

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: Modrow Trap Upgrade
2. Name of applicant: Washington Department of Fish and Wildlife (WDFW)
3. Address and phone number of applicant and contact person:
Michael DeLaCruz, WDFW
600 Capitol Way N
Olympia, WA 98501-1091
(360) 902-8361
4. Date checklist prepared: November 4, 2011
5. Agency requesting checklist: WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
6. Proposed timing or schedule (including phasing, if applicable):
The target dates for the proposed construction are:
Construction award 2/17/2012
Begin construction above ordinary high water (OHW) line 3/6/2012

Begin construction below OHW line	5/1/2012
End construction	8/1/2012
Begin Modrow Trap operation	8/15/2012

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

There are currently no plans for future additions or expansion beyond the current project proposal. However, operational maintenance is expected. Operational maintenance will involve manual debris removal from the trash rack at the upstream end of the trap.

In addition, the picket weir is and will continue to be installed annually by WDFW from August 1 to October 15. All activity associated with weir installation and operation are covered under separate permits obtained by WDFW and are not included as part of this current project proposal. However, this proposal requires that the weir location be shifted downstream approximately 28 ft on the hydraulic left bank, such that the weir is aligned with the modified trap entrance. Given hydraulic considerations, the weir location on the hydraulic right bank will also need to be shifted downstream at a distance of approximately 16 ft..

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

The Modrow Trap and Kalama Falls Hatchery Feasibility Report (prepared by R2 Resource Consultants, Inc. [R2] and dated July 5, 2011) describes the project hydrology and provides a roll-up summary of the daily peak adult fish returns to Modrow Trap. The hydrological data presented is based on historic stream flow data from USGS Gage 14223500 (located upstream of the Modrow Bridge) and USGS Gage 14223000 (located at the Kalama Falls Hatchery). On September 8, 2011, R2 began the collection of more recent stream flow data and installed a staff gage at the Modrow Trap project site. While the feasibility report provides a summary of daily peak returns to Modrow Trap, Weekly Escapement Reports for the Kalama River and its associated hatchery facilities are from WDFW at <http://wdfw.wa.gov/hatcheries/escapement/>. The Fish Passage Center (FPC) also provides hatchery fish release data for the Kalama River and its associated hatchery facilities, as do draft Hatchery and Genetic Management Plans (HGMPs) that have been prepared for the associated hatchery programs. This data is available in FPC annual reports and in the FPC Hatchery Database (http://www.fpc.org/hatchery/Hatchery_Queries_v2.html). Additionally, a Biological Assessment (BA) is being prepared by R2 as part of the 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.

There are currently no other proposals directly affecting the property of the current proposal.

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

In addition to the SEPA checklist, other government approvals and permits needed for the project proposal include:

- USACE Section 10 – Work in Navigable Waters (to be filed under JARPA and to include a Biological Assessment);
- USACE Section 404 – Discharge of Dredge or Fill Material Into Water (to be filed under JARPA);
- DOE 401 WQ Certification (to be filed under JARPA);
- WDFW Hydraulic Project Approval (to be filed under JARPA);
- Cowlitz County Shoreline Exemption (to be filed under JARPA);
- Cowlitz County Building Permit; and
- Cowlitz County Grading Permit.

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 Modrow Trap is operated to collect fall Chinook salmon, coho salmon, and summer steelhead for use as broodstock in the Kalama Falls hatchery programs. The existing hatchery collection trap has been operated at this location since circa 1960 and is in need of upgrades to improve the attraction, collection, handling, sorting, and transport conditions for fish. The proposed upgrades include an expanded trap with concentration flow to increase fish attraction, increased holding capacity, a new automatic crowder system, a fish pescalator to move fish from the trap to a new elevated sorting platform, and fish sorting tubes. The existing footprint and structure was used as the basis for the design in an effort to work within the space limitations of the site, to minimize in-river work for the upgrade, and to

minimize cost. Because bank failure would alter the hydraulic conditions of the upgraded trap and thus result in the trap not operating as designed, bank modifications and stabilization are included as part of the proposed project.

The size of the existing trap is 720 sf; the proposal would increase the trap size to 1,295 sf. The total project area is expected to be approximately 8,000 sf. This area includes a coffer cell area (approximately 3,500 sf) that will be used for trap construction and bank stabilization, and the upland project area (approximately 4,500 sf).

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.

Modrow Trap is located in Cowlitz County (1/4 Section SW, Section 32, Township 7N, Range 1W). The project property street address is 161 Modrow Trap Rd, Kalama, WA 98625 and is shown on the vicinity map on Sheet 2 in Appendix C of the JARPA. The site plan and elevation/topography are also available in Appendix C of the JARPA (Sheet 5).

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

Flat; riverine

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

The steepest slope on site is on the hydraulic left bank of the Kalama River just upstream of the existing trap. The maximum bank slope is 1.42:1.

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 USDA Web Soil Survey describes the soil of the project site as Riverwash. Riverwash typically contains stratified layers of gravel and sand. The upland area soils consist mostly of fill dirt. There is no prime farmland on the project site.

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

The hydraulic left bank of the Kalama River upstream and downstream of the existing trap is characterized by steep slopes, and thus, bank erosion is currently a concern. These slopes are currently stabilized by large boulders overgrown with vegetation (Photos 3 and 4, Appendix A of the BA).

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

There are four project components that require fill or grading: the upstream and downstream bank stabilizations, the fish lift vault installation, the sorting and truck loading area grading, and the installation of the steel floor at the downstream-most end of the upgraded fish trap. The bank modifications and stabilizations are necessary to create the hydraulic conditions for proper trap operation. Following bank excavation, fill consisting of precast concrete ecology blocks and large rocks will be used to stabilize the banks. To accommodate the sloping angle of the pescalator from the fish trap to the new sorting platform, a fish lift vault made of precast concrete will be attached perpendicularly to the landside of the existing concrete trap wall. The vault will be installed below the existing ground elevation using the trench box method, whereby excavation and sinking of the vault will occur simultaneously. Lean concrete will be used to create the floor of the vault and secure the vault to the trap wall. Backfill, consisting of a gravel/soil mix, will be used as needed to stabilize the vault location. Grading of the fish sorting and truck loading area will be needed to accommodate the height of fish transport trucks. The steel floor that will be installed at the downstream-most end of the upgraded trap will overhang from the existing concrete slab and thus, requires stabilization. To stabilize the steel plate, concrete will be pumped into the void between the steel plate and the stream bed below.

The total amount of fill and grading material is approximately 615 cy. This is predominantly gravel/soil mix, with lesser amounts of large rock, and precast and lean concrete. The gravel/soil mix will be obtained from onsite excavation activities. Large rock will be obtained from a local quarry or salvaged from the existing banks, precast concrete from a local manufacturer, and cast in place concrete will be obtained from a local batch plant. All filling and grading will be conducted in the dry using a tracked excavator positioned on the hydraulic left bank of the Kalama River.

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

While erosion at the project site is a concern for the hydraulic left bank of the Kalama River, erosion is not expected to occur as a result the Modrow Trap Upgrade. Rather, bank stabilization is a major element of the proposed project. The bank immediately upstream of the existing trap will be excavated to create a more moderate bank slope, and large rock will be used to provide bank stabilization. At the downstream end of the trap, a portion of the existing bank will be removed to improve hydraulic flow conditions for trap operation. To accomplish this, the existing riprap will initially be removed, but following excavation and sloping, the bank will be re-armored with riprap and ecology blocks. Armoring of the banks both upstream and downstream of the trap will occur up to and above the OHW line.

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

Approximately 575 sf (13%) of the upland project area will be covered with impervious surface after project construction.

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

As described in B.1.f above, the Modrow Trap Upgrade includes long-term measures to reduce and control the erosion of the hydraulic left bank of Kalama River at the project site. Temporary Erosion and Sediment Control (TESC) measures will also be used during construction, as described on Sheets 6 and 7 in the design drawings packet. Additional detail regarding the required measures will be described in the contract specifications (01530 Protection and Restoration of Existing Facilities, 01560 Temporary Environmental Controls, 02140 Dewatering, and 02268 Erosion Control Barrier). Additional measures include requirements for control of runoff from the project site, proper treatment and disposal of the runoff, protection of existing facilities, design of erosion control barrier, and other best management practices.

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.

During construction, air emissions will include dust and gaseous emissions. Dust will be generated by the movement of large construction machinery over earthen and gravel surfaces and the removal and replacement of fill materials. Gaseous emissions will result from the operation of large diesel-powered construction machinery. There will be no new air emissions from the completed project. The current operation of Modrow Trap involves automobile emissions from fish transport trucks; these emissions will likely be reduced with the operation of the modified trap (see response for 2c below).

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

There are no off-site sources of emissions affecting the proposal.

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

The modified Modrow Trap is likely to result in reduced air emissions, because the number of vehicular trips needed for transporting fish captured at the trap is likely to decrease as a result of the expanded trap capacity and a new sorting platform. The new sorting platform will allow fish not intended for the hatchery to be released immediately upstream of the upgraded Modrow Trap, returned to the trap for additional holding, or sacrificed for nutrient enrichment or food bank donation. Under the current configuration, all fish captured in the trap are transported to the Kalama Falls Hatchery for sorting; fish not held for broodstock must be trucked a second time back to the Kalama River for release.

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 site is located in and immediately adjacent to the Kalama River. The Kalama River originates in the Cascade Mountains south of Mount Saint Helens and flows into the Columbia 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.

All project construction will be conducted over, in, or within 200 ft of the Kalama River, as shown in Sheet 9 of the attached design drawings packet. The major elements of the project include an expanded fish trap, a fish lift vault, bank stabilization, and a fish sorting facility.

Construction of the fish trap and fish lift vault will occur mostly below the OHW line (elevation of 18.4 ft) within an area dewatered by "super sacks" coffer cell material along the outside wall of the existing trap. The super sacks will be placed by a mobile crane with a boom length adequate to construct the coffer cell from the top of the bank. The top of the super sack coffer cell system will be at a minimum elevation of 16 ft, and the coffer cell area will be approximately 3,500 sf (i.e., 25-ft wide by 140-ft long). Water within the coffer cell impoundment will be pumped out of the dewatered area to sediment settling facility or to a portable sediment ("Baker") tank. The fish lift vault is a precast concrete vault designed to be attached perpendicularly to the landside wall of the trap. The opening in the trap wall will align with the open end of the concrete vault. The excavation for and the placement of the vault will occur before the wall opening is constructed. Excavation for the vault will be completed using an excavator, front end loader, and dump truck. The perimeter of the trap wall opening will be saw cut, and the concrete removed and deposited in an approved facility. The fish trap expansion will be conducted by installing a large steel plate over the existing slab that extends downstream from the existing trap. Some excavation and fill adjacent to the existing slab may be necessary to stabilize the large steel plate. The mechanical/structural work related to the fish lift and trap will be completed using a tracked excavator and loader, working from the top of the bank.

There will be excavation of the bank upstream and downstream of the trap for placement of the bank stabilization measures, all within the coffer cell dewatered area. The embankment work will most likely be completed by a tracked excavator with a reach sufficient to excavate and place material from the top of slope.

The fish sorting facility will be constructed on the landside of the concrete trap wall. The work will most likely be completed with a mobile crane, track hoe, front end loader, and dump truck.

- 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 amount of fill material to be placed in the Kalama River below OHW is 198cy. The majority of this in-river fill will be composed of large rock for use in stabilizing the steep banks upstream and downstream of the Modrow Trap. Gravel/soil backfill may also be used for the bank stabilization. A small amount of concrete (i.e., 5 cy) will be pumped through the large steel plate that will serve as the trap floor at the downstream end of the upgraded trap after it is in place. The purpose is to fill the small void between the plate and the stream bed to support the plate. The gravel/soil mix will be obtained from onsite excavation activities. Large rock will be obtained from a local quarry or from the existing banks, and cast-in-place concrete will be obtained from a local batch plant, and precast concrete from a local manufacturer.

The amount of material to be excavated from the Kalama River is 355 cy. This material (mostly gravel/soil mix and large rock) will be excavated from the bank below the OHW line.

Approximately 60 linear ft of the Kalama River will be affected by the upstream and downstream bank stabilization activities. The area affected by the concrete that will be poured to support the steel plate is 155 sf.

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

Surface water withdrawals will be necessary for dewatering the coffer cell impoundment. Water within the coffer cell impoundment will be pumped to a sediment settling facility or to a portable storage tank on or near the construction site. The purpose of pumping the water would be to draw down the water within the coffer cells to a level that allows installation of the proposed trap components. It is difficult to determine the quantity of water that will be withdrawn.

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

The proposed project site is located within a 100-year floodplain, as shown on Sheet 9 in the design drawings packet.

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.

The proposal does not involve any discharges of waste materials to surface waters. However, following the removal of the cofferdam, there may be small amounts of sediment incidentally discharged into the Kalama River.

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 ground water withdrawals or discharges will occur for this project.

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

No waste material will be discharged into the ground.

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.

Precipitation is the only source of runoff at the project site. This water infiltrates the ground and flows into the Kalama River.

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

Waste materials associated with this project include excavation material (gravel/soil mix) and surface water pumped from the coffer cell impoundment. These materials will be properly handled and stored such that contamination of ground and surface waters is unlikely.

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

Measures to reduce and control surface, ground, and runoff water impacts include: conducting all project work in the dry through the use of a cofferdam, having all excavation equipment and dump trucks work from the top of the hydraulic left bank with upslope digging, placing all excavated materials directly into dump trucks, conducting maintenance and fueling of equipment in a manner that will minimize potential water and soil contamination, and using sediment settling tanks for the storage of surface water pumped from the coffer cell impoundment. Other TESC measures will also be used during construction, as described on sheets 6 and 7 in the design drawings packet. Additional detail regarding the required measures will be described in the contract specifications (01530 Protection and Restoration of Existing Facilities, 01560 Temporary Environmental Controls, 02140 Dewatering, and 02268 Erosion Control Barrier). Additional measures include requirements for control of runoff from the project site, proper treatment and disposal of the runoff, protection of existing facilities, design of erosion control barrier, and other best management practices.

4. Plants

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

deciduous tree: alder, maple, aspen, other

willow, big leaf maple, and Oregon ash

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?

All vegetation covering the hydraulic left bank of the river within the project area will need to be removed for the bank stabilization element of the project. Bank vegetation to be removed from the upstream end of the existing trap includes a small amount of grasses, blackberry, and other herbaceous vegetation (Photo 3, Appendix A of the BA). Downstream of the trap, bank vegetation to be removed includes herbaceous vegetation (e.g., grasses, willow shrub, thistle, and blackberry), as well as one willow tree and one big leaf maple tree (Photo 4, Appendix A of the BA).

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

There are no threatened or endangered plant species 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:

The small amount of vegetation that will be removed for this project will be replaced with riprap and ecology blocks for increasing bank stabilization. Thus, replanting of removed vegetation is not necessary or feasible for this 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:

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

fish: bass, salmon, trout, herring, shellfish, other:

Fish species previously documented in the Kalama River at Modrow Trap include hatchery and wild spring and fall Chinook salmon, hatchery and wild early- and late-run coho salmon, hatchery and wild summer and winter steelhead, wild chum salmon, and wild coastal cutthroat trout. Birds that are likely to be observed on or near the site include songbirds and gulls.

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

Eulachon, Southern DPS (*Thaleichthys pacificus*) – Threatened

Chinook salmon, Lower Columbia River ESU (*Oncorhynchus* (=Salmo) *tshawytscha*) – Threatened

Chum salmon, Columbia River ESU (*Oncorhynchus* (=Salmo) *keta*) – Threatened

Coho salmon, Lower Columbia River ESU (*Oncorhynchus* (=Salmo) *kisutch*) – Threatened

Steelhead, Lower Columbia River DPS (*Oncorhynchus* (=Salmo) *mykiss*) – Threatened

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

The Kalama River at the Modrow Trap is part of the spawning migration and juvenile outmigration route for several salmon and trout species including: hatchery and wild spring and fall Chinook salmon, hatchery and wild early- and late-run coho salmon, hatchery and wild summer and winter steelhead, wild chum salmon, and wild coastal cutthroat trout. Modrow Trap is operated annually from August 1 to October 15 in order to collect adult salmon and steelhead for the Kalama River hatchery programs. Thus, adults migrating upstream during this period are directed by the weir into the fish trap and then transported to the Kalama Falls Hatchery for sorting. At the time of sorting, broodstock are moved to holding ponds, and fish in excess of broodstock needs are transported back to the Kalama River for release.

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

The purpose of the Modrow Trap Upgrade is to improve holding, sorting, and transport conditions for both hatchery and wild fish entering Modrow Trap. Specifically, the new facility will reduce impacts to both hatchery and wild fish associated with fish collection, handling, and transport. The expanded Modrow Trap will result in more optimal holding conditions. Trap upgrades also include an automated horizontal crowder, and vertical crowder that will encourage fish into a pescalator. Fish exiting the pescalator pass into a simple sorting facility that combines a DC electro-anesthesia system with hand-wand coded wire tag (CWT) detection and manual sorting. This onsite fish sorting facility eliminates the need for transporting all captured fish to the Kalama Falls Hatchery, as is currently necessary under the existing trap configuration. Instead only fish intended for the hatchery are transported, thus reducing unnecessary negative impacts associated with fish transport. Sorting tubes will be used to: 1. move fish from the sorting platform to fish transport trucks, 2. return fish back to the Kalama River immediately upstream of Modrow Trap, 3. return fish back to the trap for

additional holding if necessary, and 4 move surplus hatchery fish to totes for subsequent nutrient enrichment and food bank donation. The habitat available to upstream migrating wild salmon and steelhead will be increased by quickly releasing wild fish upstream of the trap. The Modrow Trap and sorter upgrades were developed based on WDFW hatchery protocols for handling and sorting, and using NMFS guidelines and criteria published in 2008.

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.
Electric power is currently used for the operation of the existing Modrow Trap hoist assembly system. Electricity will continue to be used to meet all of the completed project's energy needs. This power will be used for the vertical and horizontal fish crowders, pescalator, DC electro-anesthesia system, and area lighting.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
The project would have no effect on the potential use of solar energy by adjacent properties.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
The upgraded Modrow Trap is likely to result in reduced fuel usage, because the number of vehicular trips needed for transporting fish captured at the trap is likely to decrease as a result of the proposed on-site sorting feature.

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 only environmental health hazards that could occur as a result of this proposal are those associated with the fueling and maintenance of construction equipment. The impacts may include spill of and exposure to fuels, hydraulic fluids, and lubricants.
- 1) Describe special emergency services that might be required.
No special emergency services will be required for this proposal.
- 2) Proposed measures to reduce or control environmental health hazards, if any:
Proposed measures to reduce and control environmental health hazards include the use of best management practices associated with construction equipment fueling and maintenance. Specifically, fueling and maintenance will be conducted in a manner that will minimize the potential for spill and contamination. Spill containment and cleanup kits will be maintained onsite, and spills of fuel, hydraulic fluid, lubricants, or other hazardous materials will be cleaned up immediately with proper disposal.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
There are no types of noise in the project area which will affect this project.
- 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.
Noise will be generated by equipment used during project construction. Post-construction noises would be limited to fish transport trucks accessing the site; vehicular noises are currently part of the existing Modrow Trap operation. Trap operation, construction and vehicular access to the site would occur only during daylight hours.
- 3) Proposed measures to reduce or control noise impacts, if any:

Project construction, vehicular access to the site, and trap operation will occur only during daylight hours and thus will not involve night-time noise disturbances. In addition, the reduction in fish transport trips will result in less noise disturbance.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties?
The project site is currently used as a fish trapping facility. Fish are trapped, crowded, hoisted, and transported to the Kalama Hatchery for sorting. The adjacent properties are for residential use with some livestock grazing.
- b. Has the site been used for agriculture? If so, describe.
The project site has not been used for agriculture.
- c. Describe any structures on the site.
Current structures on site include the existing Modrow Trap. The Modrow Trap facility is comprised of the trap and a hoist assembly. During trap operation (i.e., from August 1 to October 15), a picket weir is placed across the river to direct fish toward the trap entrance.
- d. Will any structures be demolished? If so, what?
The existing mechanical equipment such as the monorail, hoist, fish rail, and crowder will be demolished. The existing structural components of the facility will be incorporated into the new facility.
- e. What is the current zoning classification of the site?
Currently, there is no Cowlitz County zoning classification for the site.
- f. What is the current comprehensive plan designation of the site?
The current comprehensive plan designation of the site is Suburban Residential.
- g. If applicable, what is the current shoreline master program designation of the site?
Per the Cowlitz County Shoreline Master Program, the project site falls within the Conservancy District. The project site shoreline is considered to be of state importance and has been classified as a Type 1 Shoreline Stream.
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
The Kalama River and its riparian habitat are considered environmentally sensitive areas due to their importance in providing salmon and trout habitat. On the project site, the river and the upland area have been previously disturbed; the trap was constructed in 1959 and has been in operation since circa 1960.
- i. Approximately how many people would reside or work in the completed project?
At any given time, approximately 2 to 3 people would work at the completed project site; job positions would include trap operators, fish sorters, and truck drivers. No people would permanently reside in the completed project area; however, WDFW parks a small trailer (approximately 12 ft long) on the project property to allow for trap operators and maintenance personnel to temporarily reside onsite during trap operation from August 1 to October 15.
- j. Approximately how many people would the completed project displace?
No people would be displaced as a result of the completed project.
- k. Proposed measures to avoid or reduce displacement impacts, if any:
There are no displacement impacts as a result of this project.
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
Land use of the project site will not change as a result of the Modrow Trap Upgrade. Thus, the proposal is compatible with existing and projected land uses and plans.

9. Housing

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

No housing units will be provided as a result of the project.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
No housing units will be eliminated as a result of the project.

- c. Proposed measures to reduce or control housing impacts, if any:
There are no housing impacts as a result of the project.

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?

The tallest height of any proposed structure is associated with the fish lift, which will be 13 ft above the existing ground during trap operation. When not in operation (November – July) the majority of the trap components will be dismantled and removed to off-site storage, during this time period the tallest structure would be 5-ft above the existing ground. The principal building material to be used for the fish lift will be either aluminum or fiberglass, depending on the contract bid awarded.

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

The existing hoist assembly, which has a height of 25 ft above the existing ground, currently obstructs a small portion of the river view from the residence located to the north of the project site and property. The hoist assembly will be demolished and replaced with a fish lift and sorting platform, which have a maximum height of 13 ft. Thus, the project will alter and improve the river view for the nearby residence.

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

There proposed project will result in improved views of the river by reducing the height of the tallest structure on the project site.

11. Light and glare

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

The proposal includes replacing the existing area lighting with a new area light. The new lighting will have the same illumination characteristics (i.e., directed at the work area and away from the nearby residence) as the existing lighting and thus will not produce any additional light or glare effects. Operation of the proposed facility will occur during daylight hours. Generally, the area light would be off during night time hours.

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

Light and glare from the finished project will not present a safety hazard or interfere with views.

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

There are no existing off-site sources of light or glare that would affect the proposal.

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

The proposal will not have any light and glare impacts. Thus, no measures have been taken to reduce or control such impacts.

12. Recreation

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

Recreational activities in the vicinity of Modrow Trap include angling and boating. Public river access is available approximately 0.2 miles upstream of Modrow Trap at the Modrow Bridge.

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

The proposed project would not displace any existing recreational uses.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
The Modrow Trap Upgrade is designed to enhance the survival of adult salmonids in the Kalama River and thus have a beneficial impact on recreational fisheries in the Kalama River.

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.
There are no known places or objects on or next to the site that are listed on, or proposed for, national, state, or local preservation registers.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
There are no known landmarks or evidence of historic, archaeological, scientific, or cultural importance on or next to the site.
- c. Proposed measures to reduce or control impacts, if any:
The proposal is not expected to have any cultural impacts on the project site or nearby properties.

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.
Access to Modrow Trap will not change as a result of the proposed project. The site is currently accessible from Modrow Road via a gravel access road, as shown on Sheet 5 in Appendix C of the JARPA.
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
The site is not currently served by public transportation. Modrow Trap is located approximately 10 miles from the nearest transit stop, which is located at Kelso High School and part of the Longview-Kelso public transportation system.
- c. How many parking spaces would the completed project have? How many would the project eliminate?
Parking at Modrow Trap is currently limited to a single parking location below the hoist assembly, which is used for loading fish into the fish transport truck. The gravel/dirt area can also be used for parking. The completed project would alter the current configuration by adding a second truck loading location. No parking spaces will be eliminated as a result of the project.
- 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).
The proposal does not require any new roads or streets, or improvements to existing roads or streets.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
The project will not use or occur in the immediate vicinity of water, rail, or air transportation.
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
The number of vehicular trips per day is expected to decrease as a result of the new sorting feature, which allows for fish not intended for the hatchery to be returned to the Kalama River just upstream of the Modrow Trap. Fish transport trucks will only access the site during trap operation (i.e., from August 1 to October 15). Peaks in the number of vehicular trips per day will coincide with peak daily fish returns, which usually occur in mid-September for fall Chinook salmon and in mid-October for early and late coho salmon runs combined.
- g. Proposed measures to reduce or control transportation impacts, if any:
The increased capacity of the fish trap and the new sorting facility are expected to reduce transportation impacts by reducing the number of trips needed for hauling fish to the Kalama Falls Hatchery.

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.

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

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

The proposed measures will not have an impact on public services.

16. **Utilities**

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

Utilities currently available at the site include electricity and a septic system.

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.

The existing utilities will be maintained during construction and for operation of the upgraded facility.

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: *Michael A. DeLoe*

Date Submitted: *11/3/2011*