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:
Olympic/Willapa Hills Wildlife Area Salvage and Thinning Project

2. Name of applicant:
The Washington Department of Fish and Wildlife

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

Kyle Guzlas

WDFW Biologist

48 Devonshire Road

Montesano, WA 98563

(360) 249-4628 x. 241 – office

(360) 480-7723 – cell

4. Date checklist prepared:
April 1, 2008

5. Agency requesting checklist:
WDFW

6. Proposed timing or schedule (including phasing, if applicable):
Salvage and thinning operations will take place from May 2008 – July 2008 depending on site and species to be salvaged

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.

- WDFW Priority Species and Habitat Management Recommendations
- Department of Natural Resources (DNR) TRAX (Threatened, Rare and Endangered Species)
- Olympic/Willapa Hills Wildlife Area Plan
- Cultural Resources Survey
- GIS generated maps

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.
No

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

- DNR Forest Practice Application (FPA)
- ESA, Section 7 and NHPA, Section 106 consultation with US Fish and Wildlife Service
- SEPA
- Grays Harbor County – access permits off of county roads
- Fish and Wildlife Commission

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.)

This project will salvage wind thrown timber on approximately 327 acres at the Olympic and John's River Wildlife Area Units. The wind throw is a result of the December 3-4, 2007 storm that brought high winds and substantial rains to Grays Harbor County. Sustained winds reached 80+ mph and approximately 10+" of rain accumulated in a 24 hour period. This project will also serve as an opportunity to thin high density stands, while salvaging wind thrown timber, to improve wildlife habitat conditions by opening up the existing even-aged, single-story canopy forest structure. Thinning will occur on 239 acres within the 260 salvage acres at the Olympic Unit. Salvage will occur on approximately 77 acres at the Johns River Unit.

Wildlife movement, specifically Roosevelt elk, is currently impeded throughout both units because of the downed timber. This places significant forage availability ramifications on the elk herds and other wildlife that depend on these lands. Recent research has shown that the elk in the Southern Olympic Mountains are exceedingly nutritionally limited. By salvaging the wind thrown timber and thinning portions of these units, there will be an increase of forage that is available for these species. The variable density thinning prescriptions that will be utilized will increase available forage and maintain escapement and cover habitats that are critical to elk. The high-density forests currently provide little forage

benefit for elk and other wildlife because of the
lack of sunlight that reaches the forest understory. Due to the crown closure in these forests, there is no understory vegetation present in many of the stands. An increase in light penetration provides for better-developed understories with greater abundance and diversity of herbaceous plants, shrubs and trees. This will also improve the existing cover conditions. Variable density thinning efforts will have benefits for plant and animal communities that are associated with late-successional forests. In addition to elk, species that will benefit from this project include threatened and endangered species such as marbled murrelets and northern spotted owls. Nesting and foraging conditions will be improved for each of these species that currently do not utilize the forested habitats.

Washington Department of Fish and Wildlife (WDFW) management access is currently blocked by the wind throw on roads and fields that are scattered throughout both wildlife area units. Access is needed to conduct annual elk forage enhancement projects as well as annual waterfowl enhancement projects. Salvage and thinning operations will be consistent with the objectives and strategies listed in the Olympic-Willapa Hills Wildlife Area Plan.

Olympic Wildlife Area

Extensive damage occurred throughout the early December storm in this unit. The Olympic Unit consists of 900 acres of predominant forestland. The forest structure at the Olympic Unit generally consists of high-density second growth (70 yr) Douglas Fir and Western Hemlock. Other habitat types include numerous field openings that are farmed and maintained for elk forage and extensive riparian areas located along the West Fork Wishkah River and the Wishkah River. The Wildlife Area Plan (2006) identifies a strategy to manage for all species through a variable density-thinning project to enhance and restore wildlife habitats. Ideal management conditions are to reduce and maintain < 70% canopy cover in this system. (Note: Maintaining and promoting mature stands of large-diameter conifers through basal area reductions is becoming an increasingly important management concept. Mature stands, particularly at lower elevations, have become increasingly uncommon, and thereby represent a significant and highly desirable biological and ecological component). This will help create a late successional forest environment (old growth), that will provide enhanced forage conditions for Roosevelt elk and create a multi-layered, continuous forest canopy, which will benefit a variety of "old-growth" dependant species. The windstorm did a great deal of the work to achieve this strategy, however more thinning can be conducted in areas that are adjacent to or within the high-density wind throw.

Salvage activities will occur on approximately 260 acres in 11 separate logging units scattered throughout the Olympic Unit. This is based on the wind throw that is present and the potential for thinning present in each of these logging units. Of the 260 acres, thinning will occur on approximately 239 acres throughout 5 of the logging units. Each of the separate logging units is included on the attached maps. Because of the complexity of the existing forest structure there will be several different, site specific logging prescriptions. The common term applied to this practice is variable density thinning. This non-uniform thinning approach creates gaps, retains uncut areas, and applies a general thin prescription throughout the forest matrix. All units have been layyed out with a WDFW Biologist present. All "cut" trees in the thinning units will be painted by WDFW.
Attached as Appendix C – Oly are descriptions of all 11 salvage and thinning units.

Johns River Wildlife Area

Wind damage along the Washington coast was significantly worse than in the interior during the early December storm. Winds along the coast were measured exceeding 130 mph, and as a result there was significant blowdown throughout the John's River Unit. The Johns River Unit covers approximately 1,500 acres along the south shore of Grays Harbor. The forestlands are comprised of dense Western Hemlock (90%) and Sitka Spruce (10%) aging approximately 35-45 yrs in age.

Salvage efforts are broken into six separate logging units at the Johns River Unit. Western hemlock forests cannot be thinned similar to Douglas fir forests because of their shallow root system and susceptibility to disease. Therefore, efforts at the Johns River Unit are focused on salvaging the wind thrown timber.
Attached as Appendix C – JR are descriptions of all 6 salvage units.

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 Olympic and Johns River Units of the Olympic/Willapa Hills Wildlife Area managed by the Washington Department of Fish and Wildlife. Maps included as Appendix A.

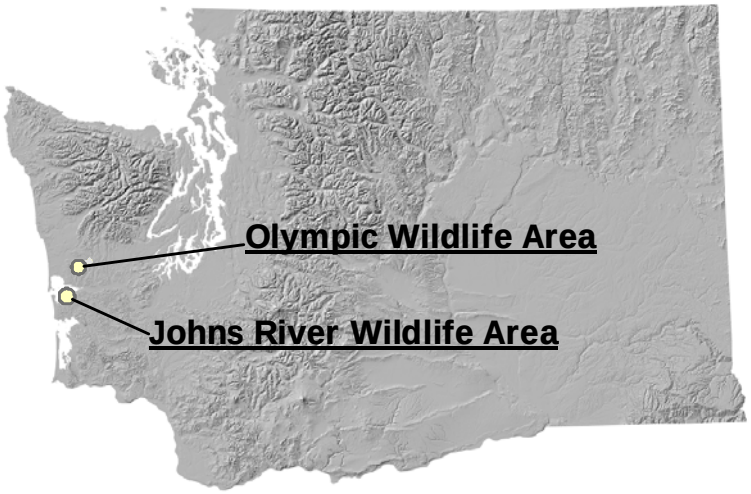
Olympic Unit – 963 acres
Johns River Unit – 1501

The Olympic unit is located in Grays Harbor County 15 miles north of Aberdeen in the Wishkah River Valley and upper Wynoochee River Valley. The proposed areas for salvage and thinning lies within portions of Sections 1, 10, 11, 12 of Township 19 North, Range 9 West and Section 29 of Township 20 North, Range 8 West. Refer to attached maps.

The Johns River unit is located approximately 10 miles southwest of Aberdeen in Grays Harbor County. The proposed areas for salvage and thinning lies within portions of Sections 1 &12 of Township 16 North, Range 11 West and Section 32 of Township 17 North, Range 10 West. Refer to attached maps.

Washington Department of FISH and WILDLIFE

Overview Location of Wildlife Areas



B. ENVIRONMENTAL ELEMENTS

1. Earth

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

Olympic Wildlife Area

The headquarters and lands of the Olympic Wildlife Area are located in Grays Harbor County 15 miles north of Aberdeen in the Wishkah River Valley and upper Wynoochee River Valley. The Wynoochee Segment is located about 18 miles downstream from the Wynoochee Dam. The area encompasses 1,500 acres of flat and hilly lands in the foothills of the Olympic Mountains.

The Wildlife Area consists of forests and small fields which are scattered among small, private tree farms, DNR land, and corporate timberlands. Various streams wind their way through lush rain forests. Vegetation includes Douglas fir, Western Hemlock, Western Red Cedar, Red Alder and Bigleaf Maple as the primary tree species. Lower canopy and groundcover species including trailing blackberry, salmonberry, fireweed, vine maple, cascara, salal, and other valuable, herbaceous forage plants.

Johns River Wildlife Area

As the waters of Johns River flow into Grays Harbor they deposited sediments which build the salt-marsh estuary with extensive mudflats adjoining prime freshwater cedar swamp behind old dikes. Forest-covered hillside uplands slope in from the east and west. The several retaining dikes allow some dryland agriculture for primarily elk and waterfowl. Abundant trees include red alder, western hemlock, western red cedar, Sitka spruce, cascara, and crabapple. Shrubs are dominated by salal, salmonberry, blackberries, huckleberry, elderberry, and devil's club. Scot's broom is an invader. Common grasses and forbs include reed canary grass, ferns, rushes, plantain, silverweed, fescues, meadow foxtail, clovers, thistle, wild pea, dock, mosses, ragwort, and lupine. Aquatic and semi-aquatic plants include cordgrass, eelgrass, pond lily, duckweed, cattail, and pickleweed.

b. What is the steepest slope on the site (approximate percent slope)?
Olympic – steepest slope would be 100% along Wishkah and West Fork of the Wishkah River banks. Average slope throughout the entire unit would be < 10%.
Johns River – steepest slope would be 60% with an average site slope of < 10%.

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.

Olympic - SILT LOAM, SILTY ALLUVIUM OVER SAND AND GRAVEL

Johns River -SILT LOAM, VOLC. ASH OVER GLACIAL OUTWASH

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.

Three temporary roads will be created for salvaging timber at Olympic Wildlife Area. The total length of these roads is approximately 37 stations (3,700'). Two of these roads are located on Unit # 3 and one is located at Unit # 5. These dirt roads will be utilized by logging equipment. Access to these roads will be off of the county road system and a county permit will be obtained through the process. Where applicable culverts will be utilized in roadside ditches and loads of clean rock may be placed for this access. Once the salvage and thinning is completed each of

the temporary roads will be obliterated. This will involve machine fluffing, debris placement, and planting where necessary. All tree species that are planted will be native species including western red cedar, Sitka spruce, Douglas fir, and western hemlock.. Any forage seeding will be consistent with the Olympic-Willapa Hills Wildlife Area Plan in regards to forage seeding for the benefit of elk. machine fluffed, any fill (gravel and culverts) removed, and seeded to minimize any potential erosion.

Three roadside landings will also be created for this project. These are located at Unit # 3 and Unit # 8. Each of these landings are located in high density blowdown locations and will be restored after the project is completed.

The eastside road at the Johns River unit will be graded and brought to forest practice standards during this project. This includes replacing two undersized culverts and grading and re-surfacing of approximately 1.8 miles of roadway. This project is separate and is being permitted by WDFW engineering. Approximately 1 mile of grading will be completed prior to the start of this project, and the remainder will be completed as the blowdown is extracted from the roadway.

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

Erosion may occur during the course of this project however the following BMP's will be implemented to limit any delivery or degradation.

- Implement all practical precautions to minimize soil erosion and disturbance
    1. Utilize approximately 5 miles of existing roads and agricultural field access. (Many of the salvage locations are adjacent to fields that are regularly tilled and planted for elk forage. Ground disturbance will be limited in these locations)
    2. Refrain equipment operation when ground conditions become saturated
    3. Maintain all soil erosion control methods throughout logging activity
    4. All "roads" will be brought to forest practice standards (RMAP) where feasible prior to the logging activity. (Some locations of roadway are covered with blowdown. These particular sections will be brought to standards during the logging operation where applicable.)
    5. Logging will take place during the summer when conditions are dry
- Road maintenance (within the existing roadbed) during the salvage project may include, but not limited to:
    1. Reinforcement of soft spots with rock
    2. Grading
    3. Slide removal
    4. Drainage maintenance
    5. Maintain erosion control measures

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:

Erosion may occur during the course of this project however the following BMP's will be implemented to limit any delivery or degradation.

- Implement all practical precautions to minimize soil erosion and disturbance
    1. Utilize approximately 5 miles of existing roads and agricultural field access. (Many of the salvage locations are adjacent to fields that are regularly tilled and planted for elk forage. Ground disturbance will be limited in these locations)
    2. Refrain equipment operation when ground conditions become saturated
    3. Maintain all soil erosion control methods throughout logging activity
    4. All "roads" will be brought to forest practice standards (RMAP) where feasible prior to the logging activity. (Some locations of roadway are covered with blowdown. These particular sections will be brought to standards during the logging operation where applicable.)
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- Road maintenance (within the existing roadbed) during the salvage project may include, but not limited to:

1. Reinforcement of soft spots with rock
2. Grading
3. Slide removal
4. Drainage maintenance
5. Maintain erosion control measures

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.

This proposal will involve vehicle emissions and dust from logging, forwarding and hauling equipment. There should be no significant impact to air quality.

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:

Ensure equipment operators have safety mufflers for emission control.

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.

There are numerous stream, rivers, wetlands, ponds, and mudflats located near the project vicinity. The two wildlife areas encompass approximately 2,500 acres. The following are the only water bodies that will be in the project vicinity.

Olympic and Johns River Wildlife Area Units

All salvage and thinning activities are subject to general forest practice standards in regards to Riparian Management Zones (RMZ's). All practices will meet or exceed existing Department of Natural Resource standards. . The following buffers will apply:
Type F streams – Site Class II, <10' bankfull width = 170' buffer (Core Zone = 50', Inner Zone = 63', and Outer Zone = 57')
Type Np streams – 50' buffer and 30' equipment limitation zone
Type Ns streams – 30" equipment limitation zone

Refer to Appendix C for specific stream types in each logging unit at Olympic and Johns River.

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 project work will occur within 200' of the streams listed in Appendix C. All work is regulated by WADNR Forest Practice Standards.

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.

No surface waters will be filled or crossed by any equipment involved with this project. The only fill placement involved with this project involves re-surfacing of existing roads in order to bring them to forest practice standards. Fill and culverts may be required by the county for access off of county roadways in the road ditch network. This will be permitted by the county**.**

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

No diversions or withdrawals will occur by this project**.**

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

No

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.

NA

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.

Road systems within the vicintity of this project will be mainataned to limit any runoff related impacts. The following BMP's will be applied:

- Road maintenance (within the existing roadbed) during the salvage project may include, but not limited to:
    1. Reinforcement of soft spots with rock. Rock utilized by this project will be purchased from a licensed/certified rock quarry.
    2. Grading
    3. Slide removal
    4. Drainage maintenance
    5. Maintain erosion control measures

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:

Best Management Practices (BMP's) will be utilized throughout the project to limit any detrimental impacts on surface, ground, and runoff water systems.

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?

Salvaged and thinned timber will be removed. Approximately 1,000/mbf at the Olympic Unit and approximately 500/mbf at the John's River Unit. These are estimates. Calculating the volume of blowdown over this acreage is very difficult to determine. The total may exceed or may be less than 1,500/mbf.

Tree species that will be removed include Western Hemlock, Douglas Fir, Western Red Cedar, and Red Alder.

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

No known endangered plants are present at either site.

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

Sites that retain less than a 50% canopy cover will be replanted with native species to the simulate the historical forest structure.

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:

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

The following are all federally listed (threatened, endangered, candidate) species that occur within Grays Harbor County. Please refer to Appendix B for a detailed summary of the following species and the impacts associated with this project.

- Marbled Murrelet
- Northern Spottted Owl
- Bull Trout
- Oregon Silverspot Butterfly
- Short -tailed Albatross
- Yellow billed cuckoo
- Streaked horned lark
- Western Snowy Plover

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

John's River is located along the Pacific Coast Flyway for migratory waterfowl, shorebirds, and neotropical migrants. Roosevelt elk regularly migrate through both Olympic and Johns River Units to forage throughout the fall, winter, and spring.

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

The variable density thinning prescriptions that will be utilized will increase available forage and maintain escapement and cover habitats that are critical to elk. The high-density forests currently provide little forage benefit for elk and other wildlife because of the lack of sunlight that reaches the forest understory. Due to the crown closure in these forests, there is no understory vegetation present in many of the stands. An increase in light penetration provides for better-developed understories with greater abundance and diversity of herbaceous plants, shrubs and trees. This will also improve the existing cover conditions. Variable density thinning efforts will have benefits for plant and animal communities that are associated with late-successional forests. In addition to elk, species that will benefit from this project include threatened and endangered species such as marbled murrelets and northern spotted owls. Nesting and foraging conditions will be improved for each of these species that currently do not utilize the forested habitats.

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.

Fuels used for harvesting, loading, and hauling equipment. Additional fuel needs may be needed for any related road improvements.

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:

Does not apply.

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.

There could be fuel spills when refueling equipment or oil spills while conducting maintenance on the equipment. Best Management Practices will be utilized to minimize all and any spills.

1) Describe special emergency services that might be required.

Washington State Department of Ecology will be notified if any spills do occur. All contractors must be in compliance with WDNR fire equipment codes while working on site.

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

Catch basins will be utilized under equipment during re-fueling.

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 harvest activities there will be some noise associated with feller processors, grapple machines, and hauling trucks. Typically these would be daylight only and weather dependant. Heavy equipment noise can exceed 100 decibels.

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

Maintain mufflers on equipment and utilize ear protection on site.

8. Land and shoreline use

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

Current use of the wildlife area is for fish and wildlife conservation and fish and wildlife related recreational activities.

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

Yes. Both units have different regimes of farming for wildlife benefits. At Olympic Wildlife Area several hundred acres are rotationally farmed for elk forage. Several hundred acres at Johns River are managed for waterfowl use and for elk forage.

c. Describe any structures on the site.

There are no structures within any of the logging units related to this project.

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

No

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

Open Space - Land Classified Under RCW 84.34

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

Refer to Olympic-Willapa Hills Wildlife Area Management Plan @ www.wdfw.wa.gov

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

NA

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

Sensitive areas including wetlands and riparian areas have been identified and appropriate forest practice standard buffers have been applied.

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:

NA

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

This project will not impact existing and projected land uses and plans. In addition, the project is consistent with the Olympic-Willapa Hills Wildlife Area Management Plan (2006).

9. Housing

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

None

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

None

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

None

10. Aesthetics

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

NA

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

None

c. Proposed measures to reduce or control aesthetic impacts, if any:
Management prescriptions include leaving all snags and creating more for cavity nesters and retaining all large diameter Ponderosa pine and Douglas fir which would make good wildlife trees. Disturbed areas (skid trails and landings) will be seeded after the harvest/prescribed burn is complete.

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?

No

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:

NA

12. Recreation

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

A visitor parking area, boat launch, and gated access roads and trails provide largely a walk-in experience. Hunting occurs for deer, waterfowl, elk, bear, band-tailed pigeon, and forest grouse. Waterfowl hunting is particularly popular and successful on the tidelands on nearby Markham Island. Fishing is widespread for whitefish, rainbow and cutthroat trout, searun cutthroat, and several races of salmon. Hiking and nature trips are common on the dikes and the established trail system. Boating for its own sake is popular. Other common recreational activities include birdwatching, photography, mushroom picking, sightseeing, wildlife viewing, bike riding, shellfish gathering, and beachcombing.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Areas will be closed during logging activities for public safety.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Signs will designate areas that will be temporarily closed during project implementation. Signs will also notify the public of potential delays for their safety, while logging operations are in progress.

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.

None known, however a cultural resource survey will be conducted prior to project implementation.

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

Pending cultural resource survey report through Section 106 consultation with USFWS, DAHP, and affected tribe(s). Several original survey markers and witness corners were located and will be protected.

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

WDFW is currently in process with Section 106 Consultation with the US Fish and Wildlife Service (USFWS) and the Department of Archeology and Historic Preservation (DHAP). All affected tribes and DHAP will be contacted and given the opportunity to comment on the proposed survey methodology. This methodology has been utilized on all recent WDFW forest stewardship projects. Tribes, DHAP, and USFWS will all have an additional comment period after the survey report is completed. Avoidance measures will be designed based upon the results of the survey, in consultation with the affected Tribe(s), USFWS and DAHP.

Additionally, WDFW will protect all survey markers. No ground disturbing activities will occur near the location markers. Implement DAHP recommend protection buffers for cultural resources that may be identified as a result of the survey.

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.

Olympic- Wishkah Road and Greenwood Road (County Roads)
Johns River – State Highway 105 (State Hwy)

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

Yes. Both sites have public transit, served by Grays Harbor Transit Buses.

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

No new parking areas will be created. No existing parking areas will be eliminated.

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).

Existing roads within the county or within the wildlife areas will be utilized for this project. Five short temporary roads/landings will be created for this project and will be restored following the project completion. These locations are shown on Maps in Appendix C.

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.

This proposal should result in no increase in vehicle trips per day upon completion of the timber sale. During the harvest and log hauling, contractors, sale administrators and log truck drivers may exceed 10 vehicles per day.

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

Signs will notify the public of the project.

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.

There is always a risk of fire from equipment operations in the woods, therefore fire suppression services may be needed.

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

All equipment will have spark arrestors on mufflers

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: .....