WHATCOM COUNTY
Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226-9097
360-778-5900, TTY 800-833-6384
360-778-5901 Fax

J.E. "Sam" Ryan
Director

SEPA Distribution List
SEP2016-00063
Date of Issuance: July 8, 2016

Please review this determination. If you have further comments, questions or would like a copy of the SEPA checklist, phone the responsible official at (360) 778-5900. Please submit your response by the comment date noted on the attached notice of determination.

SEPA Unit, WA State Department of Ecology, Olympia via email
sepaunit@ecy.wa.gov

WA State Department of Fish and Wildlife via email
Joel Ingram, joel.ingram@dfw.wa.gov

WA State Department of Natural Resources via email
Rochelle Goss, sepacenter@dnr.wa.gov

Lummi Nation Natural Resources
Merle Jefferson, Sr. via email - merlej@lummi-nsn.gov
Tamela Smart - tamelas@lummi-nsn.gov

Nooksack Indian Tribe
George Swanaset, JR via email - george.swanasetjr@nooksack-nsn.gov
Trevor Delgado via email - tdelgado@nooksack-nsn.gov

Terry J. Wechsler via email wechslerlaw@comcast.net

Applicant
Lummi Indian Business Council

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J.E. "Sam" Ryan
Director

SEPA Determination of Nonsignificance (DNS)

File: SEP2016-00063

Project Description: Habitat restoration including installation of 11 Engineered Log James (ELJs)

Proponent: Lummi Indian Business Council

Address and Parcel #: Mosquito Lake Road Bridge on the Middle Fork Nooksack
APN#s: 380514331381 & 380513296248

Lead Agency: Whatcom County Planning & Development Services

Zoning: RF & CF **Comp Plan:** RF & CF **Shoreline Jurisdiction:** Conservancy & Aquatic

The lead agency for this proposal has determined that with proper mitigation, no significant adverse environmental impacts are likely. Pursuant to RCW 43.21C.030(2)(c), an environmental impact statement (EIS) is not required. This decision was made following review of a completed SEPA environmental checklist and other information on file with the lead agency. This information is available to the public on request.

__ There is no comment period for this DNS.

X Pursuant to WAC 197-11-340(2), the lead agency will not act on this proposal for 14 days from the date of issuance indicated below. Comments must be received by 4:00 p.m. on July 22, 2016 and should be sent to: Andrew Hicks, ahicks@whatcomcounty.us

Responsible Official: Mark Personius, mpersoni@whatcomcounty.us

Title: Assistant Director

Telephone: 360-778-5900

Address: 5280 Northwest Drive
Bellingham, WA 98226

Date of Issuance: July 8, 2016 **Signature:** _____

An aggrieved agency or person may appeal this determination to the Whatcom County Hearing Examiner. Application for appeal must be filed on a form provided by and submitted to the Whatcom County Current Planning Division located at 5280 Northwest Drive, Bellingham, WA 98226, during the ten days following the comment period, concluding August 2, 2016.

You should be prepared to make a specific factual objection. Contact Whatcom County Current Planning Division for information about the procedures for SEPA appeals.

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J.E. "Sam" Ryan
Director

SEPA Determination of Nonsignificance (DNS)
Legal Notice

To be published one time only on: **July 8, 2016**

CHARGE TO: Whatcom County Planning & Development Services
5280 Northwest Drive
Bellingham, Washington 98226
Acct #451232

WHATCOM COUNTY GIVES PUBLIC NOTICE THAT THE FOLLOWING SEPA THRESHOLD DETERMINATION OF NON-SIGNIFICANCE (DNS) HAS BEEN ISSUED TODAY SUBJECT TO THE 14 DAY COMMENT PERIOD CONCLUDING ON, July 22, 2016.

File: SEP2016-00063

Project Description: Habitat restoration including installation of 11 Engineered Log James (ELJs)

Proponent: Lummi Indian Business Council

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APN#s: 380514331381 & 380513296248

Lead Agency: Whatcom County Planning & Development Services

Zoning: RF & CF **Comp Plan:** RF & CF **Shoreline Jurisdiction:** Conservancy & Aquatic

ANY PERSON OR AGENCY MAY APPEAL THE COUNTY'S COMPLIANCE WITH WAC 197-11 BY FILING AN APPEAL WITH THE WHATCOM COUNTY CURRENT PLANNING DIVISION LOCATED AT 5280 NORTHWEST DRIVE, BELLINGHAM, WA 98226. APPEALS MUST BE MADE WITHIN 10 DAYS AFTER THE END OF THE COMMENT PERIOD.

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J.E. "Sam" Ryan
Director

SEP 2016 - 00063

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.

Use of Checklist for Non-Project Proposals:

For non-project proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the Supplemental Sheet for Non-project Actions (Part C). 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.

Reviewed by initials AHJ

A Background

1. Name of proposed project, if applicable:

   Middle Fork Nooksack River: Porter Creek Reach, Phase 1

2. Name of applicant: Lummi Nation

   Applicant phone number: (360) 312-2315

   Applicant address: 2665 Kwina Road

   City, State, Zip or Postal Code: Bellingham WA, 98226

   Applicant Email address: JillK@lummi-nsn.gov

3. Contact name: Jill Komoto

   Contact phone number: (360)312-2315

   Contact address: 2665 Kwina Road

   City, State, Zip or Postal Code: Bellingham WA, 98226

   Contact Email address: JillK@lummi-nsn.gov

4. Date checklist prepared: March 31, 2016

5. Agency requesting checklist: Whatcom County

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

   Proposed timing is to coincide with WDFW's 2016 in-stream construction window, typically during the month of August. Maintenance, monitoring, and evaluation of the project will follow and any necessary adaptive management will occur in subsequent annual low flow periods.

   Construction is expected to last for four weeks.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? Yes ■ No ☐
   If yes, explain:

   This application is for the first phase of five phases identified within the Porter Creek Reach of the Middle Fork Nooksack. Phases 1 and 4 are currently at the 90% design level but only Phase 1 has funding for construction. Phases 2, 3, and 5 are in the conceptual design phase.

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

- "Lower Middle Fork Nooksack River: Phase 1 Preliminary Basis of Design," June 2, 2014
- "Lower Middle Fork Nooksack Geomorphic & Hydraulic Assessment," December 6, 2013
  Both reports written by Natural Systems Design for the Nooksack Salmon Enhancement Association.

Cultural Resource Assessment is underway.
Wetland Reconnaissance Report by Northwest Ecological Services is underway

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal?
Yes ☐ No ■
If yes, explain.

None at this time

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

- Whatcom County SEPA
- WA State Hydraulic Project Approval
- USACE NWP, Section 10 and Section 404
- State Forest Practices Permit (FPA)
- WADNR Aquatic Public Safety Checklist and Aquatic Right of Entry
- WADNR Right of Way Lease
- Ecology 401 Water Quality Certification via JARPA submittal
- Endangered Species Act Consultation (SPIF)

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.)

The Nooksack Salmon Enhancement Association (NSEA) and Lummi Natural Resources Department (LNRD) have identified the Lower Middle Fork Nooksack River (Middle Fork) near Porter Creek as a candidate location for habitat restoration. The proposed restoration reach is between river mile RM 4.9 (upstream end) and RM 4.6 (downstream end) (Figure 1). This reach was targeted by NSEA for restoration following the recommendations put forth in the WRIA I Recovery Plan (WRIA 1 2005) for the entire Middle Fork, and the geomorphic and hydraulic assessment conducted by Natural Systems Design (NSD, 2013).

Specific goals include:

- Improve long-term channel stability
- Promote the formation and growth of forested islands and associated side channels
- Increase key habitat quantity and quality through primary pool creation
- Stabilize naturally occurring accumulations of unstable large wood within the reach
- Increase floodplain and side channel connectivity.
- Protect/enhance floodplain tributary habitat

To achieve the restoration objectives, conceptual designs and layouts for ELJ placements were developed within the project area. ELJ structure types were developed to mimic the size, form, and function of historic stable LWD within the Middle Fork, using observations from persistent LWD accumulations observed during field reconnaissance. These ELJs are constructed with a core of structural logs partially embedded into the channel and arranged to induce a desired hydraulic and geomorphic effect. Each ELJ includes a large volume of smaller (racking) logs packed on the upstream end and flanks of the ELJs to provide complex interstitial cover for fish and invertebrates, and additional stability to the structure by forcing scour away from the core structure. Existing natural logjams within the project reach were used to size the proposed structures, as well as emulate the ecological and geomorphic function currently contributing to beneficial habitat. Based on these criteria, 3 structure architectures are proposed, each unique in the geomorphic and habitat benefits provided. The developed structure types are as follows:

- 4 TYPE-1 ELJ – Type-1 ELJs are the largest proposed structures with a width and length of 80- and 45-feet, respectively. Type-1 ELJs will mimic the geomorphic, ecologic and hydraulic function once provided by large old growth tress that once lined the banks and were recruited into the channel of the Middle Fork. These structures are intended to force primary pool formation on the upstream end, promote stable forested island formation downstream, increase in-stream cover, sort spawning sized gravels, and with a sufficient number of structures densely spaced, will decrease basal shear stresses reach-wide to promote bed aggradation. Type-1 ELJs will be excavated into the channel bed to protect the

structure from scour and will be post supported. Due to the construction cost of this ELJ type, placements were limited to high energy or severe hydraulic locations where a simpler, less robust ELJ would be less stable.

- 5 TYPE-2 ELJ – Type-2 ELJs are a medium sized structure with a width and length of 60- and 30-feet, respectively. Type-2 ELJs will provide similar geomorphic, ecologic and hydraulic benefits as the Type-1 structures at a smaller scale, and are strategically placed to function with adjacent ELJs to increase habitat benefits while providing cost savings. Type-2 structures will be excavated into the channel bed to protect the structure from scour; are post supported, and cost less than Type-1 structures.
- 5 TYPE-3 ELJ – Type-3 ELJs are a large structure with a width and length of 75- and 35-feet, respectively. Type-3 ELJs will provide similar geomorphic, ecologic and hydraulic benefits as the Type-1 structures at a much lower cost. The Type-3 ELJ design was partially developed to mimic the vertical members (in the form of mature second growth trees) observed in the persistent LWD accumulation at RM 4.5 in the right channel, and also on a pile array ELJ. To reduce construction costs, Type-3 structures will be excavated a nominal depth into the channel, are post supported, and uses a smaller number of key pieces. To have its intended effect, the Type-3 structure relies on trapping mobile wood moving through the project reach to create a large stable wood accumulation over time. Minimizing the excavation depth and number of key pieces results in significant cost savings, but also a less robust structure in the short-term. Stability will increase over time as additional logs rack onto the structure. Type-3 structures are located in sub-reaches that are lower energy or have less severe hydraulic conditions where natural LWD would be likely to deposit and where the structure is at a lower risk of becoming unstable. Similar low cost structures have been developed and successfully implemented on the Upper Quinault River and offer a great opportunity to re-introduce stable LWD on a reach scale in the Middle Fork.

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.

Lat: 48 degrees **47'09.90"N**, Long: 122 degrees 06'53.54" W.

TN/SC/RG: T38N/S13 and S14/R5E

From Bellingham take WA 542 east past Deming 2.8 miles to Mosquito Lake Road. If you've reached James Street you've gone too far. Take a right on Mosquito Lake Road and drive 5.5 miles to the bridge that crosses the Middle Fork Nooksack. The project extends from the bridge to about 1,500 feet downstream (to the north and northwest). Sheets 1, 4, and 5 of the attached Plan Set show the vicinity and specific location of the project.

B Environmental Elements

1. Earth

a. General description of the site:

☒ Flat
☐ Rolling
☐ Hilly
☐ Steep Slopes
☐ Mountainous
☒ Other Channel

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

An approximate 10% slope exists off of the southern access road (the existing road that accesses the steelhead acclimation ponds; otherwise the project area (including staging and access areas) is relatively level with slopes ranging from approximately 0-3%.

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.

The majority of the project area consists of riverwash (cobbles, gravels and sand) with Snoqualmie gravelly loamy sand. The site is within the Nooksack River and immediately adjacent forest land. No potential for agriculture exists.

d. Are there surface indications or history of unstable soils in the immediate vicinity? Yes ☐ No ■

If so, describe.

Stream banks within the Phase 1 project area are low, naturally cobbled, and relatively stable.

e. Describe the purpose, type, total area, approximate quantities and total affected area of any filling excavation or grading proposed.

Approximately 1,400 CY of fill material will be native streambed alluvium, removed for excavation and placed over 3 Type I, 3 Type II, and 5 Type III log structures (See design sheet 19). Six excavations and fill will be within active, non-wet channel; five will be within the partially -wetted channel. Compensatory measures will isolate construction project from wetted channel.

There will be no net fill. All fill will be excavated for structure placement and placed on top of and upstream of structure as backfill.

Reviewed by initials AM

Indicate source of fill.

Fill will be obtained from project area at locations of each proposed structures.

Indicate were excavation material is going.

Excavated material will be placed in top of and upstream of proposed structures at the location from which it was excavated.

f. Could erosion occur as a result of clearing, construction, or use?
Yes ☐ No ■

If so, generally describe.

Excavation of materials at five of the proposed ELJ's will occur within the partially wetted channel but will be isolated from the water column.

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

None.

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

Access: Several site access routes were identified that will be potentially be utilized to construct the proposed restoration elements. Temporary bridge crossings from the Mosquito Lake Road Bridge parking area will be required at the site to reach the forested islands to construct ELJs. Two temporary bridge locations are proposed, however, depending on the location of the low flow channel during construction, the number and locations of proposed temporary bridge locations may vary. It is anticipated that no more than 4 temporary bridges will be needed during construction. Access routes follow exposed unvegetated gravel bars where possible to minimize impacts to adjacent riparian vegetation and to avoid known existing LWD locations. The location of access routes will be verified prior to construction and modified to accommodate future channel migration and/or redistribution of LWD on bars.

Channel crossings by tracked excavator will be performed in the dry or via temporary bridge(s). Sheet 21 of the plan set details a temporary bridge. Additional channel crossings will be dewatered by use of upstream coffer dams that block flows from entering side channels (See Sheet 19 of the Plan Set).

Water Management: Some of the proposed ELJ locations (five at the time of writing) will infringe on the low flow channel during construction, requiring water management techniques to isolate the work area and divert water elsewhere. Prior to the initiation of isolation and construction of each structure, the wetted channel bed will be inspected for recent fish usage, include redds. Should a recent redd be present within the area proposed to be isolated, the proposed ELJ location will be changed to avoid impacts to fish usage. If no fish usage is documented, the area will be isolated using bulk bags or other agency approved method. Water will be pumped from the isolated area and diverted from the work area prior to starting excavation for the proposed ELJ. Water diverted from the isolated work area will

be diverted onto the adjacent floodplains in a location such that it infiltrates into the ground completely prior to re-entering the river. If diverted water remains as turbid surface flow as is re-enters the river, BMPs will be employed to slow the flow, filter suspended sediment, and/or otherwise keep turbidity in the river below the threshold set by permit applications. Periodic sampling for turbidity in the river downstream of the isolated work area and re-entry point of diverted waters will be conducted to ensure turbidity is maintained within levels permitted. Should turbidity remain above threshold levels, work will stop until BMPs are employed to manage turbidity below allowable levels.
Sheet 19 of the plan set shows the locations of cofferdams and the pumped water discharge sites (shown as solid black circles). Sheet 21 shows the bulk bag coffer dams in detail.
The remainder of the ELJ's will be built on gravel bars outside of low-flow wetted channel.

All machinery operating below OHW will be tracked.

Channel crossings by tracked excavator will be performed in the dry or via a temporary bridge. See Sheet 21 of the plan set. Additional channel crossings will be dewatered by use of upstream coffer dams that block flows from entering side channels (See Sheet 19 of the Plan Set).

Re-vegetation: Following construction the backfilled ELJs and any disturbed areas above the ordinary high water line (access routes, staging areas where applicable) will be planted and/or seeded to initiate establishment of native vegetation. Habitats to be formed include coniferous forest and riparian deciduous forest.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation and maintenance when the project is completed (i.e., dust, automobile, odors, or industrial wood smoke)?

Exhaust from excavators, log loaders, and trucks will create temporary emissions. Dust is anticipated to be minimal as roads are well-established.

Construction and its impacts are anticipated to last four weeks.

If any, generally describe and give approximate quantities if known.

Exhaust and any dust will be minimal and will dissipate rapidly during the construction period only. It is anticipated that ~20 log truck deliveries and 100 dump truck deliveries will be needed to bring in logs, root wads, slash, and racking material.

b. Are there any off-site sources of emissions or odor that may affect your proposal? Yes ☐ No ■

If so, generally describe.

Exhaust from the transportation of large wood will be generated off-site by logging trucks but would not affect the proposal.

c. Proposed measures to reduce or control emissions or other impacts to 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)? Yes ■ No ☐

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

The work will occur in the Middle Fork of the Nooksack River channel just upstream of the Porter Creek confluence (downstream of the Mosquito Lake Bridge).

(2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? Yes ■ No ☐

If yes, please describe and attach available plans.

Yes. Five ELJ's will require work in areas that are partially within the wetted channel. Each log jam will be isolated from flowing water prior to initiation of excavation work with a bulk-bag coffer dam. During excavation, water will be pumped in order to keep the site dry. Pumped water will be discharged at pre-determined upland locations to

allow for filtration of solids. Sheet 19 of the plan set shows the locations of cofferdams and the pumped water discharge sites (shown as solid black circles). Sheet 21 shows the bulk bag coffer dams in detail. A Lummi fisheries biologist will be onsite to ensure compliance with fish and wildlife regulations, BMP's, and permit conditions. The remaining six ELJ's will be built on gravel bars outside of low-flow wetted channel.

Channel crossings by tracked excavator will be performed in the dry or via a temporary bridge. See Sheet 21 of the plan set. Additional channel crossings will be dewatered by use of upstream coffer dams that block flows from entering side channels (See Sheet 19 of the Plan Set).

All machinery used below OHW will be tracked.

(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.

1,400 CY of stream alluvium (cobble, gravel) will be excavated from the 11 ELJ locations and used as backfill in each location from which it is excavated. There will be no net fill and no off-site fill.

No fill or dredge materials will be placed in or removed from wetlands.

(4) Will the proposal require surface water withdrawals or diversions?
Yes ■ No

Give general description, purpose, and approximate quantities if known.

During excavation, water will be pumped away from the channel in order to keep the site dry. Pumped water will be discharged at pre-determined upland locations to allow for filtration of solids. Sheet 19 of the plan set shows the locations of cofferdams and the pumped water discharge sites (shown as solid black circles). Sheet 21 shows the bulk bag coffer dams in detail.

Does the proposal lie within a 100-year floodplain?
Yes ■ No ☐

If so, note location on the site plan.

The project occurs within the Middle Fork of the Nooksack River channel.

(5) Does the proposal involve any discharges of waste materials to surface waters?
Yes ☐ No ■

If so, describe the type of waste and anticipated volume of discharge

b. Ground Water:

(1) Will ground water be withdrawn from a well for drinking water or other purposes? Yes ☐ No ■

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.

N/A, No groundwater will be withdrawn from wells.

(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 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).

There are no anticipated impacts to the existing stormwater regime as a result of the project or construction.

Where will this water flow? N/A

Will this water flow into other waters? Yes ☐ No ☐
N/A, no runoff to be generated from the project.

If so, describe. See above

(2) Could waste materials enter ground or surface waters?
Yes ■ No ☐

If so, generally describe.

There is the inherent risk of petrol spillage when using heavy machinery in or adjacent to sensitive areas. All external grease and oil shall be pressure washed off the equipment prior to transport to the site. All equipment operating below OHW shall use readily biodegradable vegetable based hydraulic fluids. No petroleum products, hydraulic fluid, sediments, sediment laden water, chemicals, or any other damaging materials shall be allowed to enter or leach into the river. The contractor will be required to have an emergency spill kit on-site at all times.

(3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site: Yes ■ No ☐

If so, describe.

Not drainage patterns per say, but the intent of the project is to improve flow conditions within the Middle Fork Nooksack River channel and side channel. See A.11 of this Checklist.

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

- Isolation of in-water work from wetted channel via bulk bag coffer dams
- Vegetable-based hydraulic fluids required for all equipment operating below OHW
- If high water-level conditions that cause siltation or erosion are encountered during construction work will stop until water levels subside.
- As shown on Sheet 19 of the plan set, coffer dams will also be used to block three areas of flowing water so that machine access to five of the proposed ELJ sites (along the downstream-facing right bank) can be achieved in the "dry." Where the excavator must cross the main channel, a temporary bridge will be constructed so that machines do not cross a wetted channel. Sheet 19 shows the bridge in detail.

4 Plants

a. Check types of vegetation found on the site:

- ☐ Deciduous tree: alder, maple, aspen, other: cottonwood
- ☐ Evergreen tree: fir, cedar, pine, other
- ☐ Shrubs
- ☐ Grass
- ☐ Pasture
- ☐ Crop or grain
- ☐ Orchards, vineyards or other permanent crops
- ☐ 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?

Approximately twenty trees will be removed to install ELJ structures that are proposed to extend up into the forested stream bank. The two locations where this is proposed lost dozens of trees during a single storm event this winter. The ELJ's will help to deflect water into historical channels and away from existing forested areas. The trees to be removed will be used as racking materials within the structures.

No trees are proposed for removal for access or staging. Staging will occur within an existing parking lot associated with the steelhead acclimation ponds.

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

No known threatened or endangered plants.

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

N/A. See 4. B above.

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

None observed.

5. Animals

a. Check 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,
- ☐ Eagle,
- ☐ Heron,
- ☐ Songbirds;
- ☐ Other: Potential developing marbled murrelet habitat, per discussions with WA DNR

Mammals:

- ☐ Deer,
- ☐ Elk,
- ☐ Other:
- ☐ Bear,
- ☐ Beaver;

Fish:

- ☐ Bass,
- ☐ Trout,
- ☐ Shellfish;
- ☐ Salmon,
- ☐ Herring,
- ☐ Other:

b. List any threatened or endangered species known to be on or near the site.
Chinook salmon, bull trout, and steelhead trout. Potential developing habitat for marbled murrelet.

Reviewed by initials AH

c. Is the site part of a migration route? Yes ■ No ☐

If so, explain.

The river is habitat for anadromous salmon and trout species.

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

No anticipated net loss of wildlife or wildlife habitat. Area will be de-fished prior to construction of logjams.

e. List any invasive species known to be on or near site.

None known to exist.

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.

Vegetable-based readily biodegradable hydraulic fluid for any machinery operating below OHW.

Petroleum use required for excavation, back-fill, log transport, and log installation.

b. Would your project affect the potential use of solar energy by adjacent properties? Yes ☐ No ■

If so, generally describe.

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, N/A. The completed project will not require any energy inputs.

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? Yes ■ No ☐

If so, describe.

The inherent risk of petrol spillage when using heavy machinery is present.

(1) Describe any known or possible contamination at the site from present or past uses.

No contamination is known or suspected.

(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.

None.

(3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the projects development or construction, or at any time during the operating life of the project.

Fuel, oil, and hydraulic fluid used during construction.

(4) Describe special emergency services that might be required.

None

(5) Proposed measure to reduce or control environmental health hazards, if any:

All external grease and oil shall be pressure washed off the equipment prior to transport to the site. All equipment operating below OHW shall use readily biodegradable vegetable based hydraulic fluids. No petroleum products, hydraulic fluid, sediments, sediment laden water, chemicals, or any other damaging materials shall be allowed to enter or leach into the river. The contractor will be required to have an emergency spill kit on-site at all times.

As described above, isolation of in-water work from wetted channel via bulk bag coffer dams will be performed.

As shown on Sheet 19 of the plan set, coffer dams will also be used to block three areas of flowing water so that machine access to five of the proposed ELJ sites (along the downstream-facing right bank) can be achieved in the "dry." Where the excavator must cross the main channel, a temporary bridge will be constructed so that machines do not cross a wetted channel. Sheet 19 shows the bridge in detail.

Turbidity will be measured during construction. If high water-level conditions that cause siltation or erosion are encountered during construction work will stop until water levels subside.

b. Noise

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

None

(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.

During construction, noise from logging trucks, a grade 200 log loader, a 300-400 grade excavator, 1-2 dump trucks, and 1-2 D-8 bulldozers will be generated; these would occur during daylight hours. Upon completion of the project, no machinery will be onsite.

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

Operate during normal business hours. Existing log truck traffic occurs daily on Mosquito Lake Road.

8 Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

Recreational boating, fishing, hunting. Commercial logging exists nearby.

Will the proposal affect current land uses on nearby or adjacent properties? Yes ☐ No ■
If so, describe.

b. Has the project site been used as working farmlands or working forest lands? Yes ☐ No ■
If so, describe.

How much agriculture or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any?

None.

If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to non-farm or non-forest use?

No conversion of land use.

(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? Yes ☐ No ■

If so, how:
N/A

c. Describe any structures on the site.

- Along the existing access road to the south of the installations is a Steelhead Acclimation Pond and parking lot
- The Mosquito Lake Road Bridge exists immediately upstream of the project site.

d. Will any structures be demolished? Yes ☐ No ■
If so, what?

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

CF: Commercial Forestry

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

Commercial Forestry

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

Conservancy

h. Has any part of the site been classified as a critical area by the city or county? Yes ■ No ☐
If so, specify.

- Fish Habitat Conservation Area (HC1b – Other fish bearing streams, Current Known Distribution)
- HCA3: Wildlife Habitat Conservation Area: Riparian Areas
- Frequently Flooded Area, Area inundated by 100 Year flooding

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:

No displacement will occur

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

No plans to permanently alter current land use or traffic access.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any?

The project will not impact agricultural or existing or future forestry practices.

Reviewed by initials AM

9. Housing

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

☐ High
☐ Middle
☐ Low-income

Number of Units: None

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

☐ High
☐ Middle
☐ Low-income

Number of Units: None

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

There will not be housing impacts.

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?

Up to 10' above river bed.

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

None.

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

None.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None, N/A

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No light or glare will be produced

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:

None needed.

12. Recreation

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

Fishing, recreational boating, hunting

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:

No impacts are anticipated.

13. Historic and Cultural Preservation

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 located on or near the site? Yes ☐ No ■
If so, specifically describe.

N/A

b. Are there any landmarks, features, or other evidence of Indian, historic use or occupation, this may include human burials or old cemeteries?
Yes ☐ No ■

Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Yes ☐ No ■

Please list any professional studies conducted at the site to identify such resources.

Cultural Resource Assessment forthcoming
Wetland assessment report forthcoming

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.

We have met with the Lummi Nation Cultural Resources Department and have given plans to the Nooksack Tribe Cultural Resources Department.

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.

Unknown if needed at this time.

14. Transportation

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 plan, if any.

Mosquito Lake Road. No proposed changes to traffic flow.

b. Is site or geographic area currently served by public transit?
Yes ☐ No ■
If not, what is the approximate distance to the nearest transit stop?

N/A

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

None.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? Yes ☐ No ■
If so, generally describe (indicate whether public or private).

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 or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

Minimal visits will be created by agency and sponsor staff to monitor and assess the project's success. Trips will be sporadic and far fewer than 1/day.

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

None. No net change in vehicular traffic once project is completed.

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)? Yes ☐ No ■
If so, generally describe.

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

No impacts to public services should result.

16 Utilities

a. Check utilities currently available at the site: None

☐ Electricity,
☐ Water,
☐ Telephone,
☐ Septic system,
☐ Natural gas,
☐ Refuse service,
☐ Sanitary sewer,
☐ Other

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.

No additional services required.

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: _____

Date Submitted: 6/14/16

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Reviewed by Whatcom County Planning & Development Services Staff

_____ 7/6/16
Staff Signature Date

C Supplemental Sheet for Non-project Actions

(It is not necessary to 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?

Proposed measures to avoid or reduce such increases are:

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

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

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

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