DEPARTMENT OF ECOLOGY
State of Washington

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*:**

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:

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

1. Name of proposed project, if applicable:

   Sullivan Creek Bank Re-Stabilization
   Closed Cement Kiln Dust (CKD) Pile Site

Metaline Falls, Washington

2. Name of applicant:

   Washington State Department of Ecology

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

   Bill Fees, Site Manager
   Washington State Department of Ecology
   Eastern Regional Office
   4601 N Monroe
   Spokane, WA 99205

   wfee461@ecy.wa.gov

4. **Date checklist prepared**: May 14, 2015

5. Agency requesting checklist:

   Washington State Department of Ecology

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

   The project is scheduled to begin August 1, 2015 and to finish August 31, 2015.

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

   No.

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

Sullivan Creek Streambank Stabilization Work Plan (pending)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No known applications are currently pending. Planning for work with the Mill Pond Dam could potentially require an USACE Section 401 Permit, but it is unknown at this time whether or not that will be required.

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

RCW 70.105D.090 exempts remedial actions conducted under a consent decree, order, or agreed order from the procedural requirements of RCW chapters 70.94 (air), 70.95 (solid waste), 70.105 (hazardous wastes), 75.20 (hydraulic permit), 90.48 (water quality), and 90.58 (shorelines), and from the procedural requirements of any laws requiring or authorizing local government permits of approvals. Ecology ensures compliance with the substantive requirements adopted pursuant to such laws, and consults state agencies and local governments charged with implementing these laws. Substantive requirements of state and local permits that must be complied with include:

- Hydraulic Project Approval from the Department of Fish and Wildlife;
- shoreline permit from Pend Oreille County;
- floodplain development permit from Pend Oreille County
- building, clearing, and grading permits from Pend Oreille County.

The Proposed Project is not exempt from Federal permit requirements and Lehigh will apply to the U.S. Army Corps of Engineers for a Section 404 Permit and a Section 10 Permit.
Also 401 certification by Ecology would be required after USACE permits are complete.

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.)

An approximately 110-ft section of streambank along Sullivan Creek within the city limits of the Town of Metaline Falls has been a chronic source of sediment input due to repeated bank failure and erosion. The constructed bank provides a buffer of protection from high flows and debris for Lehigh's groundwater treatment system installed in 2006 - 2007. The groundwater is treated via an in situ treatment zone that intersects and discharges treated groundwater through the streambank and into

Sullivan Creek. The treatment zone requires separation from Sullivan Creek to protect the treatment components.
The proposed project will reduce streambank instability and sediment delivery through installation of a continuous rock-log bank structure along the left treatment bank (looking downstream). The structure, which will primarily be composed of wood and boulders, will stabilize the affected area while enhancing in-stream and riparian habitat. The stream roughness will be increased along the affected bank; hydraulic refugia will be improved during high flows; and the riparian vegetation will have the opportunity to become more established where none currently exists.
An additional habitat diversion structure will also be constructed directly upstream of the failed streambank (on the same property) to provide a process based design to further protect the downstream bank; dissipate energy and provide refugia; and to promote flow diversion and re-engagement of the historically active side channel on the right bank of Sullivan Creek (looking downstream) directly across from the project site. The structure will be composed of large boulders and logs and will also serve to enhance aquatic habitat through pool development and connectivity.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Proposed Project site is in Metaline Falls, Washington at approximately milepost 14.7 along State Route 31, in SE 1/4 Sec. 21, T. 39N, R. 43E. The streambank stabilization will be installed on property just north and east of the Closed CKD Pile, located between State Route 31 and Sullivan Creek. Lehigh owns all of the land on which the Proposed Project will be constructed and operated. Figure 2 shows the approximate layout of the proposed streambank stabilization structures.

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

The area of the groundwater remediation system is generally flat. The Closed CKD Pile rises approximately 90 feet above State Route 31 to a gently-sloping upper deck. Exposed sloped streambank of Sullivan creek in this area is typically within 15 to 35 feet of water and sloped at between 3H:1V to 1H:1V.

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

The steepest slope is approximately 1H:1V along the bank of Sullivan Creek.

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.

There are three geologic strata at the Proposed Project site. Bedrock is the deepest stratum. Overlying the bedrock are glacial sediments that consist of sandy silt and clayey silt. Finally, Sullivan Creek eroded a bowl (the Holocene Alluvium) into the glacial sediments, which is the third stratum. The Holocene Alluvium includes gravels with occasional cobbles and boulders and interspersed zones of more clayey, silty, and sandy materials. According to the Soil Survey of Pend Oreille County, soils at this site are Martella silt loam and Sacheen variant silt loam.

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

A historic landslide occurred in glacial sediments to the south of and upgradient from the Closed CKD Pile, approximately 600 feet from the construction area. The landslide is described in the June 1997 Closure Report. The area where the groundwater remediation system was constructed is relatively flat and is not expected to be susceptible to landslides. As flow within the Sullivan Creek channel has migrated, erosion has been occurring along the face of the groundwater treatment system discharge structure. This work is designed to stop this erosion and prevent future erosion along the face of the discharge structure. A crib wall has been constructed approximated 100 feet downstream of the proposed work to protect an area of eroding stream bank.

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.

Streambank Stabilization. A rock-log bank structure will be constructed inside the 100-year floodplain on the left bank (looking downstream) of Sullivan Creek at the project site. Note the streambank to be repaired is not on the main channel of Sullivan Creek, which lies more to the right bank of the stream. Logs and boulders will be placed on the streambank in a configuration that allows anchoring of the structure components without the use of cables. Installation is proposed using a small excavator and manual labor. Minor excavation may be required at the toe of the streambank to place anchor rocks and inverted rootwads. Trench excavation of the bank will be required to place rootwad logs and log members at the upstream and downstream ends of the bank structure. The excavator will access the project area through the upland portion of the property. This area is shown in the attached Figure 2 with the streambank to be re-stabilized shown in Figure 3.

Flow Diversion Structure. A habitat diversion structure will be constructed inside the 100-year floodplain from the left bank (looking downstream) of Sullivan Creek, extending approximately 30 feet laterally into the main channel. Logs and boulders will be placed on the streambank and within the channel bed in a configuration that allows anchoring of the structure components without the use of cables. Installation is proposed using a small excavator and manual labor. Minor excavation may be required at the toe of the streambank and several locations within the main channel to place anchor rocks. Trench excavation of the bank will be required to place rootwad logs and log members. The excavator will access the project area through the upland portion of theproperty. The area for the flow diversion structure is shown in the attached Figure 2.

Activity	Location	Duration	Volume	Area
Dredge	In Creek	1-2 wks	20 cy	280 sf
Fill	In Creek	1-2 wks	40 cy	280 sf
Dredge	Adjacent	1-2 wks	10 cy	110 lf
Fill	Adjacent	1-2 wks	20 cy	110 lf

Fill material for work adjacent to the streambank and within the main channel of Sullivan Creek will include channel bed and bank material excavated from the same respective location(s), rock, boulders and logs will be sourced locally and be analogous to material found naturally within Sullivan Creek watershed.

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

The action includes excavation and placement of materials (logs, boulders, and cobbles) along side and in Sullivan Creek. Construction activities could potentially result in erosion and/or disturbance of ground surfaces. Proposed measures to control potential erosion and sediment transport within Sullivan Creek are described below in section h.

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

The completed project will not increase or alter impervious surface conditions on the project site.

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

Placement of temporary structures will be used to divert flwo within the left side channel of Sullivan Creek toward the right side channel, isolating the work area from the flowing stream, thereby reducing risk of turbidity and sedimentation. Dewatering of the construction area may also include trenching the existing channel from the construction site downstream to provide gravity flow. Alternatively, pumping water from the construction area may be employed. A silt fence will be used to limit sediment transport along the project access route; a construction entrance will be installed to control transport of sediment from the project site to road surfaces; and, the number of trips made through the project site with heavy equipment will be limited. Upon completion of the project, disturbed areas will be covered with erosion control materials to limit short-term erosion. To prevent long term erosion, revegetation of disturbed areas will also occur. The project will be implemented during the low flow period.

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.

Construction activities will generate on-site dust and emissions from earthmoving equipment operation and workers' vehicles. These emissions are expected to be temporary, minor, and largely confined to the Proposed Project site.

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

No.

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

Dust generation during construction will be controlled by wetting exposed surfaces, and other typical dust-suppression techniques.

3. **Water**

a. Surface Water:

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.

Sullivan Creek flows in a northerly direction from the Proposed Project site. Sullivan Creek is a tributary to the Pend Oreille River, which is located about 0.5 miles downstream from the Proposed Project site. A mitigation wetlands was constructed on the property in 2007 as part of the MTCA groundwater remediation project.

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

Yes. Work will occur adjacent to and in Sullivan Creek. Layout of the proposed stream bank stabilization is shown on Figure 2.

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.

Approximately 10 cubic yards of dredge will be removed from Sullivan Creek, and 20 cubic yards of fill will be placed. Placement of materials (boulders, root wads) in Sullivan Creek is indicated in Figure 2.

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

Placement of temporary structures will be used to divert flow from the left side channel of Sullivan Creek toward the right side channel, isolating the work area from the flowing stream, thereby reducing risk of turbidity and sedimentation. Dewatering of the construction area may also include trenching the existing channel from the construction site downstream to provide gravity flow. Alternatively, pumping water from the construction area may be employed. Fish will be excluded from the project site with the use of a temporary exclusion fence located upstream of the project site. In addition, dewatering will not be conducted until fish are removed from the project area.

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

Yes the entire project area lies within the 100-year flood plain.

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 proposed project is to make stream bank stabilization improvements to protect the outlet structure of a groundwater treatment system. The groundwater treatment system will continue to discharge to Sullivan Creek under a NPDES permit. This project will not result in alterations or additions to this discharge.

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.

No.

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

None.

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.

Stormwater that falls on the land between State Route 31 and Sullivan Creek either infiltrates into ground or flows into the stream via overland flow. Upon completion of the project, disturbed areas will be covered with erosion control materials to limit short-term erosion. To prevent long term erosion, revegetation of disturbed areas will also occur.

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

No. Stormwater runoff will not come in contact with any waste materials at the proposed project site. All chemicals used on-site will be stored inside the building.

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

No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage

pattern impacts, if any:

The purpose of this project is to protect the outlet structure of the groundwater treatment system from erosion from Sullivan Creek. The groundwater treatment systems protects Sullivan Creek by reducing arsenic concentration and pH in groundwater entering the creek. Temporary controls will be implemented during construction to mimize the potential for any site runoff towards Sullivan Creek. These measures include the use of silt fencing and equipment staging away from Sullivan Creek and modifying construction operations to not coincide with significant rainfall that would produce overland flow. The project is anticipated to improve long-term drainage conditions and reduce the potential for erosion and sediment mobility.

4. **Plants**

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

__X__deciduous tree: alder, maple, aspen, other
__X__evergreen tree: fir, cedar, pine, other
__X_shrubs
__X_grass
__X_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

The property contains several unvegetated areas such as driveways, buildings, and features that are part of an active Groundwater Remedy that was constructed under a Consent Decree (CD 06-2-00034-6) between the property owner and Washington Department of Ecology. The remaining areas contain minor amounts of vegetation, primarily grasses. The vegetation inside the project area is sparse due to bank erosion. Some alder, willow and cottonwood are present at low densities on the margins of the project area.

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

The proposed work will repair stream bank stabilization techniques that did not successfully revegetate. A limited amount of sparse riparian vegetation (willow shrubs) will be disturbed. Disturbed areas along the stream bank will be revegetated using stream bank stabilization techniques. Additonal upland vegetation will also be planted as part of this project with a mitigation ratio (area revegetated to project area) of approximately 1.5:1.

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

The State Department of Natural Resources does not identify any known populations

of state or federally listed threatened or endangered plant species occurring or in proximity to the project site. The USFWS has identified that one federally listed plant species, the Ute ladies'-tresses, may occupy habitats that are common in Pend Oreille County, although there is no documented occurrence of Ute ladies'-tresses in Pend Oreille County (NatureServe Explorer, 2015).

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

Project will include placing of boulders and rootwads to protect the stream bank and provide habitat. The stream bank area will be re-planted with riparian vegetation. Additonal upland vegetation will also be planted as part of this project with a mitigation ratio (area revegetated to project area) of approximately 1.5:1. This will include the use of native plants and shrubs.

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

There are no noxious weeds in the immediate project area.

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:

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

WDFW identifies that the general vicinity is known to contain regular concentrations of Rocky Mountain elk, mountain goat, and waterfowl. In addition, WDFW maps several Wildlife Heritage Points within one mile of the Proposed Project site. Mapped natural heritage points include observed occurrences of individual great grey owl, Canada lynx, common loon, and slimy sculpin. Breeding occurrences (nest sites) for bald eagle and osprey also occur in the general vicinity of the Proposed Project.

No specific perching or roosting trees have been identified in the project vicinity. Bald eagles could potentially forage within the Sullivan Creek system; however, they are more likely to forage along the mainstem Pend Oreille River to the west of the project. General noise and disturbance would occur during construction, but no highly disturbing activities are expected to be required. Since, there are ample foraging opportunities along the mainstem Pend Oreille River and since no documented nest sites, perches, or roosts have been identified within 1.0-mile of the project, the likelihood of impacts to eagles are anticipated to be discountable.

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

There are several ESA listed species that may occur in Pend Oreille County. Much of county is undeveloped forest or rangeland. The USFWS identifies that six different ESA-listed species may occur in the vicinity of the project. Of these six species, three have been documented as occurring in proximity to the project site by WDFW (2005), although no documented occurrence of these

species on or adjacent to where work will occur. These species include grizzly bear, Canada lynx, and bald eagle. A fourth species, bull trout, may have historically been present in Sullivan Creek, but populations of bull trout are not known to be present in the watershed (Andonagui, 2003). The USFWS has designated Sullivan Creek as Critical Habitat for bull trout. Andonagui (2003) reports that bull trout may have historically occurred in the Pend Oreille River, however, viable populations of bull trout are thought to be extirpated from the Pend Oreille River and its tributaries between Albeni Falls dam in Idaho and Boundary dam in Washington. Surveys conducted in the Sullivan Creek watershed have not identified any reproducing populations of bull trout in Sullivan Creek There have been only 33 documented observations of bull trout between Albeni Falls and Boundary dams since 1975. There have been no confirmed observations of live bull trout in Sullivan Creek. A dead bull trout was observed along the bank of the stream at river mile 0.65 (upstream from the project site) in 1993; however, subsequent snorkel surveys in the vicinity were not able to find other occurrences. Any occurrence of bull trout in Sullivan Creek would be extremely rare and the Proposed Project is not likely to result in adverse affects to bull trout. Bull trout, if present, are anticipated to benefit from the potential water quality benefits of the Proposed Project.

Common Name Scientific Name ESA Status Jurisdiction
Canada Lynx *Lynx Canadensis* Threatened USFWS
Bull trout *Salvelinus confluentus* Threatened USFWS
Bald eagle *Haliaeetus leucocephalus* Threatened USFWS
Grizzly Bear *Ursus arctos horribilis* Threatened USFWS

The project site is a heavily disturbed industrial property in close proximity to the Town of Metaline Falls. Although ESA-listed species may be present in the forest and rangelands around the town, occurrence of these species on the actual site of the proposed facility where work would occur is not likely.

Andonagui, C. 2003. *Bull Trout Habitat Limiting Factors Report for Water Resource Inventory Area (WRIA) 62 (Pend Oreille County, Northeast Washington State).* Washington State Conservation Commission. Olympia, Washington.
Washington Department of Fish and Wildlife. 2005. Priority Habitats and Species Database. Washington Department of Fish and Wildlife. Olympia, Washington

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

The Proposed Project area has been heavily disturbed. The site is located adjacent to State Route 31. Although the site is within the boundaries of the Pacific Flyway, the site itself has not been identified as part of a migration route for any state priority wildlife species. Sullivan Creek has been identified as a migration corridor for state listed priority fish species that may use the stream for spawning or rearing.

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

Sullivan Creek provides habitat for native fish with in-stream habitat in the vicinity of the project area and property characterized by large cobble in the channel bed, lack of pool habitat adjacent to the property, and observed changes in stream morphology downstream, adjacent, and upstream of the property. The project is proposed to improve these habitat conditions by incorporating a process based solution that also helps to encourage pool development, introduction of wood debris and allow for improved vegetation establishment by sustaining theintegrity of the currently eroding

bank within the project area. Upland revegetation will also help to improve local ecology, terrestrial habitat and provide long-term inputs to Sullivan Creek (wood, terrestrial organisms important for aquatic ecosystems,shading, etc.).

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

None known

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.

Electricity and compressed carbon dioxide are used to operate the treatmen facility; however the completed stream bank stabilization techniques proposed for this project will not require additional energy inputs beyond the natural solar radiation used in plant growth.

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

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

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:

Fuel for vehicles and machinery will be onsite during construction. Spills of construction-related materials will be prevented by the use of refueling containment systems, petroleum alternatives in lieu of petroleum in hydraulic machinery, and careful attention paid by operators and staff when working in or near the stream.

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

The ground water beneath the site upgradient of the groundwater treatment system is impacted by arsenic and high pH. However, planned activities will not bring workers into contact with this untreated groundwater.

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.

The groundwater treatment system includes groundwater contaminated with arsenic and high pH, compressed carbon dioxide gas, and high voltage electrical equipment. These hazards will be avoided by limiting the proposed project away from the groundwater treatment system.

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.

Fuel for vehicles and machinery will be onsite during construction. Spills of construction-related materials will be prevented by the use of refueling containment systems, petroleum alternatives in lieu of petroleum in hydraulic machinery, and careful attention paid by operators and staff when working in or near the stream.

4) Describe special emergency services that might be required.

The project requires a Health & Safety Plan (HASP). The HASP will outline emergency procedures and requirements in the event of a spills or accidents. The plan will list emergency contact numbers and locations of emergency services. All workers will be familiarized with the HASP. The project should not require any emergency services from the local area.

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

Health and safety plan will be prepared for use during construction of the stream bank stabilization techniques.

b. **Noise**

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

Existing sources of noise or disturbance that occur in the vicinity of the project will not affect the construction of the porposed 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 levels during construction will be those commonly associated with heavy equipment operation. Once construction is complete, the project will create no additional noise.

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

None.

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.

The site is currently used for maintenance of the closed CKD pile and operation of the groundwater treatment system.

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?

Not to our knowledge.

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:

The project will not affect the surrounding farms or forest lands.

c. Describe any structures on the site.

The one structure onsite is a two-story building used for control of the groundwater treatment system.

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

No.

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

Zoning at the site is equivalent to comprehensive plan future use designation below.

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

Most of the site is designated as 5-acre residential (R5). The northwestern corner of the site is designated 20-acre natural resource (NR20). All parcels on the site are non-conforming (under-sized) legal parcels.

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

Conservancy Environment

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

No

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

No one would reside in the completed project. The nearby building will continue to be used for control of the groundwater treatment system. Typically, one worker will will be onsite one day per week.

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

The proposed project will have no affect on the current or future population of the site.

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

No displacement impacts have not been identified for the project.

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

The project is designed to protect the existing groundwater treatment system and enhance habitat in Sullivan Creek. The groundwater treatment system controls high pH and arsenic in groundwater emanating from the cement kiln dust pile and entering Sullivan creek. This improves usability of Sullivan Creek and adjacent properties.

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

The project is not near agricultural or forest lands of long-term significance.

9. **Housing**

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

None planned. Housing is not needed for the project.

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

Housing will not be eliminated by the project.

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

Housing impacts are not anticipated.

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?

Stream bank stabilization structures proposed for this project will only protrude at most a few feet from the ground surface or water surface. Revegetated native plant may grow to heights typical of the species at full maturity.

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

Stream bank stabilization structures include placement of boulders and logs near or in Sullivan creek. Also, the stream bank in the vicinity will be re-vegetated with native plants.

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

The intent of the project is for the completed look to have an aesthetic and naturalistic appearce, while providing streambank stabilization and habitat. Upland revegetation will also help to reduce the visual impact of the existring treatment system and fencing.

11. **Light and glare**

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

The project will not produce light or glare.

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

The project will not produce light or glare.

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

Off site sources of light should not have an impact on the project. Light sources off site include sun glare off of Sullivan Creek.

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

The project will not produce or be impacted by light or glare.

12. **Recreation**

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

Sullivan creek is used for fishing and floating. Pend Oreille River is used for fishing and boating.

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

Recreational uses in the immediate vicinity of the project would be interrupted during construction. The complete streambank stabilization techniques would not displace any 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 project design is intended to improve fish habitat, enhancing recreational fishing opportunities. Completing the project within a brief time period will reduce impacts to recreation during construction. The project is designed so that the completed steam bank stabilization techniques will not negatively impact recreational opportunities.

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.

None known. The existing on-site metal building does not appear eligible for listing on national or state registers.

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.

None known on or next to the project site. The project area is located in an area previously developed and disturbed. The project location was reviewed by Historic Research Associates, Inc, in 2009 for the Boundary Hydroelectric Project FERC license.

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.

As part of the investigation to determine if the site has culture significance the Washington Information System for Architectural and Archaeological Records Data (WISAARD) was used. There were no records available for Indian sites or usage. Nearby sites on the Historic Register include the Washington Hotel, Lewis P. Larson House, Metaline Falls School, and the Pend Oreille Mines and Metals Building. Representatives of the Confederated Tribes of the Collville Reservation and the Kalispel Tribe of Indians were consulted regarding potential cultural or historic resource impacts or consideratios for the project.

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.

During the work if any Indian artifacts or historic sites are discovered the work will be stopped and the appropriate agencies will be notified.

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.

State Route 31 serves the proposed project site. No city streets will be used for access.

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?

The site/area is not serviced by public transportation. The nearest public transportation may be available in Newport, WA approximately 61 miles to the south. Otherwise, the nearest public transportation would be in Spokane, WA approximately 95 miles to the southwest.

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

The completed project will not eliminate nor create any 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).

The proposed project will not make any improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities. The project will be conducted on private property and use all existing access points.

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

No.

f. How many vehicular trips per day would be generated by the completed project 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?

No additional vehicular trips would be generated by the completed project.

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.

No, the project will not have an effect on the movement of agricultural and forest products.

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

Efforts will be made to reduce trips to the project site.

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.

The proposed project would not create any additional need for public services.

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

Impacts on public services are not anticipated.

16. **Utilities**

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

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.

Does not apply. No additional utilities will be required and no changes in service for existing utilities are expected as a result of the proposed project.

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: _____

Name of signee Huckleberry Palmer

Position and Agency/Organization Site Management / WA Dept. of Ecology - TCP

Date Submitted: 5/14/15


Metaline Falls
Metaline
Metaline Falls
Metaline Falls
Metaline Falls
Project Area
Metaline Falls
Vancouver
Seattle
Spokane
Tacoma
Yakima
Portland
DigitalGlobe, GeoEye, Microsoft, USDA FSA, CNES/Airbus DS | Esri, HERE, NRCan
POWERED BY esri

Figure 1

LEGEND

- TOPOGRAPHY (FEET ABOVE M.S.L.)
- TREE WITH ATTACHED OUTWARD (~12"-24" DIAMETER)
- VERTICAL DRIVEN WOOD OR ANCHOR BOULDER
- BOULDER (~12"-36")
- VERTICAL DRIVEN WOOD WITH ATTACHED OUTWARD LIFT UP

NOTES:

1. 2012 LIDAR PROVIDED BY SEATTLE CITY LIGHT.
2. BOULDERS TO BE USED TO MAINTAIN EXISTING SOIL PILLOWS TO EXTEND TO POSSIBLE AND ALLOW SOIL/GRAVEL BACKFILL.
3. COMBINATION OF HORIZONTAL AND VERTICALLY ORIENTATED OUTWARD STRUCTURES TO PROVIDE VARIETY OF HABITAT WHILE STABILIZING BANK IN COMBINATION WITH BOULDER/RIPRAP.
4. DIVERSION STRUCTURE TO UTILIZE EXISTING WOOD TO EXTENT POSSIBLE.

0 30'

SCALE IN FEET

INITIAL PRELIMINARY DRAFT
NOT FOR CONSTRUCTION

STREAMBANK STABILIZATION OVERVIEW

LEHIGH CEMENT COMPANY
METALINE FALLS, WASHINGTON

Geosyntec consultants

Figure 2

Project No: HR0996C | March, 2015