel or lubricant spill. There should be no other environmental health hazards because of these projects.

1) Describe special emergency services that might be required.

None.

2) Proposed measures to reduce or control environmental health hazards, if any:

Maintenance and refueling of equipment will occur at least 25 feet from the agricultural waterway. A spill response kit will be kept on the site at all times. Equipment operation will be stopped and the permit agencies contacted immediately in the event of a fuel or lubricant spill.

b. Noise:

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

The projects will not be affected by external sources of noise.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Typical construction noise from light and heavy machinery is expected during construction. Temporary noise level increases in the project vicinity could be as high as 90 decibels. The completed project will not change existing noise levels.

3) Proposed measures to reduce or control noise impacts, if any:

On a short-term basis, noise will be generated from construction equipment such as truck traffic hauling materials to and from the site, backhoe, and bulldozer. Every effort will be made to limit the short-term noise impacts to hours of 7:00 a.m. to 7:00 p.m. Short-term noise impacts will be eliminated upon project completion. The King County noise ordinance will be followed (Ordinance 3139).

8. Land and Shoreline Use

- **A)** N/A
- B) See below.
- a. What is the current use of the site and adjacent properties?

Developed alluvial fans in the Snoqualmie River Watershed are mostly used for agricultural purposes although some alluvial fans are used for residential, commercial, or forest practices purposes. Adjacent properties typically have the same use as the parcel with the alluvial fan on it.

b. Has the site been used for agriculture? If so, describe.

Yes. Most of the individual projects will likely be on agricultural lands that have been used for activities such as, but not limited to, livestock grazing, having, and growing horticultural crops.

c. Describe any structures on the site.

The structures typically near the project sites may include, but are not limited to, houses, outbuildings, barns, and other farming related buildings.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Most of the individual projects will occur on lands zoned Agriculture (A). Some projects may occur in the Rural Area, zoned RA, or in the Forest (F) zone.

f. What is the current comprehensive plan designation of the site?

Most of the projects will occur in the Agricultural Production District, which is King County's designation of Agricultural Land of Long-Term Commercial Significance under the Growth Management Act. Some projects may occur in an area with Rural Area or Forestry designation.

g. If applicable, what is the current shoreline master program designation of the site?

Individual projects may take place on parcels with any designation. Individual projects will typically take place on parcels with one of the following designations: Residential, Rural, Conservancy, Natural, High Intensity, or Aquatic.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Yes, individual projects will occur within critical areas designated by King County including aquatic areas, landslide hazard areas, erosion hazard areas, and seismic hazard areas. Individual projects will also be within a 100-year floodplain and will be subject to the King County Shoreline Master Program.

i. Approximately how many people would reside or work in the completed project?

None

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The projects will help maintain current agricultural use of the property, which is consistent with its zoning designation.

9. Housing

- **A)** N/A
- B) See below.
- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.				
10. Aesthetics				
A) N/A				
B) See below.				
a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?				
Does not apply.				
b. What views in the immediate vicinity would be altered or obstructed?				
None.				
c. Proposed measures to reduce or control aesthetic impacts, if any:				
Does not apply.				
11. Light and Glare				
A) N/A				
B) See below.				
a. What type of light or glare will the proposal produce? What time of day would it mainly occur?				
None.				
b. Could light or glare from the finished project be a safety hazard or interfere with views?				
Does not apply.				
c. What existing off-site sources of light or glare may affect your proposal?				
None.				
d. Proposed measures to reduce or control light and glare impacts, if any:				
Does not apply.				
12. Recreation				
A) N/A				
B) See below.				
a. What designated and informal recreational opportunities are in the immediate vicinity?				

If recreational activities take place on a developed alluvial fan, it is typically a passive activity like hiking, biking, or

wildlife observation.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Does not apply.

13. Historical and Cultural Preservation

- **A)** N/A
- B) See below.

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

A number of register sites are in the Snoqualmie River watershed. The area has been occupied by European settlers since at least the beginning of the twentieth century and used by Native Americans prior to the arrival of the European settlers.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

A number of known archaeological and historical sites exist within the Snoqualmie River watershed. Since sites for the individual projects have not been identified, it is not possible to identify specific evidence of historic, archaeological, scientific, or cultural importance at this time.

c. Proposed measures to reduce or control impacts, if any:

The King County Historic Preservation Program (HPP) will be notified of the location of each project so the database for historic and cultural sites can be checked. The HPP may require monitoring or other measures for projects within or adjacent to known register sites. The HPP has provided written guidance that will be made available to project applicants on what to watch for in terms of possible items of archeological or historic significance within the project area.

If cultural or archaeological resources are uncovered or encountered during project construction, work will cease immediately and appropriate steps will be taken as necessary to protect those resources prior to resuming construction. If resources are discovered, the Washington State Department of Archaeology and Historic Preservation, the King County Historic Preservation Program, and any affected tribal groups will be notified immediately, and an on-site inspection will be conducted by a state-certified archaeologist and other qualified resource professionals. A mitigation plan will be prepared prior to construction resuming at the site.

14. Transportation

- **A)** N/A
- B) See below.
- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The properties on which the projects will be constructed are served by county roads and state highways. Access to the actual project locations will likely be via private agricultural roads.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Does not apply.

c. How many parking spaces would the completed project have? How many would the project eliminate?

None.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None.

g. Proposed measures to reduce or control transportation impacts, if any:

Does not apply.

15. Public Services

- **A)** N/A
- B) See below.
- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Does not apply.

16. Utilities

- **A)** N/A
- B) See below.
- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

All customary utilities exist in the Snoqualmie River watershed.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:			
	Y Shadada	4/24/2014	
Date Submitted:	C C Cere v C C C	11/1/201	

King County Agriculture Drainage Assistance Program for Maintenance of Agricultural Waterways

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(Do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

During individual project construction and maintenance, various gasoline and diesel vehicles and other small equipment will emit exhaust. No toxic or hazardous substances will be produced or stored by this proposal. During construction or maintenance of projects, it is possible that construction equipment could leak fuel or hydraulic fluid. Projects will create noise during construction or maintenance but there will be no ongoing noise after construction is complete.

Proposed measures to avoid or reduce such increases are:

Construction and maintenance of individual projects will not take place in flowing water. Water will be bypassed or other directed away from the work area during construction and maintenance. Temporary Erosion and Sedimentation Control (TESC) best management practice will be implemented during construction and maintenance of the facility to minimize discharge of turbidity water from the facility. King County has an extensive set of pollution prevention bmp's that all construction activities in King County are required to implement, including having a spill kit on site during construction and training staff in the response to spills. King County has a noise ordinance that all construction activities must follow.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Individual sediment management facilities will remove vegetation from the footprint of the project. Individual facilities should have no impact on animals. Individual facilities will be designed to prevent adverse impacts to fish. An individual facility that reduces the number of times a stream relocates on an alluvial fan will also reduce the number of times fish are subject to stranding on the alluvial fan. Individual projects will reduce the amount of habitat disturbance for maintenance compared to dredging long sections of the stream on and downstream of the alluvial fan. Individual facilities will be de-fished prior to maintenance. The de-fishing process can be stressful to fish and some fish do not survive the defishing process. Individual projects will have no impact on marine life.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Fish relocation will be performed by trained staff who will comply with fish relocation bmp's established for the King County Regional Road Maintenance coverage under section 4(d) of the Endangered Species Act.

3. How would the proposal be likely to deplete energy or natural resources?

This proposal will have no impact on the depletion of energy or natural resources.

Proposed measures to protect or conserve energy and natural resources are: N/A

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Individual sediment management facilities will use relatively short sections of streams that flow through alluvial fans. Many facilities will be in or adjacent to the Snoqualmie Agricultural Production District which is prime farmlands, many of which are in floodplains, on or near historic wetlands. Threatened or endangered species could exist in the drainage channels and said channels could run through historic or cultural sites.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Individual facilities will ultimately improve the use of developed alluvial fans by reducing the number of times and the duration of time when the stream on the alluvial fan overtops its banks. Individual facilities will reduce the impacts to the existing use of the alluvial fan whether that be agricultural, residential, or commercial.. The only threatened or endangered species expected to be found in agricultural channels are fish. Fish will be relocated from projects using bmp's specifically designed to reduce the impact to threatened or endangered species as part of King County's Regional Road Maintenance coverage under section 4(d) of the Endangered Species Act. If cultural or historic sites are discovered, protocols have been developed to notify the King County Historic Preservation Program. Projects will not import any material.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The proposal will have no effect on shoreline use and will not encourage uses incompatible with existing plans. The proposal will result in better management of developed alluvial fans. The use of the land will not change.

Proposed measures to avoid or reduce shoreline and land use impacts are:

N/A

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The proposal will have no impact on the demand for transportation or public services and utilities.

Proposed measures to reduce or respond to such demand(s) are:

N/A

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The purpose of the ordinance is to allow permitted alterations to critical areas that are not currently allowed by King County Code.