March 4, 2015

TO: Mark Isaacson, Division Director, Water and Land Resources Division

VIA: Steve Bleifuhs, Section Manager, River and Floodplain Management Section

FM: Kerry Bauman, Senior Ecologist, River and Floodplain Management Section

RE: State Environmental Policy Act (SEPA) Approval
Black River Pump Station Sediment Removal Project

Enclosed for your review and signature is the Determination of Non-Significance (DNS) for the Black River Pump Station Sediment Removal Project. The Environmental Checklist is also included for your reference.

Project Description
King County plans to remove about 2,900 cubic yards of sediment that has accumulated on the concrete forebay apron located immediately upstream of the Black River Pump Station. Sediment that has accumulated upstream of the pump station since its construction in the 1970s is now an operational concern for the facility. Sediment will be removed by dewatering the work area and excavating directly from the riverbed. Excavated material will be decanted in a temporary, water-tight facility on the south river bank. Decanted water will meet water quality standards before being discharged back into the Black River. Excavated sediment will be disposed of at an approved disposal facility.

Issues of Note
The following issues have arisen during the planning of this project and may have implications to the Department of Natural Resources and Parks:

1. Herons Forever has expressed concern about project impacts to a Great Blue Heron rookery located in the Black River Riparian Forest northeast of the project site. The project team met with Herons Forever on December 9, 2014, to discuss the project. Since that meeting the project decant facility has been moved from the north side of the river to the south side, avoiding wetland impacts and minimizing potential disturbance to the heron rookery, in part due to suggestions made by Herons Forever. Although the Project...
The Project Team believes these changes have addressed concerns expressed at the December meeting. Herons Forever has requested a site meeting with the Project Team, which is scheduled for March 6, 2015. Unforeseen concerns of Herons Forever could still delay the project schedule or affect construction.

2. The Muckleshoot Indian Tribe may want fish passage improvements at the pump station. Such improvements are being evaluated as part of the Black River Pump Station Needs Assessment, currently underway by Tetra Tech for King County Water and Land Resource (WLR) Division as part of the larger System-wide Improvement Framework. Fish passage concerns are not anticipated to affect the sediment removal project.

3. The Lake to Sound Trail is located near the pump station and users may be concerned about access and disturbance during project construction. King County Parks has a project to extend a portion of this trail north of the pump station, the timing of which may coincide with the sediment removal project. The Project Team is coordinating construction timing with Parks.

4. Analytical test results on sediment samples indicate arsenic, cadmium, and total petroleum hydrocarbons (TPH) concentrations that exceed the Model Toxics Control Act (MTCA) Method A or B cleanup levels for unrestricted land use. In addition, sediment exceeds freshwater sediment quality criteria for TPH, bis(2-ethylhexyl) phthalate, polychlorinated biphenyls (PCBs), arsenic, cadmium, and nickel. As a result, the removal method will include provisions to control the release of contaminated sediment.

The comment period for this project is scheduled to begin on March 10, 2015. In order to preserve this schedule, we would need the enclosed DNS returned with your signature by 2:00 p.m., Thursday, March 5, 2015. If you have any questions regarding the issues above or others that come to your attention, please contact me at 206-477-4637 or Steve Bleifuhs at 206-477-4726.

Enclosures
Determination of Non-Significance

Name of Proposal:  Black River Pump Station Forebay Sediment Removal

Description of Proposal:
King County plans to remove about 2,900 cubic yards of sediment that has accumulated on the concrete forebay apron located immediately upstream of the Black River Pump Station. Sediment that has accumulated upstream of the pump station since its construction in the 1970s is now an operational concern for the facility. Sediment will be removed by dewatering the work area and excavating directly from the riverbed. Excavated material will be decanted in a temporary, water-tight facility on the south river bank. Decanted water will meet water quality standards before being discharged back into the Black River. Excavated sediment will be disposed of at an approved disposal facility.

Location of Proposal:
The project site is located at 550 Monster Road SW in the City of Renton. The property is located in the SW ¼ of Section 13, Township 23N, and Range 4E W.M.

Responsible Official:  Mark Isaacson
Position/Title:  Division Director, Water and Land Resources Division
Address:  201 South Jackson Street, Suite 600
Seattle, WA 98104-3855

DATE:  3-5-15  SIGNATURE:  

Proponent and Lead Agency:  King County Department of Natural Resources and Parks
Water and Land Resources Division

Contact Person(s):  Kerry Bauman
Environmental Scientist III
206-477-4637
The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under Revised Code of Washington (RCW) 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. THIS INFORMATION IS AVAILABLE TO THE PUBLIC ON REQUEST (for a nominal photocopying fee).

THIS DETERMINATION OF NON-SIGNIFICANCE (DNS) is issued under Washington Administrative Code (WAC) 197-11-340(2); the lead agency will not act on this proposal until after March 24, 2015. Comments must be submitted or postmarked by that date.

For additional information, please contact:

Kerry Bauman
206-477-4637
Kerry.bauman@kingcounty.gov
King County Water and Land Resources Division
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855
Purpose of the Checklist:
The State Environmental Policy Act (SEPA), Chapter 43.21 RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:
This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write “do not know” or “does not apply.” Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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

Use of Checklist for Nonproject Proposals:
Complete this checklist for nonproject proposals, even though questions may be answered “does not apply.” In addition, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (PART D).

For nonproject actions, the references in the checklist to the words “project,” “applicant,” and “property or site” should be read as “proposal,” “proposer,” and “affected geographic area,” respectively.
A. BACKGROUND

1. Name of the proposed project, if applicable:

   Black River Pump Station Sediment Removal Project

2. Name of Applicant:

   Kerry Bauman
   King County Department of Natural Resources and Parks
   Water and Land Resources Division

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

   King County Water and Land Resources Division
   201 South Jackson Street, Suite 600
   Seattle, WA 98104-3855
   Phone: 206-477-4637
   Fax: 206-205-5134

4. Date checklist prepared:

   January 5, 2015

5. Agency requesting checklist:

   King County Department of Natural Resources and Parks
   Water and Land Resources Division

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

   Construction would begin in spring 2015 and extend for approximately 10 weeks. A second
   construction season may be necessary in 2016. In-water work will be restricted to the July 1 –
   August 31 window.

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

   There are no plans for future additions, expansion, or further activity related to or
   connected with this proposal.

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

   - Habitat Data Report, Black River Pump Station Sediment Removal 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.

There are no other applications pending for governmental approvals of other proposals directly affecting the property covered by this proposal.

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

   - Section 404 Clean Water Act – US Army Corps of Engineers
   - Historic Preservation Act Section 106 Review – State Historic Preservation Office and Tribal Historic Preservation Office
   - Section 401 Clean Water Act – Washington State Department of Ecology
   - Hydraulic Project Approval – Washington Department of Fish and Wildlife
   - Renton Shoreline Substantial Development Permit or Exemption – City of Renton
   - Renton Clearing and Grading Permit – City of Renton
   - Renton Critical Areas Approval – City of Renton

   In addition, King County will coordinate with the affected tribes to maintain tribal treaty fishing access during construction.

11. **Give a 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 the project description.)**

   The King County Water and Land Resources Division (KCWLR Division) operates the Black River Pump Station (BRPS) to provide flood control protection for the lower Green River Valley. The BRPS is located about two miles west-southwest of Renton, Washington, on the Black River about 1,700 feet upstream from its confluence with the Green River. The pump station consists of a concrete dam that spans the Black River channel, with eight pumps to convey flow from the forebay behind the dam to the downstream Black River...
channel. Plant pumps can handle Black River flow up to an estimated 2,945 cubic feet per second (cfs) capacity, which exceeds a one percent flood condition. In order to protect properties downstream, the station is not run at full capacity when the river is near levee capacity; excess inflow is held in channel storage behind the dam. Flood control is accomplished by starting the large pumps at an early stage of a storm. During normal, non-storm flow conditions, only pump P-1 is used to regulate discharge past the dam, typically cycling on and off for a few hours a day (using an automated stage control system). Fish migration facilities are also included for upstream and downstream fish passage around the pump station.

Sediment that has accumulated upstream of the pump station since its construction in the 1970s is now an operational concern for the facility. The KCWLR Division proposes to remove about 2,900 cubic yards of sediment from the river channel, extending about 100 feet upstream of the pump station. The sediment removal area includes a concrete forebay apron (an approximately one-foot-thick concrete slab covering the 165-foot width between the pump station retaining walls and extending 75 feet upstream of the pumping bays), the narrow area between the dam trash grates and pump bays, and east (upstream) of the apron up to existing grade. The sediment thickness varies from 7.0 to 15.5 feet. Sediment will be removed by dewatering the work area and excavating directly from the riverbed.

Analytical test results on sediment samples indicate arsenic, cadmium, and total petroleum hydrocarbons (THP) concentrations that exceed the Model Toxics Control Act (MTCA) Method A or B cleanup levels for unrestricted land use. In addition, sediment exceeds freshwater sediment quality criteria for THP, bis(2-ethylhexyl) phthalate, polychlorinated biphenyls (PCBs), arsenic, cadmium, and nickel. As a result, the removal method will include provisions to control the release of contaminated sediment.

Project construction will entail:

- Staging and site preparation, which will include constructing a sediment stockpiling, decant and treatment area, as well as a crane pad south of the forebay
- Mobilizing equipment to the work area
- Isolating the in-water work area turbidity curtains or using other best management practices (BMPs)
- Installing a cofferdam to allow for dewatering of the sediment removal area
- Placing sediment removal equipment into the work area using the crane
- Sediment removal and stockpiling
- Decanting stockpiled sediment and treating the wastewater
- Removing in-water BMPs
- Hauling sediment off site
- Demobilizing equipment and restoring and replanting the staging area.

Sediment will be removed by dewatered mechanical excavation. This method involves isolating the sediment removal area from the river by constructing a temporary flow diversion structure (e.g., cofferdam) spanning the entire width of the river, installing temporary pumps and piping to divert the river, and dewatering the sediment removal area (Figure 1). The work area will be partially dewatered using the pump station pumps until water levels are too low or turbidity levels are too high, at which point portable pumps will be used to remove the remaining water. Sediment will then be removed using conventional excavation equipment placed into the dewatered work area using the crane. Installation of a flow diversion structure will not require pile driving.

Fish will be removed from the in-water work zone prior to and during dewatering using a combination of seine and dip netting. Electrofishing may be used once other methods have removed most of the adult and sub-adult fish from the area. Any portable pumps used to dewater the area will be fitted with screens to prevent fish from being sucked into the pumps per RCW 77.57.070. Nets will be composed of non-abrasive nylon material. Fish handling will be kept to the minimum necessary to remove fish from the area. Fish capture and removal will be conducted by a qualified biologist.

During excavation, portable pumps will remain on site to remove water that may seep past the cofferdam. Water will be pumped downstream of the pump station, unless too turbid to meet State water quality standards. If pumped water is too turbid, it will be pumped directly to the on-site facility used to treat decant water.

Figure 1. Example Dewatered Mechanical Excavation.
Hydraulic dredging (using suction pumps to remove sediment and entrained water) may also be used to remove sediments within the pump bay area behind the trash racks due to difficulty accessing that area.

Once dredging is complete a sand cap approximately 1 foot thick will be placed over the dredged area to minimize the potential for sediments to become mobilized post project.

The excavated sediment may contain up to 70 percent water by volume and will need to be dewatered prior to disposal. The project will create a sediment stockpiling, decant, and water treatment area that will require leveling a section of ground south of the river, laying down an impervious liner, and constructing a berm around the perimeter to contain the sediment and decant water. An additional area will likely be required for treatment of free water that drains by gravity from the sediment.

Free water from the sediment stockpile will have relatively high turbidity and may have elevated levels of contaminants. Water may be directed to the nearby King County South Treatment Plant for treatment or hauled to a disposal facility, but will most likely be treated on site and discharged back to the Black River. Any water discharged to the river will meet Ecology Surface Water Quality Criteria for turbidity and toxics.

Water will likely be treated through a combination of pumping and settling in tanks (with or without the use of flocculants), sand filtration to remove suspended solids, and possibly carbon filtration to remove the toxics, if needed. Drying agents may be used to speed the dewatering process. Drying agents will not be allowed to come into contact with Waters of the State.

Water quality will be tested prior to discharge back into the Black River. If the treated water does not meet Ecology requirements, the contractor will implement additional treatment techniques or dispose of the water off site at an approved facility.

The project will develop a TESC Plan and Stormwater Pollution Prevention Plan to describe stormwater controls and management that will be implemented for the project. Minimum measures to manage stormwater will include:

- Marking clearing limits
- Establishing construction access
- Controlling flow rates
- Installing sediment controls
- Stabilizing soils
- Protecting slopes
- Protecting drainage inlets
- Stabilizing channels
- Controlling pollutants
- Controlling dewatering
- Maintaining stormwater BMPs
- Managing the project and stormwater BMPs.

Dewatered sediment will be disposed of at an upland facility approved to handle such waste.

Site preparation will consist of:
- Flagging the construction limits
- Placing high-visibility fencing around sensitive areas that will not be cleared
- Installing TESC measures, as required by the approved TESC plan
- Flagging trees to be protected
- Removing trees as necessary to mobilize equipment, as permitted by the construction plans and specifications
- Grading and leveling the staging area
- Installing the turbidity curtain.

Equipment will consist of:
- Support vehicles
- Crane
- Flow diversion structure such as a cofferdam
- Turbidity curtains to control turbidity, if necessary
- Pumps and piping
- Excavator
- Sediment transfer containers
- Hydraulic dredge
- Sediment dewatering equipment
- Water treatment system
- Dump trucks.

Staging will occur on the south side of the river to avoid impacts to wetlands and the heron rookery north of the river. The staging area will be approximately 13,793 square feet. Staging area construction will temporarily remove approximately 9,125 square feet of the buffer of Wetland B and 1,267 square feet of Wetland C buffer. Temporarily cleared vegetation will be restored post project with appropriate native vegetation.

Construction is scheduled to begin in spring of 2015 and will take place over two seasons during the in-water work windows of 2015 and 2016. Mobilization of equipment and staging area construction will start in late May. In-water work will take place during the approved in-water work window of July 1 to August 31 and
will last about six weeks. Work will occur during daylight hours; generally from 7am to 6pm.

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 plan, 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 project site is located at 550 Monster Road SW in the City of Renton. The property is located in the SW ¼ of Section 13, Township 23N, and Range 4E W.M. The Black River bisects the site (Figure 2).

Figure 2. Vicinity Map (construction zone in red; impact study area in black)
B. ENVIRONMENTAL ELEMENTS

1. Earth

   a. General description of the site (underline one): flat, rolling, hilly, steep slope, mountainous, other.

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

      Riverbank slopes exceed 40% over short distances, but the site generally has slopes less than 5%.

   c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

      Soils on the project site have been mapped as Woodinville silt loam (predominantly hydric) and Puyallup fine sandy loam (partially hydric). Both soils occur on floodplains. The Woodinville soil is poorly drained, while the Puyallup soil is well drained.

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

      No, there are no indications or history of unstable soils on the project site or immediate surroundings. The soils on site are likely susceptible to liquefaction in large earthquakes.

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

      The project involves the excavation of approximately 2,900 cubic yards from the Black River channel.

      About 280 cubic yards of fill will be placed as a sand cap over the excavated area to contain any contaminated sediments exposed after excavation. The sand will be obtained from a commercial quarry.

      Construction of the staging and sediment decant area will require grading and levelling and area of approximately 13,793 square feet.

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

      Erosion could occur during preparation of the construction staging and sediment dewatering areas, but significant erosion is unlikely to occur because
of the lack of extensive steep slopes on the project site and the implementation of temporary erosion and sedimentation controls described above in the description of the project (Section A.11).

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

The site currently includes approximately 8,000 square feet of impervious area (not including the gravel parking area or access road). After construction is completed, staging areas will be restored, so that the project will not result in any additional impervious surface.

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

Temporary erosion and sediment control measures as described in the project description above (Section A.11) would control erosion.

2. Air

a. What types of emissions to the air would result from the proposal (for example, dust, automobile, odors, industrial wood smoke, greenhouse gases) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.

During construction, minor amounts of dust will be generated by vehicular traffic. Sediment excavation and dewatering is unlikely to generate dust because material will be wet. Construction equipment and trucks hauling excavated sediment from the site will generate vehicular emissions. The attached greenhouse gas emissions worksheet provides estimated quantities of CO₂ equivalent emissions.

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

There are no off-site sources of emissions or odor that would affect this proposal.

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

Impacts to air are expected to be minor and short-term (the construction period will last approximately 10 weeks); therefore, no measures to reduce or control impacts to air are proposed.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)?
If yes, describe the type and provide names. If appropriate, state what stream or river it flows into.

The project will take place in the Black River, which flows west to join the Green River. The combined waterbodies flow north as the Duwamish River and enter Puget Sound at Elliott Bay. The City of Renton classifies the Black River as a Class 1 water.

In conjunction with the proposed project, four wetlands were mapped within a study area that includes the forebay directly upstream of the Black River pump station as well as potential construction staging areas where the sediment will be temporarily placed while it is dewatered before being transported to an approved facility. One wetland (Wetland A), 1.3 acres in size and located on the north side of the Black River, is categorized as a Class II wetland under the Washington State Department of Ecology's rating system. Two wetlands (Wetlands B and D), 0.03 and 0.93 acres in size and located on the south and north sides of the Black River, respectively, are categorized as Class III wetlands. One wetland (Wetland C), 0.04 acres in size and located south side of the Black River, is categorized as a Class IV wetland.

Further information regarding these aquatic resources is contained in Wetland and Stream Delineation Report, Black River Pump Station Sediment Removal Project prepared by Herrera Environmental Consultants and dated May 2014 (draft).

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.

The project will remove sediment from the Black River. Construction staging and sediment dewatering will take place approximately 30 feet south of the river and Wetland C, and immediately adjacent to Wetland B.

3) Estimate the amount of fill and dredge material that could 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.

About 2,900 cubic yards of sediment will be removed from the approximately 0.34-acre concrete apron located in the Black River immediately upstream of the BRPS. Dredged material will be dewatered and treated in the staging and decant area south of the river.

About 280 cubic yards of fill will be placed as a sand cap over the excavated area to contain any contaminated sediments exposed after excavation. The sand will be obtained from a commercial quarry.
4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

The sediment removal area will be isolated from the river by installing a temporary flow diversion structure such as a cofferdam. Temporary pumps and piping will be used to divert the river around the work zone, and the sediment removal area will be dewatered.

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

The project will take place within the 100-year floodplain of the Black River.

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 project will not involve discharges of waste material to surface waters. Turbidity curtains, cofferdams, or other methods will be used to isolate the work zone from the Black River. Inadvertent discharges could occur if turbidity escapes the turbidity curtains or if excavated sediment re-enters the Black River during dewatering or is spilled during transport from the site and then re-enters surface waters along the transport route. However, the potential for inadvertent discharge is low and the amount, if it were to occur, would be limited.

Excavated sediment will be dewatered on land. The decanted water will be treated to Department of Ecology surface water quality standards and discharged into the Black River, or, if testing indicates that contaminant levels are too high for discharge into the river, the decanted water will be hauled to the Renton treatment plant for treatment and direct discharge to Elliott Bay.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities, if known.

Groundwater will not be withdrawn for any purpose, nor will water be discharged to ground water.

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.

Waste material will not be discharged into the ground as a result of this project.

c. Water Runoff (including storm water):

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.

Decanted water from sediment dewatering together with any precipitation-derived runoff from the dewatering site will be collected and treated prior to discharge to the Black River, which flows into the Duwamish River and ultimately into Elliott Bay in Puget Sound. If testing indicates that contaminant levels in the treated decant water are too high for discharge into the river, the decanted water will be hauled to the Renton treatment plant for treatment and direct discharge to Elliott Bay. The specific volume of this water is uncertain.

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

Waste materials will be prevented from entering the ground or surface waters by maintaining a clean site, properly disposing of debris and use of Best Management Practices to filter and trap material within the project site.

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

Waste materials (excavated sediment or water decanted from excavated sediment) are unlikely to enter groundwater. The sediment dewatering area will be protected with an impermeable liner to prevent decant water from entering the soil or groundwater. Small amounts of either sediment or decant water could enter the Black River as a result of either inadvertent spillage during transport or runoff leaving the dewatering site. The likelihood of either event happening is low and, if either were to occur, the amount of waste material would be small.

4. Plants

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

☐ Deciduous trees: alder, maple, willow
☐ Evergreen trees: pine, Douglas fir, western red cedar
☐ Shrubs
☐ Grass
☐ Pasture
Crop or grain

Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, reed canarygrass

Water plants: water lily, eelgrass, milfoil, other

Other types of vegetation:

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

Approximately 11,551 square feet of vegetation will be removed for staging. Vegetation consists primarily of herbaceous species such as Kentucky bluegrass (Poa pratensis) but does include some red elderberry (Sambucus racemosa), red alder (Alnus rubra), and shore pine (Pinus contorta).

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

There are no known threatened or endangered plant species 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:

Areas that will be temporarily cleared or disturbed for construction staging and sediment dewatering will be restored post project by planting with native vegetation.

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

Himalayan blackberry and reed canarygrass occur on the project site.

5. Animals

a. Check or underline any birds or animals that have been observed on or near the site, or are known to be on or near the site:

Birds: hawk, heron, eagle, songbirds, other:
Mammals: deer, bear, elk, beaver, other:
Fish: bass, salmon, trout, herring, shellfish, other:

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

Puget Sound Chinook salmon (Oncorhynchus tshawytscha) and Puget Sound steelhead (O. mykiss), both listed as threatened under the Endangered Species Act, have been documented in the Black River. Puget Sound bull trout (Salvelinus confluentus), also listed as threatened, have been documented in the Green River approximately 1,700 feet from the pump station.
c. Is the site part of a migration route? If so, explain.

The site is located on a migration route for salmonids between Puget Sound and the Black River / Springbrook Creek. The Green River / Duwamish River valley generally supports spring and fall migration of birds.

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

The following measures are proposed to protect wildlife and habitat:

- The project staging area was moved from the north side of the river to the south side to avoid wetland impacts, as well as potential impacts to the great blue heron colony east of the pump station.
- Impact pile driving was eliminated from consideration as a construction method to minimize noise impacts.
- In-water work will occur during the approved in-water work window (July 1 to August 31).
- Turbidity curtains or other best management practices will be used to minimize turbidity and the spread of potentially contaminated sediments.
- Turbidity curtains will be deployed while the pumps are shut off, allowing sediments to settle before water is pumped downstream.
- If water pumped downstream of the BRPS from portable pumps does not meet Ecology Surface Water Quality Criteria, it will be pumped to the on-site water treatment facility.
- The work area will be isolated and de-watered to control turbidity.
- Fish will be removed from the work area before dewatering.
- Sediment dewatering water will be treated to Ecology Surface Water Quality Criteria for turbidity and toxics before discharge into the Black River.
- Drying agents will not be allowed to come into contact with Waters of the State.
- A temporary erosion and sediment control plan will be implemented during construction to prevent and reduce the potential for erosion. The plan requires the placement and maintenance of erosion control measures on site throughout construction. Measures could include placement of straw wattles, silt fences, temporary seeding, and/or soil coverings as appropriate.
- An engineer-approved spill prevention, control, and countermeasure plan will be implemented to guard against the release of any harmful pollutants or products.
- All temporarily disturbed areas will be re-vegetated with native plant species following construction.
- The project will comply with all terms and conditions of any applicable state and local regulations.

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

Starlings, house sparrows, and non-native squirrels may occur on or near the project site. There are no other known invasive animal species on or near the site.

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.

   The completed project will not have any energy requirements.

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

   This project will not affect the use of solar energy by adjacent properties.

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

   The completed project will not use energy, and energy use during construction will be limited because of the short 10-week duration of construction. Other than requiring the contractor to maintain construction equipment in good working order, no measures to reduce or control energy impacts are needed or 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.

   Yes, sediments proposed for excavation contained elevated levels of several contaminants (see below). Handling of these sediments during excavation, dewatering, and transport for disposal presents the potential for exposure to these contaminants and a risk of spill.

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

   Analytical test results on sediment samples indicate arsenic, cadmium, and total petroleum hydrocarbons (TPH) concentrations that exceed the Model Toxics Control Act (MTCA) Method A or B cleanup levels for
unrestricted land use. In addition, sediment exceeds freshwater sediment quality criteria for TPH, bis (2-ethylhexyl) phthalate, polychlorinated biphenyls (PCBs), arsenic, cadmium, and nickel.

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 elevated levels of contaminants in the excavated sediment affect project design (see subsection 5 below).

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.

   Lubrication oil and fuel would be used by construction equipment and small amounts are likely to be stored on site during the 10-week construction period.

4) Describe special emergency services that might be required.

   Emergency services may be required if a large spill of oil or fuel used by construction equipment occurred on site or if sediment were spilled during transport or containment, but these events and the associated need for emergency services are unlikely to occur.

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

   To mitigate the elevated levels of contaminants in the excavated sediment, project design includes measures to isolate the excavation area within the Black River during construction and to provide containment of the sediment during dewatering. These measures are described in the project description above (Section A.11.).

b. Noise:

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

   There are no types of noise in the project area that would affect the project.
2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic construction, equipment operation, other)? Indicate what hours noise would come from the site.

The project would create elevated noise levels during the 10-week construction period. Levels of approximately 90 dBA would occur routinely within 50 feet of dredging equipment. Trucks transporting sediment from the site would contribute to overall traffic noise generated along transport routes. Noise from the site would occur between the hours of 7:00 am and 6:00 pm.

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

Elevated noise levels would be temporary (a period of approximately 10 weeks) and the site is in an urban area with comparatively high ambient noise levels. Impact pile driving was eliminated from the design to minimize noise impacts. Noise impacts are therefore not expected to be significant, and no other measures to reduce or control noise impacts are proposed.

8. Land and Shoreline Use

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

The project site contains a pump station consisting of a concrete dam placed across the Black River channel, with eight pumps to convey flow from the forebay behind the dam to the downstream Black River channel. Adjacent properties include a rail line, industrial buildings, and open space. The proposal will not affect this use or the uses of any adjacent property.

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?

The project site may have been used as working farmland or forest land prior to the urbanization of the Renton-Tukwila area. However, the area is not currently used for agriculture or forest production and no agricultural or forest land will be converted as a result of this proposal.

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 proposal will not affect or be affected by surrounding working farm or forest land normal business operations.

c. Describe any structures on the site.

The project site contains a pump station consisting of a concrete dam placed across the Black River channel, with eight pumps in an approximately 3-story structure located above the dam and spanning the river. A smaller building to the south houses the facility controls and emergency generator. A parking lot south of the facility contains fuel tanks, some piping, and a compressor.

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

No structures will be demolished.

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

The site is zoned Resource Conservation by the City of Renton.

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

The site is within the City of Renton’s Employment Area Valley comprehensive plan designation.

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

The shoreline designation of the Black River at the site is Natural.

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

The Black River and adjacent wetlands have been classified as critical areas by the City of Renton, and the project area lies within a designated flood hazard area.

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

No people would reside or work in the completed project.

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

The project would not displace any people.

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

No displacement impacts would occur; therefore, no mitigation measures are necessary or proposed.
1. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposal would not change or significantly affect existing or projected land uses on or near the site and is compatible with those uses and the land use plans for the site and vicinity.

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

There are no nearby agricultural or forest lands that would be affected by this proposal; therefore, no measures to ensure compatibility are proposed.

9. Housing

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

No housing units would be provided by the project.

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

No housing units would be eliminated by the project.

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

No housing impacts would occur; therefore, no measures to mitigate housing impacts are proposed.

10. Aesthetics

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

The project does not include any proposed structures.

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

The project would not permanently alter or obstruct any views. During sediment removal, construction equipment, which would likely include a crane and an excavator with clamshell, will be visible from nearby vantage points, including from vehicles along Monster Road west of the site.

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

Aesthetic impacts will be minimal and temporary, occurring only during construction. Therefore, no measures to reduce or control aesthetic impacts are proposed.
11. Light and Glare

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

      Construction activity would occur between the daylight hours of 7:00 am and 6:00 pm during the late spring-summer season. Therefore, construction and construction equipment is unlikely to generate light. Some glare may be generated from construction equipment and trucks transporting equipment to and from the site or dewatered sediment from the site.

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

      The finished project will not create any light or glare.

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

      No existing off-site sources of light or glare would affect this proposal.

   d. Describe proposed measures to reduce or control light and glare impacts, if any.

      Light and glare would be minimal and also temporary (a duration of approximately 10 weeks); therefore, measures to reduce or control light and glare impacts are not proposed.

12. Recreation

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

      The project site is located immediately adjacent to the Black River Riparian Forest, which straddles the Black River north and east of Monster Road SW. The Metro Waterworks Park is located south of Monster Road SW within about ¼ mile of the project site. Both the Black River Riparian Forest and Metro Waterworks Park provide informal and formal passive recreation opportunities. Monster Road SW is designated as a bikeway by the City of Renton.

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

      The proposed project would not displace any existing recreational uses.

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

      The proposal would not significantly impact recreation opportunities, in part because any effects would be temporary (approximately 10 weeks in duration); therefore, no measures to reduce or control impacts on recreation are proposed.
13. Historical and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

The only structures on the site are the Black River pump station and associated structures. The pump station was constructed in the 1970s and is therefore less than 45 years old. There are no buildings, structures, or sites on, or in the immediate vicinity of, the project site that are over 45 years old and eligible for or listed on national, state, or local preservation registers.

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

There are no landmarks, features, or other evidence of Indian or historic use or occupation on the project site. The King County Historic Preservation Program performed a cultural resources review in April 2014. King County and Washington State historic registers, maps, and aerial photographs were reviewed. Shovel probes were excavated on the north and southeastern side of the staging area.

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

The proposal would involve excavation of sediment transported recently (within the past several decades) into the forebay area of the BRPS. Surficial soils will be excavated to clear obstructions in the construction staging area and sediment dewatering area. The KCHPP cultural resources review determined that although the staging area has a High Probability of containing archaeological sites based on environmental and other factors, it has a Low Probability of containing intact archaeological resources because project-related ground disturbance will be entirely within artificial fill. The dredging area was determined as having a Low Probability of containing archaeological sites.

Even though the type of activities resulting from the proposal would have a low likelihood of encountering cultural resources and there are no known cultural resources on or immediately adjacent to the construction site, the project site is along the Black River near its confluence with the Green River, and the site likely experienced substantial use by Native Americans. Therefore an unanticipated discovery plan will be developed and implemented during construction. The plan will describe procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

14. Transportation

a. Identify public streets and highways serving the site and describe proposed access to the existing street system. Show on-site plans, if any.

Monster Road SW, a two-lane arterial, borders the project site on the south and would provide access to the site. Dual existing access driveways located approximately...
500 and 600 feet, respectively, east of the Monster Road bridge over the Black River, provide access to the south side of the pump station.

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

The site is not served by public transit. The nearest public transit is King County bus routes that run along SW Grady Way approximately ¾ mile southeast of the site and along SW Sunset Boulevard approximately ½ mile NW of the site.

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

The completed project would not create any additional parking spaces or eliminate any existing parking spaces.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

The proposal will not require any improvements to any public roads or streets or pedestrian, bicycle, or state transportation facilities.

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

The excavated sediment will be transferred to land for decanting and disposal by road. The project will not use rail or air transportation. A Burlington Northern Santa Fe Railway right-of-way (Woodinville Subdivision) borders the north side of the project site.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The completed project would not generate any vehicular trips. Dewatered sediment will "bulk up", and the expected final volume of dewatered sediment that will be transported from the project site is 3,600 to 5,400 cubic yards (depending on whether drying agents need to be added to the dewatering sediments). Therefore up to 540 truck trips would be generated during transport of dewatered sediment from the site. Transport of sediment may take one or two weeks. Up to about 108 truck trips per day, or up to approximately 10-11 truck trips per hour would be generated temporarily. These estimates are based on design information. In addition to these truck trips, a small number of vehicle trips per day (likely less than 20) would be generated by construction workers travelling to and from the project site.

g. Will the proposal interface 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 proposal will not interfere with, affect, or be affected by the movement of agricultural or forest products on roads or streets in the project area.
h. Proposed measures to reduce or control transportation impacts, if any:

Transportation impacts on adjacent roadways would be short-term (a duration of one to several weeks for the bulk of the vehicular traffic generated). Monster Road SW had a daily vehicle count in 2010 in excess of 10,000 vehicles, and the additional trips from this project would be up to about 1% of that daily volume. No significant transportation impacts are expected; therefore, no measures to reduce or control transportation impacts are proposed.

15. Public Services

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

The project would not result in any significant increase in the need for public services. During construction, a jobsite accident could result in the need for emergency health care services, but the increased need is unlikely to be significant.

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

No significant impacts on public services would result from the project; therefore, no measures to reduce or control public service impacts are proposed.

16. Utilities

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

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 that might be needed.

No utilities are proposed for the 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: [Signature]
Title: [Title]
Date Submitted: [Date Submitted]
# ATTACHMENT A
## GREENHOUSE GAS EMISSION CALCULATIONS

### Black River Pump Station Sediment Removal Embodied Emissions (Construction)

<table>
<thead>
<tr>
<th>HEAVY EQUIPMENT</th>
<th>Construction Duration (weeks)</th>
<th>Hours of Construction</th>
<th>Fuel consumption (gall/hr)</th>
<th>Total fuel consumption (gallons)</th>
<th>Fuel Type</th>
<th>lbs CO₂e / gallon of fuel</th>
<th>CO₂e (lbs)</th>
<th>CO₂e (metric tons)</th>
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<tbody>
<tr>
<td>Cranes (12-40 ton)</td>
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<td>1980</td>
<td>Diesel</td>
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