King County

ENVIRONMENTAL CHECKLIST

Maintenance of Agricultural Drainages in the Snoqualmie Agricultural Production District

Purpose of the Checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21 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 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 a 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 the proposed project, if applicable:*

The maintenance of agricultural drainages within or adjacent to the Snoqualmie Agricultural Production District.

2. *Name of Applicant:*

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

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

Contact: Brian Sleight
King County Water and Land Resources Division
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855
Phone: (206) 296-8025

4. *Date checklist prepared:*

December 14, 2010

5. *Agency requesting checklist:*

Washington Department of Fish and Wildlife

King County Department of Natural Resources and Parks – Waster and Land Resources Division

6. *Proposed timing or schedule (include phasing, if applicable):*

The proposed projects will be done during the relevant construction window, generally between July 1 to October 15, 2011, and 2012.

7. *Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.*

This checklist addresses projected impacts of projects in the next two years.

8. *List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.*

Lucchetti, G. and K. Higgins. 2010. A Salmon-based Screening Tool to Guide Fish Protection Measures for Agricultural Waterways Summertime Maintenance Activities.

King County. 2004. Best Available Science, Volume I: Review of Science Literature, King County Executive Report.

King County. 2004. Best Available Science, Volume II: Assessment of Proposed Ordinances, King County Executive Report.

Snohomish County Surface Water Management Division. 2005. Snohomish River Basin Salmon Conservation Plan.

Washington State University and University of Washington. 2008. A Study of Agricultural Drainage in the Puget Sound Lowlands to Determine Practices which Minimize Detrimental Effects on Salmonids - Final Report.

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.*

None known.

10. *List any government approvals or permits that will be needed for your proposal, if known.*

Washington Department of Fish and Wildlife Hydraulic Project Approval

Shoreline Substantial Development Permit Exemption Review

King Conservation District Farm Plan

Defishing activities will be covered under King County's Regional Road Maintenance Endangered Species Act 4(d) rule Take Exemption

11. *Give a 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 the project description.)*

This proposal is for projects to maintain agricultural drainage within or adjacent to the Snoqualmie Agricultural Production District to reduce flooding of agricultural fields. These projects will include the removal of the accumulated sediment and noxious and invasive vegetation that have decreased the capacity of the affected drainage ways or blocked drainage of historic drain tiles. These projects may also include the removal of the beaver dams in the agricultural waterways. The agricultural drainage ways will be maintained to historic depth and width. Only sediments accreted since the last maintenance will be removed. Because of the similarity of possible impacts from the multiple drainage maintenance projects and the limited geographic area, King County Water and Land Resources Division is analyzing these similar actions in a single checklist, as allowed in WAC 197-11-060, 3, c., and is addressing them together as a multi-project proposal in this determination. We intend that this SEPA process will cover applications for the agricultural drainage maintenance proposals received in 2011 through 2012.

King County is working with regulatory agencies to develop best management practices guidelines for ditch maintenance for agricultural areas in unincorporated King County. The public will have an opportunity to review the best management practices through a separate SEPA process before they are adopted. The guidelines will include such best management practices as the time of year for the project, sediment and erosion control, fish removal from the construction area, and mitigation requirements. The best management practices implemented will depend on the type of waterway and the likelihood of fish being present during the drainage maintenance project. Waterways are classified as artificial, modified, or natural channels based how they were created. The likelihood of fish being present is based on known fish presence, water quantity, and water quality. Projects will be evaluated ahead of time to determine the classification of the waterway. The projects covered by this proposal, which will be conducted following the best management practices described in this proposal and required under relevant permits, will help to inform the development of the guidelines.

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 plan, 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.

This multi-project SEPA covers the maintenance of the agricultural drainages within or adjacent to land zoned as the Snoqualmie Agricultural Production District in King County. The Snoqualmie Agricultural Production District includes the Snoqualmie Valley from the Snohomish County line south to Fall City (Attachment A). Project will occur on active farms in unincorporated King County, Washington.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. *General description of the site (underline one): flat, rolling, hilly, steep slopes, mountainous, other.*

The projects are in King County's Snoqualmie Agricultural Production Districts or adjacent agricultural properties. The land is within the floodplain of the Snoqualmie River. The land is flat and has a network of drainages that often carries natural streams.

b. *What is the steepest slope on the site (approximate percent slope)?*

The sites are flat farm fields, one to two percent slopes at the steepest.

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.*

A variety of soils are found within or adjacent to the Snoqualmie Agricultural Production District. The maintenance of the agricultural drainages will occur on sites with prime farmland soils such as the Seattle Muck, Alderwood, Kitsap, Briscott, Puget, Pilchuck, Sultan, and Nooksack silty or sandy loams.

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

Some projects may occur in the alluvial fans that are made up of sediment deposited from uplands on either side of the Snoqualmie Valley.

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

The projects will remove sediment and noxious and invasive vegetation from agricultural waterways. The projects are limited to waterways that are artificial or modified channels. The amount of material to be removed will depend on the amount of sediment that has accumulated in the bottom of the channels or behind beaver dams. The amount of sediment to be removed will vary depending on length, width, and depth and of the drainage, and could range from 50 to more than 5,000 cubic yards. The historic width and length of waterways will not be increased. The sediment that will be removed has accumulated over the past years since previous maintenance, which is generally done on a 10-year cycle. This action will not result in the waterways being deeper or wider than they were historically. The spoils will be spread in a thin layer and tilled into the agricultural fields away from the waterways, so they will not re-enter the waterways. The spoils will not be placed in wetlands.

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

During the dredging of the channel, there may be some mixing of the sediment with water, creating a short-term sediment mobilization downstream. Following the activity, exposed surfaces on either

side of the waterways may be subject to erosion. Sedimentation and erosion will be minimized and controlled by appropriate best management practices described in responses below.

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

No part of the site will be covered by impervious surface.

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

The projects will be completed during the dry season, either when the waterways are dry or at low flows, using a flow-bypass diversion if water is present. All exposed soils within the channels and adjacent riparian zones will have erosion best management practices applied immediately following earthwork to further reduce erosion impacts. Erosion control materials such as jute fabric, hydroseeding, or straw with grass seed will be applied. The amount of erosion protection will depend on the waterway classification, presence of fish, and steepness of the side slopes. If water in the channel becomes turbid, it will be directed through sediment control devices such silt fences or coir logs prior to being released back into the channel. The amount of downstream sediment protection will depend on the waterway classification and presence of fish. Spoils will be placed away from the channel areas, so that they do not re-enter the watercourses. The spoils will not be placed in wetlands.

With implementation of the appropriate erosion and sediment control best management practices, the cumulative impact of these projects is low. In the Snoqualmie Agricultural Production District, there are approximately 57 miles of agricultural waterways. The length of the drainage projects generally ranges from 500 to 3000 feet long. This proposal is to provide SEPA coverage for drainage maintenance projects in 2011 and 2012. We anticipate no more than 12 drainage projects occurring within this timeframe.

2. Air

a. *What types of emissions to the air would result from the proposal (for example, dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.*

Once construction is complete, these drainage maintenance projects will emit no gasses.

Construction of the proposed projects will use various vehicles and pieces of equipment that emit gasses with the potential to affect climate. The equipment may include an excavator, dump truck, grader, pick-up truck, bobcat, and water pumps. These gasses include carbon dioxide (CO_2), methane, and nitrous oxide, as well as others in much smaller amounts.

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 the air, if any:*

None.

3. Water

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 the type and provide names. If appropriate, state what stream or river it flows into.

Maintenance of the agricultural waterways will occur in the floodplain of the Snoqualmie River, sometimes within 200 feet of the river, an oxbow, or a major or minor tributary. These are aquatic areas in the King County critical areas regulations and are also mapped and defined as shorelines of the state under the State Shoreline Management Act (RCW 90.58) and its rules (Chapter 173-26 WAC). Maintenance may also occur within 200 feet of a wetland or within a grazed wet meadow. The maintenance will occur on a variety of waterway types from artificial drainages to modified natural waterways.

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.

Yes. Accumulated sediment, invasive and noxious vegetation, and/or beaver dams in the agricultural watercourses will be removed.

If water is flowing, it will be diverted around the project areas using trash pumps and hoses with fish screens. Turbid water will be diverted to adjacent vegetated areas and/or filtered by fabric or straw bales. Impacts to water quantity and quality are expected to be minimal. No water will be diverted into another waterway.

3) Estimate the amount of fill and dredge material that could 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 or exported from the project sites.

The projects will include the removal of accumulated sediment, invasive and noxious vegetation, and/or beaver dams in the waterways. The historic width and length of waterways will not be increased. These waterways have been maintained for several decades. Sediment that will be removed has accumulated over the past several years. The waterways will not be deepened or widened beyond their historical size. The amount of sediment to be removed will depend on the length, width, and depth of the drainage. The amount removed could range from 50 to more than 5,000 cubic yards.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

There will be no net withdrawal of water for the projects. If there is water in the channels, it will be diverted around the project areas to minimize sediment transport. The projects will be constructed during the dry season to minimize impacts on water quality and aquatic organisms, including salmonids. Turbid water will be diverted to adjacent vegetated areas and/or filtered by jute fabric or coir logs. Impacts to water quantity and quality are expected to be minimal. No water will be diverted into another catchment.

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

Yes. The majority of land within or adjacent to the Snoqualmie Agricultural Production District is within the 100-year floodplain of the Snoqualmie River.

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

No groundwater will be directly withdrawn. The conveyance capacity of the channels will increase. This may allow greater groundwater movement into the channel, lowering local shallow groundwater levels to some degree.

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 storm water):*

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.*

Water from the existing fields already flows into the waterways. The proposed maintenance will improve drainage of water off the fields by restoring the conveyance capacity of the channels.

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

The proposal is to removal invasive and noxious vegetation from the agricultural waterways. This vegetation provides shade and helps to prevent runoff from adjacent pasture and horticultural fields. For a short time, until the vegetation is re-established, there may be a potential of nutrient or chemical loading from increased runoff into the waterway.

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

Short-term discharges of fine sediments during the projects may occur. Various best management practices will be used, including working during periods of low water levels, dewatering/diverting water around work areas (for flowing water), and silt fences or similar sediment control best management practices. Erosion control measures such as straw, hand seeding of grass, hydroseeding and jute matting will also be installed.

With implementation of the appropriate erosion and sediment control best management practices, the cumulative impact of these projects is low. Potential erosion during dredging will be minimized by using best management practices, such as working while the channel is dry or diverting any present flows around the worksite, and using erosion control materials such as filter fabric, straw bales, loose straw, or mulch.

In the Snoqualmie Agricultural Production District, there are approximately 57 miles of agricultural waterways. The length of the drainage projects generally ranges from 500 to 3000 feet long. This proposal is to provide SEPA coverage for drainage maintenance projects in 2011, and 2012. We anticipate no more than 12 drainage projects occurring within this timeframe.

4. Plants

a. Check or underline types of vegetation found on the site:

- ☒ Deciduous trees: alder, maple, aspen, cottonwood, willow, other
- ☒ Evergreen trees: fir, cedar, pine, other
- ☒ Shrubs: blackberry, willow, dogwood, spirea, ninebark
- ☒ Grass: reed canarygrass
- ☒ Pasture: pasture grasses
- ☒ Crop or grain: pasture grasses, horticultural crops
- ☒ Wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other – reed canarygrass
- ☐ Water plants: water lily, eelgrass, milfoil, other
- ☐ Other types of vegetation

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

The predominant plants are reed canarygrass and blackberry, which grow in the channels on the side slopes. Such vegetation in the channels will be removed. To the best extent possible, if native vegetation is present in or along the channels, it will be retained.

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 located next to farm fields typically planted in pasture or crops. These agricultural drainages have been maintained by removal of vegetation for decades.

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

Depending on the maintenance activity and fish usage of the waterway, a buffer of native plants will be installed on the waterway banks. The size of buffer will depend on the level of fish usage in the waterways.

5. Animals

a. Check or underline any birds or animals that 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), cutthroat trout are all documented in the Snoqualmie River. The agricultural waterways provide rearing habitat for these species. The most abundant salmonid species likely to occur in the waterways during the project time window 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

A major potential impact to fish in the project waterways includes harm during the construction activity. This will be prevented to the greatest extent feasible by defishing, including trapping, electro-fishing, block nets, and water by-pass.

Another impact is the loss of the instream habitat provided by the invasive and noxious vegetation in the channels. This vegetation provides shade and helps to prevent runoff from adjacent pasture and horticultural fields. The impacts from removal of the vegetation may be increased water temperature and increased nutrient or chemical loading from runoff.

Bald eagles fly over the site and forage in the Snoqualmie River. Most eaglets have fledged by mid-July (Washington State Status Report for the Bald Eagle, WDFW 2001). Noise and activity associated with the proposed project, which will occur in the late summer months, should not therefore disturb the eagles' breeding.

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

The Snoqualmie Agricultural Production District and agricultural properties immediately adjacent to the Snoqualmie Agricultural Production District lie within the Pacific Flyway and migratory waterfowl use the area. The Snoqualmie River and many of the agricultural watercourses that flow into Snoqualmie River are part of the migration route for most salmonid species.

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

The projects will be performed during the summer, when the channels are dry or at their lowest flow and warmest temperature. If flows and water quality are sufficient and fish are present, they will be removed prior to dewatering or diversion of flows. Fish will be released back into the channels upstream of the project areas if suitable habitat exists there. If no other suitable habitat exists within the channels, fish will be released into the closest waterways with suitable water conditions for fish. On waterways that have a likelihood of fish use, the vegetation will be replaced by a buffer of native plants installed on the waterway banks. The size of buffer will depend on the level of fish usage in the waterways.

With implementation of the appropriate fish protection best management practices, the cumulative impact of these projects is low. In the Snoqualmie Agricultural Production District, there are approximately 57 miles of agricultural waterways. The length of the drainage projects generally ranges from 1000 to 3000 feet long. This proposal is to provide SEPA coverage for drainage maintenance projects in 2011 and 2012. We anticipate no more than 12 drainage projects occurring within this timeframe.

6. Energy and Natural Resources

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:*

None.

7. Environmental Health

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 will be 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 will be contacted immediately in the event of a fuel or lubricant spill.

b. Noise:

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

The projects are secluded from sources of noise and will not be affected by them.

2) *What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic construction, equipment 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 try 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. *What is the current use of the site and adjacent properties?*

The proposed projects are next to land in agricultural use.

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

The proposed projects are next to land used for agriculture such livestock grazing, haying, and horticultural crops.

c. *Describe any structures on the site.*

The structures near to the project sites include houses, 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?*

Parcels within the Agricultural Production District are zoned Agriculture (A10 and A35). Agricultural properties adjacent to the Snoqualmie Agricultural Production District are zoned as Rural Areas (RA5 and RA10).

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

The land use designation is Agriculture; the area is known as the Agriculture Production District, which is King County's designation of Agricultural Lands of Long-Term Commercial Significance under the Growth Management Act.

The properties adjacent to the Snoqualmie Agricultural Production District are designated Rural Area.

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

Most of the properties within or adjacent to the Snoqualmie Production District are designated as "resource" (Shoreline Master Plan, November 2010).

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

Yes. The projects will occur within critical areas designated by King County, including aquatic areas, 100-year floodplain, floodway, erosion and seismic hazard areas are also present within or next to the proposed project areas.

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

9. Housing

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. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

Not applicable.

b. What views in the immediate vicinity would be altered or obstructed?

None.

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

Not applicable.

11. Lights and Glare

a. What type of light or glare will the proposal produce? During 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?

Not applicable.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Describe proposed measures to reduce or control light and glare impacts, if any.

Not applicable.

12. Recreation

a. *What designated and informal recreational opportunities are in the immediate vicinity?*

The Snoqualmie River is a significant salmon and trout recreational fishing destination.

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:*

Not applicable.

13. Historical and Cultural Preservation

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.*

The projects will occur on properties within or adjacent to the Snoqualmie Agricultural Production District, which encompasses several square miles that contain numerous late 19th and early 20th century farms, community buildings, bridges and other historic properties, many of which are listed on the National Register, State Heritage Register, and/or King County Landmark Register. At present, the Snoqualmie Agricultural Production District contains seven state-registered archaeological sites, according to records at the Washington State Department of Archaeology and Historic Preservation and the King County Historic Preservation Program.

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

In addition seven state registered archeological sites (see above), the properties within and adjacent to the Snoqualmie Agricultural Production District contain many inventoried historic farms, barns and other above-ground historic properties that are eligible for listing. Many areas also have environmental indicators that strongly suggest the probability of archaeological resources: proximity to known sites; low slopes and proximity to resources such as water and fisheries; landforms such as natural river levees, terraces above the flood plain, current and former oxbows; mapped settler's cabin sites; and numerous ethnographic place names, plus accounts of at least five places of Native American occupation separate from known sites. Washington State Department of Archaeology and Historical Preservation's archaeological predictive model shows most of the area as "very high risk, archaeological surveys highly advised" prior to ground disturbance, while the remainder is shown as high risk.

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

The proposed actions are generally expected to enhance the historic buildings and other above-ground properties within and adjacent to the Agricultural Production Districts since they will support ongoing agricultural and use. However, archaeological resources, both known and unknown, could be adversely affected by ground disturbance. Adverse effects to archaeological resources will be avoided by advance notice on all individual projects to the King County Historic Preservation Program, and, if state-registered sites may be affected or archaeological deposits are discovered, to any concerned Indian tribes. Knowing disturbance of state-registered sites is illegal under RCW 27.53 and RCW 25-48. In cases where a state-registered or otherwise known site may be affected, the Washington State Department of Archaeology and Historical Preservation and/or King County Historic Preservation Program may require monitoring of ground disturbance by a professional

archaeologist within the site and its vicinity. In archaeologically sensitive areas, the King County Historic Preservation Program will be informed of ground-disturbing activities in advance and may choose to observe ground disturbance. Farmers and/or contractors conducting ground disturbance will be informed in advance regarding archaeological sensitivity and will be given information on what ground conditions to look for and what to do if an archaeological deposit is encountered. If unexpected archaeological deposits are encountered, all work in the vicinity will cease until a professional archaeologist can evaluate the discovery and consult with the Washington State Department of Archaeology and Historical Preservation's, King County Historic Preservation Program, and concerned tribes regarding its treatment.

The maintenance of the existing drainage channels will not create disturbance beyond the normal and historic agricultural activities. The projects will not result in newly exposed soils. The waterway will be surveyed and the historic configuration will be determined. Using a survey pole, areas of newly accumulated sediment on the bottom and side slopes will be identified. Only recently deposited sediment will be removed. The maintenance of the agricultural waterways will not widen or deepen the channel beyond its historic shape.

14. Transportation

a. *Identify public streets and highways serving the site and describe proposed access to the existing street system. Show on-site plans, if any.*

These sites are served by private agricultural roads; by county roads including the NE Woodinville – Duvall Road, NE 124th Street, West Snoqualmie Valley Road NE, NE 80th Street, NE Cherry Valley Road, NE Carnation Farm Road, Ames Lake – Carnation Road NE, NE Tolt Hill Road, Fall City – Carnation Road NE, West Snoqualmie River Road NE; Duvall – Monroe Road NE, and state routes 202 and 203.

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

Not applicable.

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:*

Not applicable.

15. Public Services

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:*

Not applicable.

16. Utilities

a. *Underline utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.*

Most of the sites will not have existing underground utilities because the agricultural waterways are next to farm fields. If underground utilities are anticipated, the appropriate utility service provider will be notified prior to construction to coordinate relocation.

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 that 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: Elizabeth V Wells

Title: Agricultural Drainage Assistance Program Manager

Date Submitted: 12/14/10