SEPA ENVIRONMENTAL CHECKLIST

UPDATED 2014

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants: [help]

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

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

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. background [help]

1. Name of proposed project, if applicable: [help]

   Swift Upper Release Channel Gravel Augmentation

2. Name of applicant: [help]

   PacifiCorp Energy

3. Address and phone number of applicant and contact person: [help]

Briana Weatherly
PacifiCorp – Hydro Resources
825 NE Multnomah, Suite 1500
Portland, Oregon 97232

(503) 813-7039

4. Date checklist prepared: [help]

May 2014

5. Agency requesting checklist: [help]

Washington Department of Fish and Wildlife

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

One day between July 16 and August 15, 2014

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

PacifiCorp will continue to monitor the migration of spawning gravels following operational spill events greater than 5,000 cubic feet per second (cfs) at the Swift Dam spillway per the terms of the Swift No. 1 Hydroelectric Project 401 Water Quality Certification-Order No. 3679. Future augmentation of spawning gravels may occur at the request of the Washington Department of Ecology pending the results of future monitoring efforts. Appropriate permits will be sought from regulatory agencies prior to any future gravel augmentation actions.

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

A Joint Aquatic Resource Permit Application (JARPA) has been prepared for the proposed project. In addition, the following documents have been prepared for the Lewis River Hydroelectric Projects:

- FERC License, Swift Hydroelectric Project (FERC No. 2111), June 26, 2008;
- Biological Evaluation of the United States Fish and Wildlife Service (USFWS) Listed, Proposed and Candidate Species as Related to PacifiCorp and Cowlitz PUD's Lewis River Hydroelectric Projects, January 15, 2005;
- Final Environmental Impact Statement for the Lewis River Projects, March 2006;
- National Marine Fisheries Service Biological Opinion for the Operation of PacifiCorp and Cowlitz PUD's Lewis River Hydroelectric Projects, August 27, 2007;
- USFWS Biological Opinion for the FERC Relicensing of the Lewis River Hydroelectric Projects, September 15, 2006;

- Lewis River Historic Properties Management Plan, March 2004; and
- Washington Department of Ecology, Swift Hydroelectric Project (FERC No. 2111) 401 Certification/Order No. 3679, October 9, 2006.

A JARPA and SEPA were also prepared in March 2008 for the Swift No. 1 Bypass Habitat Improvement Project: Lewis River Upper Flow Release and Constructed Channel Project.

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. [help]

There are no known pending governmental approvals of other proposals directly affecting the property.

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

The following approvals and permits are being requested for the proposed project:

- Section 404 Permit, U.S. Army Corps of Engineers
- Hydraulic Project Approval, Washington Department of Fish and Wildlife

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.) [help]

The purpose of the project is to provide improved spawning habitat for salmonids. Section 4.2 (9) of Washington Department of Ecology's (Ecology) 401 Water Quality Certification-Order No. 3679 for the Swift No. 1 Hydroelectric Project requires augmentation of spawning gravels in the Swift Bypass reach of the Lewis River (the historic Lewis River channel). Phase 1 of this project was completed in 2009 when approximately 100 cubic yards (cy) of spawning gravels were placed throughout the Swift Bypass reach, including the proposed location of gravel placement for this project. Under Phase 2 of the 401 Certification requirements, PacifiCorp was required to survey the Swift Bypass reach in the spring following the first occurrence of an operational spill event at the Swift Dam spillway of 5,000 cfs or greater (which occurred in 2012). The purpose of the survey was to determine whether gravels placed in the Swift Bypass reach during Phase 1 had migrated and if they were in locations that provide suitable fish spawning habitat. Based on the Phase 2 survey results, Ecology determined that additional gravel augmentation is needed in the Swift Bypass reach.

Under the terms of 401 Water Quality Certification-Order No. 3679, Ecology is requiring PacifiCorp to place spawning gravels in the Lewis River channel immediately below the Upper Flow Release Siphon. Up to 230 cy of rock and gravels will be placed at a depth of six inches in an approximately 12,255 square foot area. The substrate mixture will consist of 1 part imported pea gravel and 3 parts clean and rounded native river rock (approximately 1 inch to 3 inch diameter). The river rock will be sourced from a stockpile near the Swift substation that was created during excavation of the historic Lewis River channel for dam construction in the 1950s.

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. [help]

The project is located in the Swift Bypass reach of the Lewis River in Skamania County, Washington. The gravel placement is proposed in a portion of the channel that is immediately downstream of a flow release siphon that was installed in the southern wall of the earthen Swift Power Canal in 2009 to provide increased flows to the historic Lewis River channel. The project is located in Township 7N, Range 5E, Section 28. The County tax parcel number is 07052900010400. A site plan and vicinity map is provided in Appendix B of this application package.

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth

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

The project area is generally flat but is located within a canyon with slopes to the east that are nearly vertical.

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

The channel is within a canyon and slopes to the east are almost vertical. The steepest slope in the immediate project area is approximately 50%. There is a bench alongside the channel adjacent to the proposed gravel placement site that will facilitate equipment access.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]

Soil maps obtained from the Natural Resource Conservation Service (NRCS) indicate that the project site is comprised of Riverwash (Map Unit 90). The adjacent area to the southeast, which includes the vertical cliffs above the Plunge Pool, is comprised of Swift-Rock outcrop complex, 65 to 90 percent slopes. The area to the north is comprised of Arents soils, 0 to 5 percent slopes.

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

There are no surface indications or history of unstable soils in the immediate vicinity.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]

Up to 230 cy of rock and gravels will be placed in an approximately 12,255 square feet area of the Swift Bypass reach immediately below the Upper Flow Release siphon. The substrate mixture, which will be placed at a depth of six inches, will consist of 1 part imported pea gravel and 3 parts clean and rounded river rock (approximately 1 inch to 3 inch diameter) that will be sourced from an on-site stockpile near the Swift substation. The river rock is native to the area and was excavated during dam construction in the 1950s.

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

No upland clearing or construction is required for the proposed project, nor will it foster increased use of the site. Some minor erosion could occur as a result of heavy equipment traversing the existing dirt access road to and from the site and entering the Lewis River channel.

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

Zero percent; the proposed project will not create impervious surfaces.

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

Equipment will be restricted to existing compacted dirt roads to reduce the potential for erosion. Heavy equipment will make a limited number of trips to access the site. Once in the water, the operator of the excavator will be directed to maneuver the bucket primarily by rotating the cab of the excavator (as opposed to rotating the tracks). By entering and exiting the water in straight lines with minimal track rotation, the amount of potential erosion and resulting turbidity will be reduced.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]

The use of heavy construction equipment (i.e., dump trucks, excavator) will be necessary to transport and place the spawning gravels. The operation of the heavy equipment will result in intermittent vehicular exhaust emissions lasting for the duration of construction. Efforts will be made to limit use of construction equipment and to reduce the idle times of engines. The approximate quantities are unknown but expected to be very small when held relative to other larger construction projects occurring in the vicinity.

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

No, there are no off-site sources of emissions or odor that may affect the proposal.

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

All heavy equipment will be required to operate with appropriate vehicle emission control devices that are in compliance with current air quality standards. Efforts will be made to limit construction equipment movement at the site and to reduce the idle times of engines.

3. **Water**

a. Surface Water: [help]

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. [help]

The project area is within the Swift Bypass reach of the Lewis River (the historic Lewis River channel) immediately below Swift Reservoir. The Plunge Pool, a deep scour hole excavation located at the base of a nearly-vertical cliff through which the Swift Dam spillway channel cuts, sits in the northeastern corner of the parcel. The Plunge Pool receives discharge from the overflow gates and the spillway channel at the Swift Dam. The water from the spillway channel crashes down the nearly-vertical cliffs and scours the deep hole resulting in the Plunge Pool feature. The Plunge Pool is approximately 320 feet in diameter and all sides of the pool are well defined by small boulders and rocks along a distinct rise in topography.

The Swift Power Canal, which transports water from the Swift No. 1 tailrace to the Swift No. 2 powerhouse, parallels the Swift Bypass reach. Within the project area, the Swift Power Canal conveys flow to the Swift Bypass reach via a siphon (the Upper Flow Release Siphon). The siphon was installed in the southern wall of the earthen Swift Power Canal to increase flows to the historic Lewis River channel for salmonid spawning and rearing habitat as part of the 2009 Lewis River Upper Flow Release and Constructed Channel project. A 0.02 acre wetland was delineated on the adjacent parcel in 2008, prior to the reconstruction of the channel.

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. [help]

Dump trucks will transport the gravels and rounded river rock to the site via an existing primitive access road that runs along the south side of the Swift Bypass reach. The articulated off-road dump trucks and excavator will ford the Lewis River at an existing crossing point downstream of the gravel placement site (Appendix A). An excavator will work in the water in order to place the gravels along the bed of the channel.

All equipment will be washed and, if the excavator does not have a contained engine, it will be diapered prior to entering the water. As a precaution, two oil booms will placed downstream of the work area and spill kits will be on-site. To minimize sediment transfer, the contractor will scrub down

truck tire treads with a brush prior to fording the river from the south to dislodge sediment accumulated during the drive to the site.

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. [help]

Up to 230 cy of gravels will be placed is an approximately 12,255 square feet area of the Swift Bypass reach immediately below the Upper Flow Release siphon. The pea gravel will be imported and the river rock will be sourced from a stockpile near the Swift substation that was created during excavation of the historic Lewis River channel for dam construction in the 1950s. No native materials will be excavated for the proposed project.

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

The proposed project will not require surface water withdrawals or diversions.

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

The project area is not shown to be within the 100-year floodplain on the FEMA flood map (5301600175B); however, this portion of the Lewis River was subterranean when the flood map was created and the Lewis River immediately downstream of the project area is mapped within flood Zone A. The channel was reconstructed as part of the Lewis River Upper Flow Release and Constructed Channel project permitted in 2009. The area is flooded when controlled spill events occur at the Swift dam.

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. [help]

The proposed project does not involve any discharges of waste materials to surface waters.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]

No ground water will be withdrawn, nor will water be discharged to ground water as part of the proposed 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. [help]

No waste material will be discharged into the ground from septic tanks or other sources.

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. [help]

The proposed project is not expected to affect runoff. Water will continue to infiltrate through permeable surfaces and follow existing contours to the Swift Bypass reach.

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

Oil could potentially enter surface waters as a result of equipment working in the water.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The proposed project will occur almost exclusively below the OHWM of the river; as such, upland drainage projects will not be impacted by the proposed project.

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

To minimize the potential for surface water impacts, equipment will be inspected for leaks and washed prior to entering the water to remove residual oil. The excavator will also be diapered if it does not have a contained engine. Two oil booms will be placed downstream of the work area as an additional precaution. If possible, the contractor will also use vegetable oil in lieu of hydraulic oil to minimize the negative effects to the aquatic environment from any accidental leaks or spills.

4. **Plants** [help]

a. Check the types of vegetation found on the site: [help]

__X__deciduous tree: alder, maple, aspen, other
__X__evergreen tree: fir, cedar, pine, other
__X__shrubs
__X__grass
____pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

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

No vegetation will be removed or altered for the proposed project. An existing access road will be used to transport spawning gravels to the channel.

c. List threatened and endangered species known to be on or near the site. [help]

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: [help]

No landscaping is proposed in conjunction with the placement of spawning gravels because no previously disturbed areas will be affected. In the event that non-developed areas are disturbed, native vegetation will be replanted.

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

Scotch broom is located near the project area. Noxious weeds within Swift, Yale and Merwin Project areas are routinely removed and/or controlled.

5. **Animals**

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [help]

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site. [help]

There are five species of fish with the potential to occur within the Lewis River near the proposed project that are currently listed as threatened under the federal Endangered Species Act (ESA):

- Chinook salmon, Lower Columbia River Evolutionarily Significant Unit (ESU) *(Oncorhynchus tshawytscha)*
- Coho salmon, Lower Columbia River ESU *(O. kisutch)*
- Chum salmon, Columbia River ESU *(Oncorhynchus keta)*
- Steelhead trout, Lower Columbia River Distinct Population Segment (DPS) *(O. mykiss)*
- Bull trout, Columbia River DPS (*Salvelinus confluentus*)

Reintroduction efforts for native salmonids are underway throughout the Lewis River system. The proposed project has the potential to result in temporary physical displacement of species due to gravel placement and/or short-term, localized increases in background turbidity. However, enhancing spawning habitat in the Swift Bypass reach is expected to improve long-term, in stream habitat conditions for salmonids. Potential temporary impacts associated with the proposed gravel placement activity will not adversely affect these species over the long-term.

The project is also located within a 1.8 mile northern spotted owl (*Strix occidentalis*) circle, but outside of the disturbance threshold of any nests. Therefore, northern spotted owls are not expected to be affected by the proposed work.

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

Prior to the construction of the Lewis River dams, the river was a migration route for native salmonid species. The proposed project is part of a coordinated effort to improve the quality of habitat for resident and migratory salmonids.

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

The proposed project is scheduled to occur during the WDFW recommended in-water work window for the Lewis River (July 16 to August 15) to minimize the potential impacts to fish. The project will also be conducted after the elk calving season (late May/June) to minimize potential disruptions to elk during this sensitive time. Impacts to aquatic habitat are expected to be limited to short-term, localized increases in background turbidity. Equipment will be inspected, washed and, if the excavator does not have a contained engine, it will be diapered prior to entering the water. As a precaution, two oil booms will be placed downstream of the work area. Also, if possible, the contractor will use vegetable oil in lieu of hydraulic oil to minimize the negative effects to the aquatic environment from any accidental leaks or spills.

To minimize sediment transfer, the contractor will scrub down truck tire treads with a brush prior to fording the river from the south to dislodge sediment accumulated during the drive to the site. Once in the water, the operator of the excavator will be directed to maneuver the bucket primarily by rotating the cab of the excavator (as opposed to the rotating the tracks). By entering and exiting the water in straight lines with minimal track rotation, the amount of potential turbidity will be reduced.

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

There are several non-native aquatic and terrestrial species located within or near the Lewis River system; however, no invasive animal species are within the project areas.

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. [help]

The completed project will not have energy needs.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]

The project will not affect 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: [help]

The completed project will not use energy and, therefore, no energy conservation features are proposed.

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. [help]

Minor spills related to the operation of construction equipment, such as diesel and oil, have the potential to occur during the transport of materials and placement of spawning gravels. No toxic chemicals or hazardous waste materials would be generated by the project. No long-term environmental health hazards would be present as a result of the proposed gravel placement.

Equipment will be inspected, washed, and, if the excavator does not have a contained engine, it will be diapered prior to entering the Lewis River. As a precaution, two oil booms will be placed downstream of the work area and spill kits will be kept on site.

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

There is no known contamination at the site from present or past use.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There are no existing hazardous chemicals/conditions that might affect project development and design.

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

The only toxic and/or hazardous chemicals that will be used include fuels and oils for construction equipment. No other hazardous chemicals will be necessary after construction is complete.

4) Describe special emergency services that might be required.

No special emergency services would be required upon completion of the project.

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

The following best management practices will be employed to minimize the potential for accidental releases to the Lewis River:

- All equipment used below the ordinary high water mark of the Lewis River will be washed to remove residual oil.
- All equipment used below the ordinary high water mark of the Lewis River will be visually inspected (including the undercarriages) to ensure that they are clean and in proper working order with no fuel or oil leaks or drips.
- The excavator will be diapered if it does not have a contained engine.

- Spill kits will be maintained on site to enable quick clean-up of accidental spills.
- Two oil booms will be placed in the channel downstream of the work area to contain any accidental leaks.
- Equipment will not be fueled within 100 feet of any waterbody.

Also, if possible, the contractor will use vegetable oil in lieu of hydraulic oil to minimize the negative effects to the aquatic environment from any accidental leaks or spills.

b. **Noise**

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

There are no noises in the area that will affect the 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. [help]

The use of heavy construction equipment (i.e., excavator, dump trucks) will be necessary to transport and place spawning gravels. The operation of the heavy equipment would result in noise levels that are in excess of ambient levels for a brief period of time.

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

No measures are proposed to reduce or control noise impacts due to their brief duration and the isolated site location.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]

The project is located between Swift Dam and Yale Reservoir in rural Skamania County, Washington. The Swift Dam and powerhouse are located just east of the project site. The dam creates the impoundment that is Swift Reservoir. With water from Swift Reservoir, PacifiCorp generates hydroelectric power at the Swift No. 1 Powerhouse located at the base of Swift Dam. Discharge from the Swift No. 1 Powerhouse is routed into the Swift Power Canal, a large earthen diversion channel that transports water to the Swift No. 2 Powerhouse and Yale Reservoir to the west of the project location. Adjacent properties to the south are forested and owned by the Washington Department of Natural Resources.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]

No, the site has not been used for agriculture or working forest lands.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No, the proposed project will not affected or be affected by surrounding working farm or forest land normal business operations.

c. Describe any structures on the site. [help]

No buildings are located on the parcel. The closest building is the Swift No. 1 Powerhouse located approximately 200 meters northeast of the project location. The Swift Power Canal is a constructed earthen canal that is located immediately north of the parcel. The Upper Flow Release Siphon is installed in the southern wall of the Swift Power Canal immediately downstream of the powerhouse.

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

No structures will be demolished as part of the proposed project.

e. What is the current zoning classification of the site? [help]

The site is designated Swift Recreational (SR) in the Swift Subarea Zoning Map.

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

The site is designated Swift Recreational (SR) in the Swift Subarea Plan.

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

The current shoreline master program designation of the site is Conservancy.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]

The Lewis River is a shoreline of statewide significance. The site is also part of a Fish and Wildlife Protection critical area due to the presence of listed fish.

i. Approximately how many people would reside or work in the completed project? [help]

No one will reside or work in the completed project.

j. Approximately how many people would the completed project displace? [help]

The completed project will not result in displacements.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]

Not applicable.

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

The proposed project will not result in any change to the current use of land. The project is compatible with plans to reintroduce salmonids to the Lewis River above Merwin Dam pursuant to the Lewis River Settlement Agreement.

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

Not applicable. There are no agricultural lands nearby and all forest lands and associated roads will be unaffected by the proposed project.

9. **Housing**

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

No housing units will be provided.

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

The project will not eliminate any housing units.

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

Not applicable.

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? [help]

No structures are proposed.

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

No views in the immediate vicinity will be altered or obstructed.

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

Not applicable.

11. **Light and glare**

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

The placement of spawning gravels will not produce light or glare.

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

Not applicable.

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

No existing off-site sources of light or glare will affect the proposed project.

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

Not applicable

12. **Recreation**

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

PacifiCorp operates several recreational facilities on the Yale and Swift reservoirs. The nearest facility is Beaver Bay Camp on the eastern end of Yale Reservoir. The proposed project is located in a restricted area where public recreation is not permitted.

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

The proposed project would not displace existing recreational use in the area.

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

Not applicable.

13. **Historic and cultural preservation**

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]

The Swift Dam and the buildings and structures built in association with power generation at Swift No. 1 are considered eligible for listing as historical buildings and structures on the National Register. However, there are no places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts,

or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

Prior to the 2009 construction of the Lewis River Upper Flow Release and Constructed Channel Project, PacifiCorp's contract archaeologists conducted a review of the project site pursuant to section 8.9 of PacifiCorp's Lewis River Historic Properties Management Plan. They noted the highly modified condition of the project area and determined that it contains no intact, original landforms in which archaeological deposits could be present. Therefore, no archaeological survey work was recommended.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]

PacifiCorp maintains an inventory of all known cultural and historic resources located within the project areas. In addition, PacifiCorp follows guidelines established within the Lewis River Historic Properties Management Plan and the Lewis River Cultural Resources Management Plan which were both mandated and approved by the FERC.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Not applicable

14. **Transportation**

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]

The site is accessible via an existing dirt access road. The site can only be accessed via private roads from Road 90.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

No, the site is not served by public transit.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]

The completed project will not have parking spaces.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

The proposed project will not require any new roads or streets or improvements to existing roads or streets.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]

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

The completed project will not generate any vehicular trips.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The proposed project will not interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area.

h. Proposed measures to reduce or control transportation impacts, if any: [help]

Not applicable.

15. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

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. [help]

Not applicable.

16. **Utilities**

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

None

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. [help]

No utilities are proposed for the project.

C. Signature [HELP]

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: Briana Weatherly

Name of signee Briana Weatherly
Position and Agency/Organization Manager, Compliance - PacifiCorp Energy
Date Submitted: 5/27/14

D. supplemental sheet for nonproject actions [help]

(**IT IS NOT NECESSARY** to use this sheet for project actions)

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

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

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

The proposed project will involve depositing spawing gravels into the historic Lewis River channel to benefit the aquatic environment. Negative impacts to the environment will be short in duration and will primarily include increased turbidity levels. Noise will include the movement of trucks and equipment to deposit gravels but these impacts will occur for less than one day. Lastly, toxic chemicals including oils and fuels for heavy equipment will only be exposed to the Lewis River for less than one day and will be managed with BMPs as described below.

Proposed measures to avoid or reduce such increases are:

The following best management practices will be employed to minimize the potential for accidental releases to the Lewis River:

- All equipment used below the ordinary high water mark of the Lewis River will be washed to remove residual oil.
- All equipment used below the ordinary high water mark of the Lewis River will be visually inspected (including the undercarriages) to ensure that they are clean and in proper working order with no fuel or oil leaks or drips.
- The excavator will be diapered if it does not have a contained engine.
- Spill kits will be maintained on site to enable quick clean-up of accidental spills.
- Two oil booms will be placed in the channel downstream of the work area to contain any accidental leaks.
- Equipment will not be fueled within 100 feet of any waterbody.

Also, if possible, the contractor will use vegetable oil in lieu of hydraulic oil to minimize the negative effects to the aquatic environment from any accidental leaks or spills.

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

Plants and animals are unlikely to be affected by the proposed project. Fish could potentially be

impacted by the placement of spawning gravels; however, the long term benefit of adding these gravels are outweighs the negative and short term impacts to the aquatic environment.

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

Plants and animals will be unaffected by the proposed project since the contractor will be restricted to already established roadways and loading areas. Fish could potentially be impacted by the placement of gravels; however, the long term benefit to the species outweighs these short term and localized impacts.

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

The proposed project will not deplete energy or natural resources.

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

Not applicable.

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?

The proposed project will affect environmentally sensitive areas in a positive manner by adding spawning gravels for improved salmonid habitat.

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

The proposed project has been designed with several BMPs as described throughout this document to protect the environment and minimize the short term localized effects of adding spawning gravels to the river channel.

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?

The proposed project will not affect land and shoreline use. In addition, the proposed project area is not accessible to the general public.

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

Shoreline and land use impacts will be reduced by restricting equipment to existing roadways and previously disturbed areas. In addition, all areas will be protected from spills by implementing BMPs as described throughout this document.

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

The proposal will not increase demands on transportation or public services and utilities.

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

Not applicable.

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

The following approvals and permits are being requested for the proposed project:

- Section 404 Permit, U.S. Army Corps of Engineers
- Hydraulic Project Approval, Washington Department of Fish and Wildlife.

No other permits necessary to complete the proposed project.