SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

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.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [help]

1. Name of proposed project, if applicable: [help]
   Leque Island Estuary Restoration Preparation Project

2. Name of applicant: [help]
   Washington Department of Fish and Wildlife

3. Address and phone number of applicant and contact person: [help]

Contact: Loren Brokaw

16018 Mill Creek Boulevard

Mill Creek, WA 98012

Phone: (425) 775-1311, x105

4. Date checklist prepared: [help]
February 17, 2017

5. Agency requesting checklist: [help]
Washington Department of Fish and Wildlife

6. Proposed timing or schedule (including phasing, if applicable): [help]
May 1, 2017 to November 1, 2017. Construction would occur during a 12-week work window, with work beginning as soon as all permits are secured and site conditions allow.

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

The Leque Island Estuary Restoration Preparation Project (Preparation Project) is proposed as a preliminary phase of the Leque Island Restoration Project (Overall Project), a salt marsh restoration project which would restore tidal function to 250-acres on Leque Island by removing some or all of the existing perimeter dikes. The Preparation Project is necessary because 2015/2016 winter storms significantly damaged the exterior dikes at the project site, and another storm may cause the dikes to fail. A premature failure of the dikes, and subsequent flooding of the island, would complicate implementation of the project significantly and could make restoration of the interior channel cost prohibitive due to the additional expense of dewatering and draining the site to work in saturated soil.

A subsequent SEPA Checklist will be prepared to support the Overall Project when the final design has been reviewed and approved by WDFW and a technical review panel.

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

- Geotechnical Engineering Report, GeoDesign, Inc., 2007
- Determination of Eligibility for Listing on the National Register of Historic Places: Leque Island Levee, USFWS & DAHP, 2009
- Hydrogeologic Evaluation (Salt Water Intrusion Report), Pacific Groundwater Group, 2012*
- Determination of Impact of Leque Island Restoration Project on Camano Island Sole Source Aquifer, EPA, 2013*
- Hydrodynamic Modeling Report, Pacific Northwest National Laboratory, Update Pending March 2017.
- Draft Biological Assessment, Leque Island Estuary Restoration Preparation Project, Prepared by: Ducks Unlimited, Inc., July 27, 2016
- Draft Cultural Resources Inventory Report for the Leque Island Estuary Restoration Project, Cardno, December 22, 2016.

* During design and permitting of a previous similar estuary restoration project that was proposed on the project site in 2008-2009, representatives of an adjacent drinking water district expressed concern of the project's effects on water quality in the aquifer from which the district draws its water. In 2010, the Environmental Protection Agency (EPA) intervened and suggested that WDFW and DU complete a groundwater monitoring and modeling study, so WDFW/DU hired Pacific Groundwater Group to

complete the requested work (referenced above as the "Hydrogeological Evaluation"). In 2013, EPA reviewed the report and wrote a determination letter that agreed with the study's findings that estuary restoration on Leque Island poses no additional threat to drinking water resources. More information about this process is available on EPA's webpage at: https://yosemite.epa.gov/r10/water.nsf/Sole+Source+Aquifers/camano_island.

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. [help]

A separate tidal marsh restoration project proposed by the Stillaguamish Tribe (i.e., the zis a ba Tidal Restoration Project) and located to the east of Leque Island is currently being developed, with construction proposed for 2017. Changes in local hydrology resulting from that project may affect the outcome of restoration proposed at Leque Island. WDFW has worked closely with the Stillaguamish Tribe to develop a hydrodynamic model that considers the effects of both projects concurrently.

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

USACE Nationwide Permit, WDOE Water Quality Certification, WDFW Hydraulic Project Approval, Snohomish County permits (to be determined). Likely consultation with USFWS and NFMS for effects on federally-listed fish and wildlife species, and outreach to DAHP and the Native American tribes for potential effects on cultural resources.

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.) [help]

The Preparation Project would include construction of intertidal habitat features landward of the perimeter dikes around Leque Island, including excavation of a new tidal channel network; fill of the existing drainage network; removal of existing infrastructure (footbridges, ditch culverts, berms); and construction of habitat / wave attenuation hummocks. All work would occur within the 250-acre Leque Island; no work is proposed on the perimiter dikes, waterward of the dikes, or at the tide gates under the Preparation Project.

The scope of the Preparation Project includes:

- Excavate up to 18,260 linear feet of new tidal channels within the project area. Excavation would impact up to 10.8 acres and remove up to 40,000 cubic yards (CY) of material.
- Fill up to 8.4 acres of existing artificial drainage features interior of the perimeter dike, including drainage ditches, relic tidal channels, and borrow areas. Up to 39,200 CY of material excavated from the new tidal channels would be used as compacted fill in these areas.
- Create low-elevation habitat / wave attenuation hummocks. Hummocks would encompass up to 0.50 acre and would require placement of up to 800 CY of material.
- Remove 1,900 linear feet of existing berms. Material associated with these berms (up to 700 CY) would be spread in 4-inch lifts across about 1.5 acres of the project area.
- Remove wooden footbridges and culverts in the existing drainage ditches on the project site.

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. [help]

The project would be located on Leque Island, just west of Stanwood and south of State Route (SR) 532 within Snohomish County in Section 26, Township 32N, Range 5E. Please refer to the attached vicinity map on both aerial imagery and a USGS quadrangle map, as well as the preliminary design figures which illustrate the location of the existing drainage ditches that would be filled onsite, and the preliminary location / configuration of the new tidal channel network. The specific location of the hummocks has not been determined but would likely be in the northwest portion of the project site.

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth [help]

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)? [help]
1-2 percent (outside of existing drainage ditches, where slopes may be up to 2:1 [50%])

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 agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]
Soils on the project site are predominantly comprised of Puget Silty Clay Loam. None of the soils on site are classified as associated with agricultural land of long-term commercial significance.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]
With the exception of areas along the perimeter levee that breached during the winter of 2015/2016, soils on site are generally stable.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]

- Excavate up to 18,260 linear feet of new tidal channels within the project area. Excavation would impact up to 10.8 acres and remove up to 40,000 cubic yards (CY) of material.
- Fill up to 8.4 acres of existing artificial drainage features interior of the perimeter dike, including drainage ditches, relic tidal channels, and borrow areas. Up to 39,200 CY of material excavated from the new tidal channels would be used as compacted fill in these areas.
- Create low-elevation habitat / wave attenuation hummocks. Hummocks would encompass up to 0.50 acre and would require placement of up to 800 CY of material.
- Remove 1,900 linear feet of existing berms. Material associated with these berms (up to 700 CY) would be spread in 4-inch lifts across about 1.5 acres of the project area.
- Remove wooden footbridges and culverts in the existing drainage ditches on the project site.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]
Unlikely. All grading and excavation activities would be completed in the dry, with standard construction best management practices (BMP) implemented to minimize erosion potential. The site is largely flat, so erosion on steep slopes would not occur.

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

One road, Eide Road, is currently located along the western portion of the project site. That road (which encompasses less than 5% of the project site) will remain in place until after the Overall Project is implemented (likely 2018) to provide site access. Similarly, two small parking areas (less than 1% of the project site) located off Eide Road and in the northwest corner of the project site (adjacent to SR 532) will remain in place until after the Overall Project is implemented. No new impervious surfaces will be constructed under the project.

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

Standard construction BMPs will be implemented to reduce / control erosion, and provided in a project-specific Stormwater Pollution Prevention Plan (SWPPP). Representative BMPs include:

- Use of filter bags, sediment fences, sediment traps or catch basins, leave strips or berms to prevent movement of soil into waterways and wetlands.
- Staging construction materials that may leak petroleum products, fuel, lubricants, or other hazardous materials in designated upland areas, away from water and sensitive natural communities.
- Washing vehicles and equipment offsite.
- Seeding and mulching temporarily disturbed areas after construction.

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]

Air emissions would be limited to heavy equipment and worker vehicle trips during a 12-week construction window. The quantities of emissions are not known. No operational emissions would occur, and maintenance-related emissions would be limited to periodic site inspections by WDFW staff (which would be minimal).

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

No.

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

All heavy equipment would be outfitted with appropriate emission control measures, and would not be allowed to idle for extended periods of time. Water would be applied during construction to control dust levels, as needed.

3. **Water** [help]

a. Surface Water:

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. [help]

Several unnamed artificial drainage ditches traverse the project site. Waterbodies adjacent to the project site include Davis Slough to the west, Port Susan (Puget Sound) to the south, and the Stillaguamish River to the east and north. Two tidegates drain the project site – a northwest tidegate drains to Davis Slough and a southeast tidegate drains to South Pass.

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. [help]

Yes. All work would be completed in the interior portion of Leque Island, but within 200 feet of each of the above named waterbodies. Please refer to the preliminary design figures included with this checklist.

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. [help]
All proposed work would occur within a surface water or wetland. Please refer to the quantities and areas described in (B)(1)(e) above. All fill material would be derived onsite.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]
The project would not require surface water withdrawals or diversions.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]
The entire project site is located within a 100-year floodplain.

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. [help]
The project does not involve any discharge of waste materials to surface waters.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]
No groundwater would be withdrawn under the project.

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. [help]
No waste material would be discharged into the ground under the project.

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. [help]
Stormwater delivered to the site from SR 532 is currently retained onsite until it is discharged to Puget Sound / Davis Slough via tidegates (or allowed to percolate into the ground). This would not change after the Preparation Project is implemented.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]
As described above, stormwater introduced to the site from SR 532 may be delivered to surface waters via the tidegates. No other waste materials are known to the project site.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [help]

Yes. The purpose of the project is to create an interior channel network that will support the introduction of tidal waters onto Leque Island under the Overall Project, anticipated for 2018. As a result, the existing artificial drainage network would be filled, and a new tidal channel network created. Refer to the preliminary design figures for an illustration of how drainage patterns onsite would be modified.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: [help]

Please refer to the representative BMPs provided above at (B)(1)(e).

4. **Plants** [help]

a. Check the types of vegetation found on the site: [help]

____deciduous tree: alder, maple, aspen, other
____evergreen tree: fir, cedar, pine, other
__X__shrubs
__X__grass
__X__pasture
__X__crop or grain
____ Orchards, vineyards or other permanent crops.
__X__ wet soil plants: cattail, buttercup, bullrush, 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? [help]

Up to 9.5 acres of emergent marsh vegetation and agricultural fields in cereal grain production would be altered to create the new tidal channel network and low-elevation habitat / wave attenuation hummocks. Limited shrubs would be removed from a low-elevation interior berm that bisects Leque Island.

c. List threatened and endangered species known to be on or near the site. [help]

One federally-listed plant species, golden paintbrush (*Castilleja levisecta*), was identified in the USFWS official species list for the project as having the potential to occur in the project vicinity. However, the upland prairie habitat requirements of this species are not found onsite and it is unlikely it would be impacted during construction.

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

Existing vegetation would be stripped prior to construction and replaced in disturbed areas after the project is implemented to reduce the potential for erosion. Additional native plantings are not proposed under the Preparation Project because those plants would not likely survive after the site is restored to tidal inundation.

e. List all noxious weeds and invasive species known to be on or near the site. [help]

None.

5. **Animals** [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [help]

Examples include:

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

The project site provides habitat for, and is managed by WDFW to support, a variety of bird species, including raptors (owls, hawks, eagle), shorebirds, and waterfowl, as well as small mammals. The area is also hunted for pheasant. Fish do not currently have access to the project site.

b. List any threatened and endangered species known to be on or near the site. [help]
Four federally-listed fish species may occur in waters adjacent to the project site, incuding bull trout (*Salvelinus confluentus*), dolly varden (*S. malma*), Puget Sound chinook salmon (*Onchorhynchus keta*) and Puget Sound steelhead (*O. mykiss*).

c. Is the site part of a migration route? If so, explain. [help]
Yes. The project site supports various species of migrating waterfowl.

d. Proposed measures to preserve or enhance wildlife, if any: [help]
Adverse effects on water quality, which may affect fish utilizing adjacent waters, would be avoided by isolating the work area within the perimeter levee of Leque Island, and implementing standard erosion control measures to contain sediment generated during earth moving activities on site and away from surface waters. The potential for post-construction downstream turbidity would be minimized to the extent possible by replacing vegetation stripped from the project area in disturbed areas and installing erosion control measures until the site has stabilized.

After the Overall Project has been implemented, tidal processes will be re-introduced to the site including hydraulic energy and exchange of sediment, detritus, and aquatic organisms. The new tidal channel network would benefit juvenile salmonids by providing off-channel estuarine habitat, increased habitat complexity, and improved water quality.

e. List any invasive animal species known to be on or near the site. [help]
None

6. **Energy and Natural Resources** [help]

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. [help]
The project has no long-term energy needs.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]
The project would have no effect on the potential use of solar energy by adjacent properties.

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: [help]
The project would not require any energy and does not include any energy reduction or control features.

7. Environmental Health [help]

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. [help]

1) Describe any known or possible contamination at the site from present or past uses.
The project site was and has historically been used in agricultural production, where fertilizers or other chemicals may occur in soils onsite. No specific areas of contamination are known to occur.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [help]
Underground utility lines (electrical) are located along the east side of the project area. These lines would likely be relocated, depending on the final design of the Overall Project.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [help]
Petroleum products (fuel, lubricants) would be used to operate heavy machinery during construction. No other toxic or hazardous chemical would be stored, used, or produced during project development, construction, or operation.

4) Describe special emergency services that might be required. [help]
No special emergency services would be required.

5) Proposed measures to reduce or control environmental health hazards, if any: [help]
Standard worker and environmental health protection measures would be employed during construction, including use of appropriate safety gear (hard hats, ear protection) and dust suppression (as required). No other environmental health hazards are anticipated.

b. Noise [help]

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]
Traffic noise from SR 532 occurs along the northern boundary of the project site.

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. [help]
Limited construction-related noise from use of heavy equipment would occur during construction. This noise would be short-term, and would only occur during daylight hours.

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

Work would only be completed during daylight hours. In addition, there are few (if any) sensitive noise receptors located in the vicinity of the project site.

8. **Land and Shoreline Use** [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]
Leque Island is currently managed by WDFW as part of the Skagit Wildlife Area as habitat for migrating and wintering waterfowl and for recreational uses, including bird watching, bird dog training, and waterfowl and pheasant hunting. The project site is bound by Puget Sound and tidelands controlled by WDNR on the west, south, and east. SR 532, which is managed by WSDOT, is located on the north side of the project site and provides access between Stanwood and Camano Island. The Stillaguamish River is located to the east and north of the project site.
The project would not affect current land uses on adjacent properties. WDFW is coordinating with WSDOT to ensure tidal restoration at Leque Island will not adversely impact SR 532.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]
The project site has been used as working farmland in the past, with portions of the project site planted in cereal grain as food for wintering waterfowl. Since the accidental dike breach and subsequent repair in March 2015, the site has not been planted with agricultural crops due to leassee concerns with farmability due to salt intrusion during the breach event. Up to 9.5 acres of land that was farmed prior to 2015 would be converted to tidal channel under the Preparation Project.

The Overall Project is one of the projects that is included in Snohomish County Sustainable Lands Strategy (SLS), which is a partnership of salmon recovery of agricultural interests. SLS has developed a package of projects that when evaluated cumulatively, offers a net gain for salmon recovery and agriculture viability. The SLS Executive Committee has supported including the Overall Project as one of the salmon recovery projects in the package.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [help]
The project would not affect – or be affected by – surrounding working farm or forest land normal business operations.

c. Describe any structures on the site. [help]
A perimeter dike surrounds the west, east, and south sides of the project site and SR 532 runs along the north side. An access road (Eide Road, which is managed by Snohomish County Public Works) is located along the north and east sides of the project area, and provides access to a viewing area, interpretive signage, and a parking area. A second parking area is located in the northwest corner of the site, off SR 532. A low elevation (1-2 feet) berm bisects the project site, and numerous small footbridges provide access across existing drainage ditches. Culverts are located in many of the drainage ditches onsite and tow tide gates drain the project site.

d. Will any structures be demolished? If so, what? [help]
The footbridges and culverts in the exiting drainage ditches would be removed. All other structures would remain in place.

e. What is the current zoning classification of the site? [help]
A-10

f. What is the current comprehensive plan designation of the site? [help]
Riverway Commercial Farmland

g. If applicable, what is the current shoreline master program designation of the site? [help]
Aquatic Shoreline and Resource Shoreline

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.
Unknown (likely)

i. Approximately how many people would reside or work in the completed project? [help]
None.

j. Approximately how many people would the completed project displace? [help]
None.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]
Not applicable.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]
WDFW is currently coordinating with Snohomish County to ensure the project is consistent with applicable zoning ordinances and comprehensive plan requirements.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: [help]
Not applicable.

9. **Housing** [help]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]
None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]
None.

c. Proposed measures to reduce or control housing impacts, if any: [help]
Not applicable.

10. **Aesthetics** [help]

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help]

The low-elevation hummocks would be 1-2 feet tall. They would be constructed of soil derived onsite.

b. What views in the immediate vicinity would be altered or obstructed? [help]
Views of the project site would change from one typical of an agricultural field / wet pasture with channelized irrigation ditches to an emergent marsh interspersed within a more naturally placed tidal channel network.

c. Proposed measures to reduce or control aesthetic impacts, if any: [help]
None.

11. Light and Glare [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]
The project would not produce light or glare, during or after construction. All construction would be completed during daylight hours.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]
No light or glare would be generated by the project.

c. What existing off-site sources of light or glare may affect your proposal? [help]
Traffic on SR 532 is visible from the project area, as are limited residential lights from Stanwood and Camano Island. These light sources would not affect the project.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]
Not applicable.

12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity? [help]
WDFW currently manages the project site for various recreational uses, including bird watching, nature photography and waterfowl and pheasant hunting. Fishing and boating opportunities are also provided in the various adjacent waterbodies.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]
The Preparation Project would not immediately displace any existing recreational uses. The Overall Project will make foot access more difficult for some uses, including waterfowl hunting and bird watching/photography, and will displace pheasant hunting.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]
WDFW is working with a Recreation Advisory Committee to identify recreational opportunities that could be enhanced onsite after the tidal marsh restoration project is complete. WDFW has also applied for funding to secure a property where walk-in waterfowl and pheasant hunting and bird watching/photography may be relocated and has applied to develop a boat launch facility on an adjacent property to facilitate boat access onto the site.

13. Historic and cultural preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe. [help]

In 2009, the DAHP evaluated and determined the perimeter levee on Leque Island (the Leque Island Dikes) was not eligible for listing in the National Register of Historic Place. No other historic buildings or structures are known to occur on site.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]
None known. WDFW and DU contracted with an archaeological consulting firm, Cardno, to assess the potential for the project site to support buried cultural resources. A draft report entitled *Cultural Resources Inventory Report for Leque Island Estuary Restoration* completed in December 2016 states that "No cultural resources were identified [within the project area] during Cardno's investigation. Due to the history of the project area, the potential for deeply buried deposits, the inaccessibility of areas during survey, and the proximity of known archaeological and ethnographic resources, Cardno recommends archaeological monitoring be undertaken for selected channel excavations. Monitoring is recommended in these channels because the subsurface survey was unable to reach planned excavation depths due to soil saturation." The report was submitted to the U.S. Army Corps of Engineers on January 18, 2016 and will be circulated to appropriate parties as part of the consultation process.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]
The methods used to assess the potential for cultural resources to occur onsite were developed by Cardno, in collaboration with USACE, DAHP, and the tribes. The assessment included a literature review in combination with an on-site archaeological survey. Prior to the survey, Cardno and the Stillaguamish Tribe THPO used LiDAR technology to identify seven high probability areas (HPAs) encompassing 61 acres to survey. Within the HPAs, field staff completed 101 shovel probes. Excavated material was run through ¼ hardware mesh. In addition to investigation within the HPAs, field staff completed a pedestrian survey and 4 additional shovel probes in the broader project area.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [help]
To avoid and minimize loss, changes to, and disturbance to resources, WDFW will incorporate recommendations outlined in the *Cultural Resources Inventory Report for Leque Island Estuary Restoration.*

As noted above, the report recommends "that selected channel excavations be monitored by a professional archaeologist who meets the SOI standards (36 CFR Part 61) for archaeology or by a qualified archaeologist supervised by a professional archaeologist who meets the SOI standards. Monitoring is recommended in these channels because the subsurface survey was unable to reach planned excavation depths due to soil saturation." The report also recommends "that a monitoring and inadvertent discovery plan (MIDP) be developed for the project and implemented during all ground-disturbing activities. Ground-disturbing activities include dike breaching, channel excavation, and removal of tree root wads.

14. Transportation [help]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]
The project site can be accessed from SR 532. Access within the project site is provided by Eide Road.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

Public transit does not serve the project site.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]

No parking spaces would be created or eliminated under the Preparation Project.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

The project would not require any new or improvements to existing roads, streets, pedestrian, bicycles or state transportation facilities.

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

The project would not use water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]

Up to 10 worker vehicle trips per day would occur during the 12 work construction period. Workers would typically access the site between 7 a.m. and 6 p.m., depending on daylight working hours. These are provided as estimates – no modeling has been used to estimate vehicular trips.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help]

The project would not interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area.

h. Proposed measures to reduce or control transportation impacts, if any: [help]

Not applicable.

15. Public Services [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

The project would not result in an increased need for public services.

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

Not applicable.

16. Utilities [help]

a. Circle utilities currently available at the site: [help]

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

None. Underground utility lines (presumed to be electric lines) are located along the east side of the project site. These lines do not specifically serve the project site.

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. [help]
No utilities are proposed under the project.

C. Signature [help]

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: _____

Name of signee __**Loren Brokaw**_____

Position and Agency/Organization _**Restoration Project Coordinator, WDFW**____

Date Submitted: 2/17/17