

**WAC 197-11-960 Environmental checklist.**

ENVIRONMENTAL CHECKLIST

*Purpose of checklist:*

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

*Instructions for applicants:*

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

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

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

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

*Use of checklist for nonproject proposals:*

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

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

**A. BACKGROUND**

**1. Name of proposed project, if applicable:**

Thatcher Bay Nearshore Restoration

**2. Name of applicant:**

Skagit Fisheries Enhancement Group

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

Alison Studley, PO Box 2497 Mount Vernon, WA 98273  
360-336-0172 [astudley@skagitfisheries.org](mailto:astudley@skagitfisheries.org)

**4. Date checklist prepared:**

2/01/10

**5. Agency requesting checklist:**

WDFW

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

Forage fish work window 2010 if enough funding is secured, or 2011 if funding is still needed

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

No

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

- Assessment/Feasibility Report
- Sampling and Analysis Plan
- Sediment Characterization Report
- DMMO Sediment Suitability Determination
- Cultural Report
- JARPA application

**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 that I'm aware of

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

- WDFW - HPA
- Corps-
  - Section 404 (Clean water act)
  - Section 103 (Ocean dumping of dredged material)
  - Section 10
- Ecology-Water Quality certification
- State Historical Preservation Office
- ESA- submitted self certification for consistency with the Habitat Restoration Program 4 d rule limit 8
- San Juan County – e-mail communication from County indicates project is likely exempt.

**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 Thatcher Bay Nearshore project involves removal of uncontaminated wood debris from a small saltwater embayment on Blakely Island. Material that is removed will be disposed of by dumping in Rosario Strait. Clean beach sediments of size suitable for spawning use by smelt and other forage fish will be used to replace the sawdust.

**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.

Township: 35N Range: 1W Section: 4 NW 1/4

Legal Description:

PR PARCEL 1 - PR SW-NE, PR GL-6, PR GL-7, PR NW-SE, TGW CONS ESMT, (SFTPO SEE 002)

Site plan, vicinity map and topographic map are provided in attached 30% Design Report

**B. ENVIRONMENTAL ELEMENTS**

**1. Earth**

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

Flat, nearshore

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

Not Applicable

**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.**

Sand/mud/woodwaste. See attached Sediment Characterization Report

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

No

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

Approximately 12,900 cubic yards of wood debris material will be removed upland from the beach at an elevation of approximately 8 feet above mean lower low water (MLLW) to depths in the nearshore of approximately -8 feet MLLW. Removed sediment will be replaced with clean sediment mimicking the grain size and composition of the native sediments imported from the banks of Swinomish Slough. The sediment will be placed with the use of an excavator staged on a barge.

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

Re-sorting of placed beach sediments is expected. This process is desirable and will ultimately improve forage fish spawning habitat

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

0%; No impervious surfaces will be created by the project.

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

Dredging will be sequenced such that materials on the top of slopes are removed first, followed by successive dredging cuts at lower elevations. Such sequencing will help minimize sediment resuspension and generated dredge residuals.

Appropriate BMPs will be employed to minimize sediment loss and turbidity generation during dredging. Depending on the results of the water quality monitoring program, BMPs may include, but are not limited to the following:

- Eliminating multiple bites while the bucket is on the bottom
- No stockpiling of dredged material on the seabed
- No seabed leveling
- Other conditions as specified in the Water Quality Certification from Ecology

## 2. Air

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

Short term air emissions are expected to be limited to diesel and gasoline engine emissions from the dredge barge and other heavy equipment being used for excavation, dredging, and sediment disposal.

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

None known

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

None are proposed

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

The site is wholly encompassed by Thatcher Bay which is part of the Puget Sound nearshore ecosystem. A small unnamed stream originating from Spencer Lake

- 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.**

The project will require removal of woodwaste via dredging, and placement of beach sediments within Thatcher Bay. The proposed work is described in detail in the attached 30% Design Report.

- 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.**

The project will involve removing approximately 12,900 cubic yards of wood waste from the southeast corner of Thatcher Bay. The existing beach will be restored by placing approximately 12,900 yards of clean sediments imported from the banks of Swinomish Slough

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

The work will not require surface water withdrawal or diversion

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

The proposed site is not 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.**

Potential discharges to surface water during the wood waste removal include localized temporary increases in turbidity during dredging and excavation, and leakage of petroleum products (fuels, oil, grease, hydraulic fluids, lubricants) from equipment. These substances could enter surface water directly (from vessels or barge-mounted equipment involved in construction). Care will be taken to prevent any petroleum products, chemicals, or other toxic materials from entering the water. Contractors will be required to have spill response plans and will have booms, absorbent pads and other appropriate materials necessary to contain and clean up an accidental spill at the site, and to inspect and maintain equipment in good repair.

Turbidity would increase temporarily due to short-term suspension of sediments in the water column at the point of dredging. Any turbidity associated with dredging would be minimal, localized, and temporary, and would be limited to the mixing zone allowed by Ecology's water quality standards (typically 150 feet in marine waters).

Approximately 12,900 cubic yards of wood waste removed from Thatcher Bay will be towed to an appropriate open water dispersive disposal site within Rosario Strait and deposited with a controlled release. The open water disposal of this sediment will oxygenate and disperse the organic sediment within the designated disposal site. The combined effect of dispersal and oxygenation will facilitate the natural decomposition of the sediment. The attached Sampling and Analysis Plan and DMMO Sediment Suitability Determination provide additional details on the proposed disposal method and composition of materials.

**b. Ground:**

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

The project will not involve withdrawal or discharge to groundwater.

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

No waste material will be discharged to the ground

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**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.

No runoff will be generated or collected and dispersed by the project

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

No

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

Not Applicable

#### 4. Plants

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

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants:** water lily, eelgrass, milfoil, other
- other types of vegetation

Eelgrass is found south of the site near the mouth of Thatcher Bay. No vegetation is currently growing on the woodwaste

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

The project site is within a shallow nearshore embayment. Currently there is very little vegetation present due to sediment contamination by wood waste

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

No threatened or endangered plants are known to be on or near the site

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

No upland soils will be disturbed by the project.

**5. Animals**

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

birds: hawk, **heron, eagle**, songbirds, **other**: cormorant, gull, duck

mammals: deer, bear, elk, beaver, other:

fish: bass, **salmon, trout, herring, shellfish**, **other**: Pacific sand lance (*Ammodytes hexapterus*), Longfin smelt (*Spirinchus thaleichthys*) Surfsmelt (*Hypomesus pretiosus*)

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

It is possible that two species listed as Endangered under the ESA could be found near the project area. Southern resident orcas (*Orcinus orca*) utilize the San Juan Islands extensively for feeding during the summer months. Humpback whales (*Megaptera novaeangliae*) are unlikely to occur in Puget Sound, and were last recorded in 1999; the area is not considered part of their natural distribution area.

Many salmonids listed as threatened under the ESA utilize nearshore areas such as Thatcher Bay while they are rearing in Puget Sound. Bull Trout – Dolly Varden (*Salvelinus confluentus*), Puget Sound Chinook Salmon (*Oncorhynchus tshawytscha*), Hood Canal Chum Salmon (*Oncorhynchus keta*), Puget Sound Steelhead Trout (*Oncorhynchus mykiss*) may periodically utilize the site for foraging and/or rearing. One threatened bird species – marbled murrelet (*Brachyrhamphus marmoratus*) is commonly observed in the San Juan Islands. One threatened mammal, the Stellar sea lion (*Eumetopias jubatus*) is also common in the San Juan Islands and could be in the project vicinity.

Leatherback sea turtle, Loggerhead sea turtle, Green sea turtle, Olive Ridley sea turtle are all also listed as threatened or endangered under ESA. It is extremely unlikely that any of the sea turtles would be found near the site.

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

Salmonids may occasionally visit the area as areas within the San Juan Islands provide rearing and foraging habitat for outmigrating anadromous salmonids from the Samish, Skagit, and Nooksack river systems.

The Puget Sound area is part of the Pacific flyway. Birds that inhabit the area vary seasonally due to migration. The San Juan Islands area provides over-wintering areas for grebes and other migratory waterfowl, including over 26 duck species.

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

Excavation will remove existing wood debris. Backfill will include a mix of mineral substrate that is expected to improve biological production of the aquatic habitat. The project will improve long-term water and sediment quality by removing upland contaminated soil, removing aquatic contaminated sediment. Completion of this project will improve spawning habitat for forage fish and allow native nearshore vegetation such as eelgrass to become established (assuming other site conditions such as light do not limit establishment).

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**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.**

Fossil fuels will be required to complete the dredging and wood disposal. The completed project will not have any ongoing 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:**

Not Applicable

## 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.**

The dredge barge, dredge and support boats require petroleum-based fuel for operation and thus there would be a risk of spills occurring during dredging operations. Work will be conducted during calm weather in the summer months, and thus the risk of such an event would be small.

### 1) Describe special emergency services that might be required.

We do not anticipate needing any special emergency services for this project

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

Implementation of a contractor spill control plan and best management practices will minimize risks of accidental spills during construction. Contractors will be required to have a spill response plan and will have booms, absorbent pads and other appropriate materials necessary to contain and clean up an accidental spill at the site, and to inspect and maintain equipment in good repair.

## b. Noise

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

Existing noise will not affect the construction activities.

**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.**

Construction noise will occur associated with a variety of construction equipment. This could include truck and crane engines, generators and other small engines, dredges, excavators, backhoes, and other heavy equipment. Construction noise will be limited to daytime hours and will not create adverse impacts due to the lack of sensitive noise receptors in the area. Noise impacts from operation of the facility are not anticipated.

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

Construction activities will be carried out in a manner consistent with applicable County and State environmental noise standards.

**8. Land and shoreline use**

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

The land surrounding Thatcher Bay is currently held by the Blakely Island Trust. A conservation easement through the San Juan Preservation Trust encompasses all of the backshore and upland areas surrounding Thatcher Bay.

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

No

**c. Describe any structures on the site.**

There are no structures on the site

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

No

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

The land surrounding the site is zoned Rural Farm Forest, with an allowable density of 1 unit per 5 acres

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

The land surrounding the site is designated Rural Farm Forest

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

The shoreline at the site is designated Rural Residential and Conservancy

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

Yes. Beach areas on either side of the project, which currently have beaches composed of uncontaminated beach sediments, have been mapped as Shoreline Fish and Wildlife Habitat Conservation Areas that support smelt spawning. Slopes landward of the project site are mapped as exceeding 15 percent, and classified as an intermediate hazard. Thatcher Bay itself is considered an environmentally sensitive Estuary/Lagoon, and as a result a 100-foot buffer applies under the County Critical Areas Ordinance (CAO)

**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:**

Not Applicable

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

The surrounding land is currently held by the Blakely Island Trust. A conservation easement through the San Juan Preservation Trust encompasses all of the backshore<sup>1</sup> and upland areas surrounding Thatcher Bay.

**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 required

**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?**

No structures will be constructed

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

No views will be obscured

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

None required

**11. Light and glare**

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

None

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

None

**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 required

**12. Recreation**

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

There are currently no designated recreational opportunities in the immediate vicinity of the project site. Informal opportunities for recreation in Thatcher Bay include kayaking, pleasure boating, fishing and shell fishing.

**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:**

None proposed

**13. Historic 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.**

No. See attached Cultural Resources Assessment

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

The following text is taken from the attached Cultural Report:

Historically Blakely Island was used by the Samish and Lummi tribes for fishing, hunting, and plant gathering (Roe 2005), and for slave raids by the Haida and other tribes from the north (Roe 2005). Shell middens remain on the north end of the island, and an early resident of Orcas Island recalls Indian potlatches and gatherings along Obstruction Pass (Roe 2005). No evidence of historic use by native peoples is currently evident at Thatcher Bay, although there may have been groups that used this cove year round, including the possibility of larger aggregate village use. Much of the evidence for this extensive pre-contact and proto-historic land use has been obliterated by the development of the last two hundred years.

Spencer Mill was a lumber mill that operated between 1879 and 1942 in Thatcher Bay. The mill is believed to be the source of the existing wood waste that this project proposes to remove. In January 1965, melting snow, heavy rain, and high water washed out the small retaining dam at Spencer Lake, destroying the remains of the old flumes, the mill, and the post office (Roe 2005). Heavy iron machinery, including a large Pelton wheel, was moved from the mill out onto the beach and into the bay where it was still visible in 2005 at low tide (Roe 2005). Today, all that remains of the Spencer Mill are pilings, concrete debris, steel cables (Johannessen and MacLennan 2006:Appendix 2), and sawdust on the beach and in the bay (Nelson 2006).

Johannessen, J. and A. MacLennan. 2006. *Soft Shore Protection/Structure Removal Blueprint for San Juan County Forage Fish Beaches, Appendix 2*. Electronic document, [http://www.sanjuansorg/pdf\\_document/FSJ.html](http://www.sanjuansorg/pdf_document/FSJ.html), accessed February 13, 2009.

Timothy A. 2006. Blakely Island History. Electronic document, <http://www.spu.edu/depts/biology/blakely/about/history.html>, accessed February 9, 2009.

Roe, J. 2005. Blakely Island in Time. Montevista Press, December 15.

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

None required

**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.**

The site is not accessible by land

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

No

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

The project would not eliminate or create parking spaces

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**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:

None required

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.

None required

16. Utilities

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

No utilities are available at the 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.

No utilities are proposed for the site

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:  .....

Date Submitted: (signed) March 4, 2010.....