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:
Native Oyster Habitat Enhancement in Liberty Bay

2. Name of applicant: Puget Sound Restoration Fund
3. Address and phone number of applicant and contact person:

590 Madison Ave. N

Bainbridge Island, WA 98110

4. Date checklist prepared: April 13, 2007
5. Agency requesting checklist: Washington Department of Fish & Wildlife
6. Proposed timing or schedule (including phasing, if applicable):

On-water work is scheduled to begin May 23, 2007. Puget Sound Restoration Fund has limited access to a high-security pier at Keyport Underwater Naval Warfare Center to load shell beginning on May 21st. It will take two days to load approximately 450 cubic yards of shell onto a Navy barge, which will then be moved to the enhancement site on May 23rd for spreading. Subsequent barge loads with the remaining shell will be spread in early to mid June. The project is scheduled to coincide with the natural spawning cycle of the Olympia oyster in Liberty Bay, since larval oysters are more likely to recruit to clean oyster shell than oyster shell that's been in the water and fouled with other marine organisms. Moreover, we wish to take advantage of the first recruitment episode, which generally takes place in late May/early June.

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

Yes. The 2-acre plot that we are enhancing in 2007 is part of a 10-acre plot owned by WDFW that has been deemed perfectly suited for native oyster recruitment according to Brady Blake at WDFW's Pt. Whitney Lab. Puget Sound Restoration Fund has a Memorandum of Agreement with WDFW to conduct native oyster enhancement at this site through December 31, 2012. Pilot enhancement projects conducted in 2005 (1/3 acre) and 2006 (1/2 acre) succeeded in recruiting native oysters estimated at 90 oysters per M^2. Based on the success of the 2005 and 2006 test plots, Puget Sound Restoration Fund is partnering with WDFW, The Nature Conservancy, the Suquamish Tribe, NOAA and the U.S. Navy to enhance two adjacent acres in 2007. With regard to the enhancement of the remaining 7-8 acres, Puget Sound Restoration Fund and The Nature Conservancy have recently submitted a proposal to NOAA to enhance an additional 5 acres in 2008/9. Other proposals for funding will be submitted in subsequent years based on the project's success.

Puget Sound Restoration Fund is also enhancing .5 acres of tidelands in Dogfish Bay on tidelands owned by WDNR with funding from the Environmental Protection Agency. This project is also being pursued in partnership with WDFW, the Suquamish Tribe and the U.S. Navy. If native oysters recruit to the shell at this location, we plan to enhance another 1 acre in subsequent years.

Based on all evidence to date, structure, not larval production, is the limiting factor in the return of Liberty Bay's historic native oyster population. With that in mind, Puget Sound Restoration Fund intends to conduct additional enhancement activities in order to reestablish a sufficient concentration of oysters to ensure successful reproduction and long-term sustainability.

Given that we will probably be working in Liberty Bay for some years to come, Brady Blake with WDFW has suggested that we work together to obtain a 5-year programmatic HPA for native oyster enhancement activities. This may well make sense for other locations where similar work is being conducted as well.

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

The NOAA Restoration Center, USFWS, ACOE and Kitsap County Department of Community Development have all issued findings of non-significance.

In brief, on May 23, 2006, Puget Sound Restoration Fund received a 2-year Nationwide Permit #4 to distribute up to 1,300 cubic yards of Pacific oyster shell on Liberty Bay tidelands near Scandia or order to enhance settlement substrate for Olympia oysters on tidelands owned by Washington Department of Fish & Wildlife.

In May 2006, NOAA Restoration Center staff reviewed the project and "determined that the proposed activities are eligible for inclusion under the Biological Opinion," and not likely to jeopardize ESA-listed salmonid species in the Pacific Northwest.

An additional determination from NOAA and USFWS indicated that the project was "Not likely to adversely affect" bald eagles.

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.

I am not aware of any other proposals directly affecting the WDFW-owned tidelands where native oyster enhancement is being conducted.

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

All other permits/exemptions have been obtained, including:

- U.S. Army Corps of Engineers: Nationwide Permit #4
- Department of Ecology: 401 Water Quality Certification (not required for most #27 Nationwide Permits; not required for any #4 Nationwide Permits)
- NOAA/NMFS: Endangered Species Act consultation (if project is federally funded) for potential impacts to Chinook salmon, Bull Trout, and Bald Eagles
- NOAA/NMFS: National Historic Preservation Act consultation (if project is federally funded) for potential impacts to significant scientific, cultural, or historical resources
- Kitsap County: Shoreline Substantial Development Permit Exemption
- Department of Natural Resources: Right-of-Entry Permit (not required if tidelands are owned by a public entity other than DNR)
- WDFW: Transfer Permit for cultch (Taylor Shellfish Farms, from whom the shell is being purchased, has an annual permit applicable to all transfers from their cultch piles)

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.)

Olympia oyster habitat enhancement will add settling structure to nearshore regions of Liberty Bay, providing the means for extant populations of native oysters to expand their numbers and range near both Scandia and Dogfish Bay. Larval production in Dogfish Bay, Keyport, and Scandia is known to exist. A healthy population of native oysters – including multiple age classes – occupies U.S. Navy property at Keyport, and many more oysters can be found amongst Pacific oyster shell piles, left behind by an old oyster farming operation, near Scandia. Puget Sound Restoration Fund has also found single oysters in suitable habitat on the eastern side of Dogfish Bay and on a breakwater at the Poulsbo Marine Science Center. The pattern in Liberty Bay is clear: where there is structure – including shell material, large rocks, and even cement – there are native oysters.

What this suggests is that structure, not larval production, is the limiting factor in the return of Liberty Bay's historic native oyster population. The best thing we can do to aid in their comeback is to provide what many areas of the Bay are currently lacking – substrate on which native oyster larvae will settle. Olympia oysters are somewhat picky in their habitat requirements, almost never surviving on mud, sand, in heavy currents or wave action, or in areas of high silt deposition. They do, however, readily attach to oyster shell. Baseline monitoring of the proposed restoration site by Dr. Jonathan Davis revealed a number of native oysters already thriving on old piles of Pacific oyster shell, and a pilot habitat enhancement project undertaken by PSRF in May 2005 has succeeded in recruiting additional native oysters from waters near Scandia.

With this in mind, Puget Sound Restoration Fund, Dr. Davis, the Suquamish Tribe, Washington Department of Fish and Wildlife (WDFW), Hood Canal Oyster Company and the U.S. Navy have undertaken a collaborative effort to expand available habitat for Puget Sound's only native oyster in Liberty Bay. Spreading additional Pacific oyster shell over 2 acres of state-owned tidelands near Scandia and .5 acres in Dogfish Bay in 2007 will greatly increase settling structure, and will take advantage of the Bay's large volume of native oyster larvae currently unable to find enough places in which to settle and grow to maturity. The expansion of a filter-feeding, reef-building species will improve habitat, nutrient cycling, and water quality in a bay that is sorely in need of attention – but certainly not beyond our capacity to restore. If the effort continues to be successful, enhancement will be expanded to 7-8 acres of adjacent state-owned tidelands in Liberty Bay and approximately .5 to 1 acre in Dogfish Bay.

Materials and Methods

Puget Sound Restoration Fund will transport and spread:

- 1,000 cubic yards of clean Pacific oyster shell material on 2 acres of WDFW-owned tidelands at the Scandia enhancement site by barge, from a loading site at Keyport Naval Undersea Warfare Center in May and June 2007 (the shell will be free of fine sediments and marine organisms, as determined by permits issued by WDFW).

- 250 cubic yards of clean Pacific oyster shell on DNR-owned tidelands in Dogfish Bay in June and July 2007.

At both sites, shell material will be off-loaded on site at high tide with a high-pressure hose. Within the boundaries of the 1-3 acre enhancement site at Scandia and the .5 acres at Dogfish Bay, shell material will be spread evenly, to a depth of 6-8 inches. Plots where shell is to be spread will be marked in advance – by temporary buoys or with PVC pipe – and noted with GPS measurements. Between 15-25 participants will be involved in the effort, which will begin in late May to coincide with the natural spawn of Liberty Bay's native oysters. Monitoring will begin in summer 2007 and continue through summer 2008.

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.

The proposed 2-acre site in Scandia, Liberty Bay is part of a larger 46-acre site owned by WDFW that has been set aside for native oyster enhancement. It is generally located northwest of Pearson Point. As indicated previously, of these 46 acres, 10 acres are considered ideally suited for native oyster enhancement by virtue of tidal elevation and evidence of oyster recruitment on shell material left on site by a previous commercial operation. The GPS locations for the roughly rectangular 46-acre site are:

NW Corner 122 39' 32.75"W 47 43 37.35N

NE Corner 122 39' 23.15W 47 43 37.12N

SW Corner 122 39 18.27W 47 43 15.25N

SE Corner 122 39 0.31W 47 43 10.46N

A map is included as an attachment.

In Dogish Bay, the mid-point of the .5 acre enhancement site is located at the following GPS locations:

N 47.7009305 W-122.6343557 (DATUM: NAD83)

TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other . . . . . Lower intertidal gradually sloping mudflats with occasional hummocks of Pacific oyster shell left behind by a commercial aquaculture operation prior to WDFW acquisition.

b. What is the steepest slope on the site (approximate percent slope)?
The slope at both locations is approximately. 0.02, though an exact calculation has not been made. Elevation ranges from –1' MLLW to –3.5' MLLW.

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.

The site is composed primarily of lower intertidal mudflats located between approximately –1.0' MLLW and –3.5' MLLW and consists almost entirely of soft substrates interspersed with piles of remnant Pacific oyster cultch material.

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.

1,000 cubic yards of clean Pacific oyster shell at the Scandia enhancement site

250 cubic yards of clean Pacific oyster shell at the Dogfish Bay site

Taylor Shellfish Farms is the source of the clean Pacific Oyster Shell.

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

NO

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

NA

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

NA

a. **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.

NA

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

NA

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

NA

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 project is located in tidal waters in Liberty Bay, Washington. The Scandia site is located roughly northwest of Pearson Pt. The Dogfish Bay enhancement site is located roughly west-northwest of the Keyport estuary.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes. Pacific oyster shell will be spread on tideflats to enhance settlement substrate for native oysters.

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.

1,000 cubic yards of clean Pacific oyster shell at the Scandia enhancement site

250 cubic yards of clean Pacific oyster shell at the Dogfish Bay site

Taylor Shellfish Farms is the source of the clean Pacific Oyster Shell.

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

NO

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

Within tidal waters described above.

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

NO

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.

NO

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

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

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:

NA

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

b. What kind and amount of vegetation will be removed or altered?
None

c. List threatened or endangered species known to be on or near the site.
Bald eagle may be present in the vicinity of the project area; a nest has been identified 800-1,000 feet from the project work site. The local WDFW bald eagle biologist (Shelly Ament) was consulted and mitigation measures adopted. Should the nest still be occupied in late May 2007, the pump noise (used to spread the oyster shell) is not anticipated to disturb the nest, and work will occur while fledglings are feathered and "less sensitive" to disturbance (see USFWS concurrence).
Puget Sound fall Chinook are presumed to use this nearshore environment for rearing prior to ocean migration. The site is not located in proximity to a Chinook natal delta, and so is not assumed to be a high use area. (See NOAA Restoration Center concurrence)

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

NA

5. **Animals**

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

birds: hawk, heron, ~~eagle,~~ songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other:
See comments above regarding eagles

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

Bald eagle may be present in the vicinity of the project area; a nest has been identified 800-1,000 feet from the project work site. The local WDFW bald eagle biologist (Shelly Ament) was consulted and mitigation measures adopted. Should the nest still be occupied in late May 2007, the pump noise (used to spread the oyster shell) is not anticipated to disturb the nest, and work will occur while fledglings are feathered and "less sensitive" to disturbance (see USFWS concurrence).
Puget Sound fall Chinook are presumed to use this nearshore environment for rearing prior to ocean migration. The site is not located in proximity to a Chinook natal delta, and so is not assumed to be a high use area. (See NOAA Restoration Center concurrence)

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

NO

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

In order to avoid and/or minimize impacts to Bald Eagles, WDFW Eagle Biologist Shell Ament recommends the following restrictions:

1) Work on site should occur for no more than 7 hours per day – between 10 am and 5 pm- in order to leave ample foraging time at the project site for eagles during the morning and evening hours.
2) Project word should be postponed if the nest is occupied AND eggs have not hatched by May 23rd. As eggs have typically hatched by May 1st, this situation is not expected to occur.
3) PSRF and its project biologist, Dr. Jonathan Davis, should monitor the nest site in April to determine whether it is occupied this season. If it is not occupied by May 1st, Shelly recommends the restrictions identified under (1) and (2).

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.

A 6-8 HP pump will be used to spray shell off a 110’ x 30’ foot Navy barge.

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:

NA

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.

NO

1) Describe special emergency services that might be required.

NA

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

NA

b. **Noise**

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

NA

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.

All potential effects are from noise disturbance from a small 6-8 HP water pump, with an estimated noise level of 46 dB, used to push shell material off the barge in the bay.

It is assumed that Eagles selecting this site for nesting will be acclimated to a baseline of no less than 45 dB with automobile traffic peaks of 47-58 dB, and occasional use of residential tools creating noise in the 80 dB range. According to WDOT, disturbance thresholds for spotted owls in wild forest settlings have been set at 51 dB. Although the pump noise will likely be detectable at the nest site, the estimated project noise level of 46 dB is unlikely to result in take.

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

Anticipated pump operation would not exceed 5-7 hours a day over a 2-3 week period and would occur after the eggs had hatched, which typically occurs by May 1st.

8. **Land and shoreline use**

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

Residential shoreline abutted by WDFW-owned tidelands with no current use apart from native oyster enhancement

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

The site was used for commercial aquaculture until the mid-90s, when the tidelands were transferred to WDFW.

c. Describe any structures on the site.

None other than remnant piles of Pacific oyster shell

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

NA

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

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

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

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
Not that I know of.

i. Approximately how many people would reside or work in the completed project?
Approximately 4-5 people at a time over a 2-3 week period.

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

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

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

Nearby shoreline residents are supportive of project and have offered land access to tidelands as needed.

9. **Housing**

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

NA

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

NA

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

NA

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?

NA

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

NA

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

NA

11. **Light and glare**

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

NA

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

NA

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

NA

d. Proposed measures to reduce or control light and glare impacts, if any:

NA

12. **Recreation**

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

People kayak and boat in the area.

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:

The project will be conducted over a 2-3 week period during daylight hours and is not expected to disrupt recreational opportunities

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.

The action is not anticipated to cause ground disturbance and so does not have the potential to affect archaeological resource, according to the NOAA Restoration Center, which performed federal agency conulstations. The site is currently owned by WDFW, who approves and supports the action. Similar shell placement actions were reviewed and found to have no potential to affect cultural resources at this location.

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

None

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

NA

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 lower intertidal area where the project will be conducted is best accessed by boat, since the tideflats are composed of soft substrates and are located a fair distance from the shoreline making walking generally unsuitable. The nearest road roughly parallel to the site is Viking Way NW. The nearest road on the south end of the project site is NW Scandia Rd.

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

NA

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

NA

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).

NA

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.

NA. Shell will be spread by barge.

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

NA

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.

NA

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

NA

16. **Utilities**

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

NA

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.

NA

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: 4-13-07.....

TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

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

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

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

Unlikely

Proposed measures to avoid or reduce such increases are:

NA

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

The project will increase settlement structure for native oysters and enhance natural reproduction and long-term sustainability of native oysters in Liberty Bay. Additionally, the project will reestablish complex habitat in the lower intertidal that has been shown to provide habitat for juvenile fish and mobile invertebrates, such as crabs.

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

The project will be conducted in daylight hours over a 2-3 week period so as to cause as little disturbance as possible.

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

NA

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

NA

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

See answers above – the project is unlikely to adversely affect endangered species.

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

To avoid noise impacts, the project will follow the recommendations of WDFW Eagle Biologist Shelly Ament.

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

Unlikely to affect

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

NA

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

NA

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

NA

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

NO