

PLEASE NOTE: AMENDED TEXT IS PRESENTED IN **BOLD, UNDERLINED** TYPEFACE



**King County**

## **ENVIRONMENTAL CHECKLIST ADDENDUM**

---

### **PORTER REACH RESTORATION PROJECT**

---

#### ***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.

PLEASE NOTE: AMENDED TEXT IS PRESENTED IN **BOLD, UNDERLINED** TYPEFACE

**A. BACKGROUND**

1. *Name of the proposed project, if applicable:*

PORTER REACH RESTORATION PROJECT

2. *Name of Applicant:*

King County Department of Natural Resources and Parks  
Water and Land Resources Division (WLRD)

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

Fauna Nopp, Project Manager  
King County Water and Land Resources Division  
201 South Jackson Street, Suite 600  
Seattle, WA 98104-3855  
Phone: 206-263-6319  
Fax: 206-296-0192

4. *Date checklist prepared:*

May 2016, **Amended December 2016**

5. *Agency requesting checklist:*

King County Department of Natural Resources and Parks  
Water and Land Resources Division (WLRD)

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

The project will be constructed during the summer of 2017. Planting will occur during the fall and winter of 2017/2018.

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, or expansions. Further activity is limited to maintenance and corrective actions to ensure project performance and public safety.

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

1. Porter Reach Restoration Basis of Design Report, King County Water and Land Resources Division. March 2016.

2. Porter Levee Setback Project Cultural Resources Survey, December 2013. ICF International.

3. Wetland Biology Report, Porter Levee Setback Project CIP 1114123, August 15, 2013, King County Water and Land Resources Division.

**PLEASE NOTE: AMENDED TEXT IS PRESENTED IN BOLD, UNDERLINED TYPEFACE**

4. Middle Green River Levee Setback Feasibility Study, King County Water and Land Resources Division, 2013.

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 permits or other authorizations for other proposals are currently pending.

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

- Clean Water Act Section 404 Permit (U.S. Army Corps of Engineers)
- Endangered Species Act (ESA) Section 7 Consultation (National Oceanic and Atmospheric Administration Fisheries and United States Fish and Wildlife Service)
- National Historic Preservation Act Section 106 Review
- National Pollutant Discharge Elimination System (NPDES) Permit for Construction (Washington State Department of Ecology)
- 33 USC 408 Approval to alter U.S. Army Corps of Engineers Civil Works Project
- Coastal Zone Management Consistency
- Section 401 Water Quality Certification (Washington State Department of Ecology)
- Washington Department of Fish and Wildlife Hydraulic Project Approval
- King County Clearing and Grading Permit
- Shoreline Management Substantial Development Permit Exemption (Washington State Department of Ecology)
- King County Flood Hazard Certification
- Aquatic Use Permit (Washington State Department of Natural Resources)
- Procedures for Considering Public Safety When Placing Large Wood in King County Rivers, Public Rule LUD 12-1, King County Ordinance 16581
- Approval Memo for Altering King County Park Division Properties (King County Department of Natural Resources and Parks)
- Consistency with King County Comprehensive Plan Policy R-647
- Aquatic Habitat Restoration Project Approval: King County Code 21A.24.381

11. *Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site.*

The Porter Reach Restoration Project is a proposed levee removal and setback project on the Green River (RM 34) near Highway 18 and Soos Creek (Figure 1). The rock face and toe of a 900-foot section of the Porter Levee will be removed, and the top five feet of the levee will be excavated. The upstream part of the existing levee will remain in place to deflect the river away from private property to the south. A 1,000-foot-long bioretment and a log deflector will be constructed to protect SE Green Valley Road. **Construction of the bioretment involves raising a 930-foot section of the road by approximately one to two feet so that it lies above the estimated elevation of the 100-year flood throughout the raised section. Raising the road meets multiple objectives: it reduces construction impacts to critical areas, maintains the flood containment function of an existing berm, and is likely to reduce the incidence of floodwaters in low spots along the section of raised roadway.** Bank wood clusters will be installed to roughen and harden the left bank along the Road. A 1,000-foot-long backwater channel will be created in the floodplain interior. Logjams will be built in the floodplain.

**PLEASE NOTE: AMENDED TEXT IS PRESENTED IN BOLD, UNDERLINED TYPEFACE**

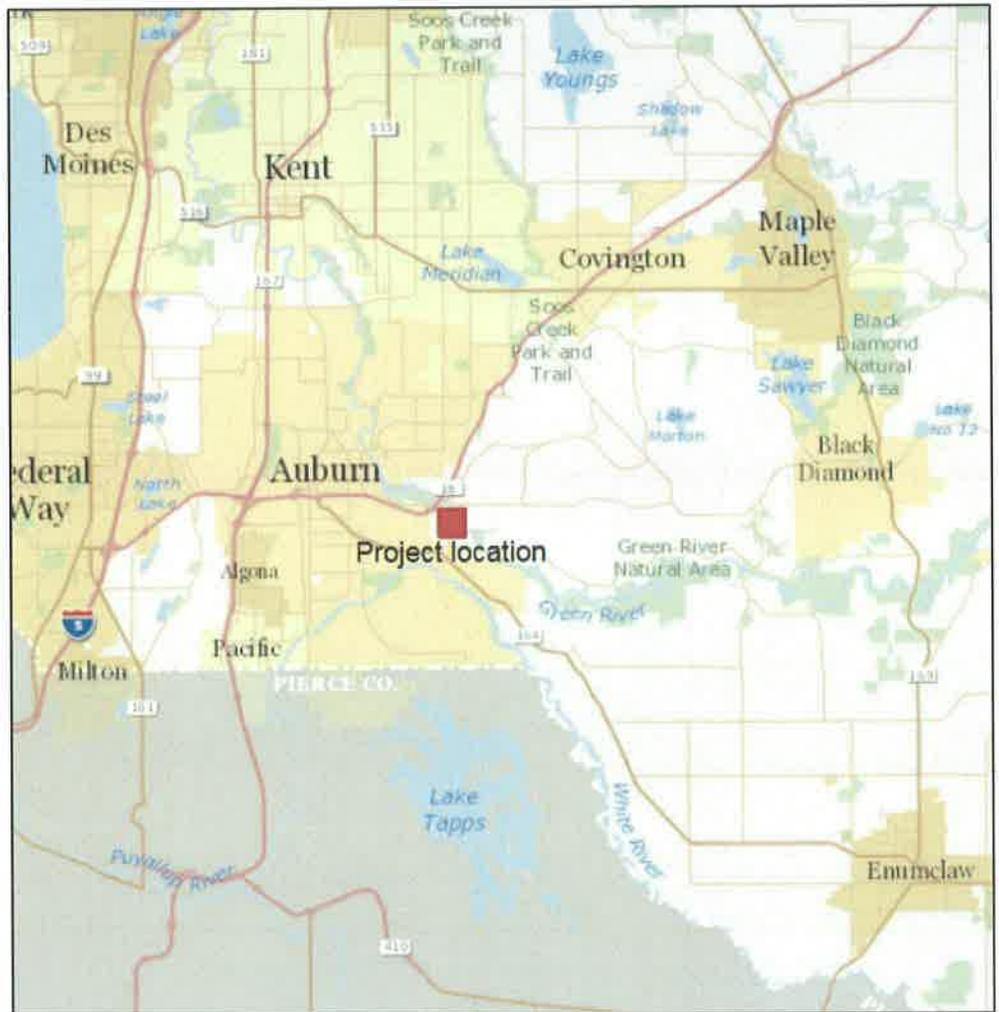
Native vegetation will be planted and snags will be installed. Weeds will be controlled. A culvert will be installed on the private property to the south to redirect drainage from the west side of the project site to the oxbow pond on the eastern side, improving flood conveyance. The goal is to improve the survival of threatened salmon and trout by allowing the river to naturally erode its banks, form logjams, scour pools, and make side channels. The project will maintain the existing level of protection to private properties, infrastructure, and roadways. The project will comply with King County large wood placement policies and ordinances.

**PLEASE NOTE: AMENDED TEXT IS PRESENTED IN BOLD, UNDERLINED TYPEFACE**

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 Porter Reach Restoration Project (Porter Project) is located in rural King County near the City of Auburn, Washington (Figure 1). The project site is on the west bank of the Green River between RM 33.5 and 34.1 in Section 21, Township 21 N and Range 5E. The site is immediately upstream from the Auburn Narrows Natural Area, Highway 18, Soos Creek on the east bank, and a boat launch/take-out on the west bank.

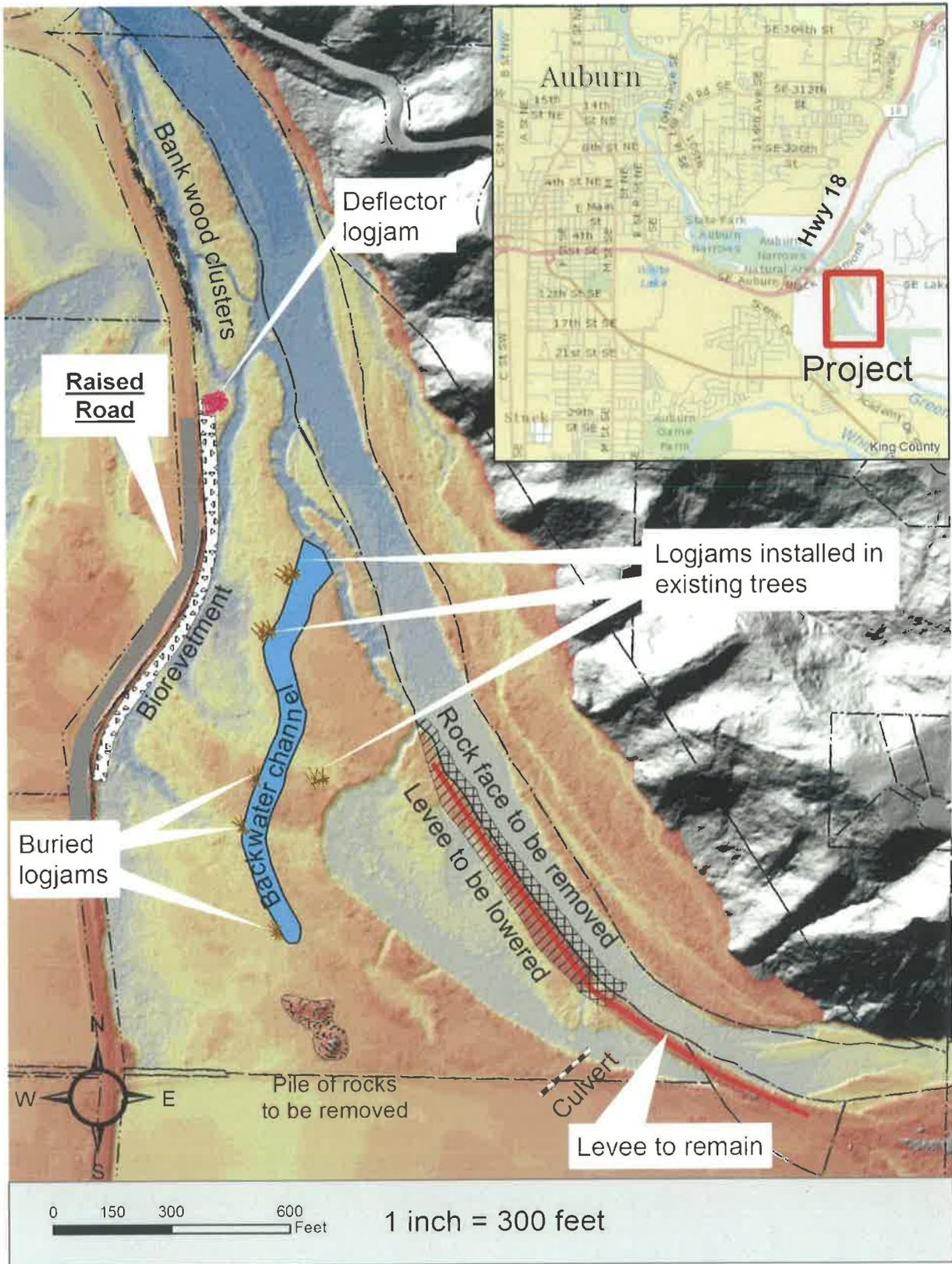
The topography of the project site is relatively flat in the valley bottom, with steep slopes of the valley wall to the northeast (Figure 2). Channels and swales are located throughout the



**Figure 1. Site and vicinity plan.**

Project features include removal of the existing levee, construction of a biorevetment **including a raised road section**, logjam installation, backwater channel construction, placement of bank wood clusters, and removal of an existing rockpile (Figure 2).

PLEASE NOTE: AMENDED TEXT IS PRESENTED IN **BOLD, UNDERLINED TYPEFACE**



PLEASE NOTE: AMENDED TEXT IS PRESENTED IN **BOLD, UNDERLINED** TYPEFACE

**Figure 2. Site plan, vicinity map, and topography plan and vicinity map. All labeled features are to be constructed or removed unless otherwise stated. Topography is represented as a digital terrain model based on LiDAR data; the upland valley walls are represented as a shaded relief map for simplicity.**

## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

- a. *General description of the site (underline one):* The project is in a flat river valley bottom.
- b. *What is the steepest slope on the site (approximate percent slope)?* 27% sideslopes on the embankment along SE Green Valley Road.
- c. *What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.*

The Porter Levee site is located in an alluvial valley incised into surrounding uplands comprised primarily of glacial deposits. Alluvial deposits of sand, silt and gravel were encountered to the depth explored in all of the borings and test pits conducted within the project area except those in close proximity to the downstream right bank valley wall. Two borings in that location encountered glacially consolidated clay at 15.5 to 17.5 feet below the surface.

Five soils types are located within the study area including Newberg silt loam, Oridia silt loam, Pilchuck loamy fine sand, Puyallup fine sandy loam, and Riverwash.

- d. *Are there surface indications or history of unstable soils in the immediate vicinity?*  
There are no indications of unstable soils.
- e. *Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of fill.*

Fill will be necessary for backfill and erosion protection. Approximately 6,100 cubic yards of angular rock fill will be used to construct the biorevetment (setback levee) along SE Green Valley Road. Angular rock will be delivered from off-site. In addition, approximately 40 boulders are needed to ballast the bank wood clusters. **Approximately 6500 cubic yards of fill will be used to raise a depressed 930-ft section of the SE Green Valley Road by approximately one to two feet.**

Approximately 37,000 cubic yards of excavation are planned for the following actions:

- To lower the top of the existing levee along an approximately 900-foot portion of its length
- To construct the 1,000-foot-long backwater channel.
- To install the buried launchable toe for the biorevetment.

An estimated 31,500 cubic yards will be hauled off-site to an approved disposal location.

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

Yes, bank erosion is a primary goal of the project, because it is a critically-important natural disturbance process that contributes to salmon habitat. Bank erosion is expected to primarily occur during and immediately after winter floods, when background turbidity and sediment loads in the river channel are normally high.

**PLEASE NOTE: AMENDED TEXT IS PRESENTED IN BOLD, UNDERLINED TYPEFACE**

Erosion from construction impacts like clearing and grading could also result, but would be minimized through the use of temporary erosion and sediment control Best Management Practices.

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

None.

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

Although channel migration and floodplain sedimentation are intended outcomes, the following practices will be used to assure that water quality is maintained during construction:

- A. Excessive channel migration will be prevented by leaving a portion of the levee core in place, for the river to gradually erode and by leaving floodplain forest as intact as possible. The placed logjams may also help to locally moderate channel migration rates.
- B. A biorevetment **and raised road section** will be constructed along Green Valley Road to contain the channel migration within the Porter Levee Natural Area and to protect infrastructure and private property.
- C. Turbidity in the river will be monitored during in-water construction work to make sure levels are within permitted limits.
- D. All necessary and appropriate erosion control Best Management Practices (BMPs) will be used during construction to limit sediment runoff from access roads, work areas, and stockpiles during rainstorms.
- E. Existing native vegetation cover will be preserved by limiting clearing to only what is necessary to implement the project; grading areas will be revegetated after grading is complete.
- F. When floods erode the streambanks, sediment will enter the river during periods of elevated background turbidity. Project-related increases in turbidity will peak in the first few floods after construction and then diminish to typical levels for unprotected river banks.

**[BREAK]**



PLEASE NOTE: AMENDED TEXT IS PRESENTED IN  TYPEFACE



Figure 3. Green River and associated aquatic features within the ordinary high water mark (OHWM).

PLEASE NOTE: AMENDED TEXT IS PRESENTED IN  TYPEFACE

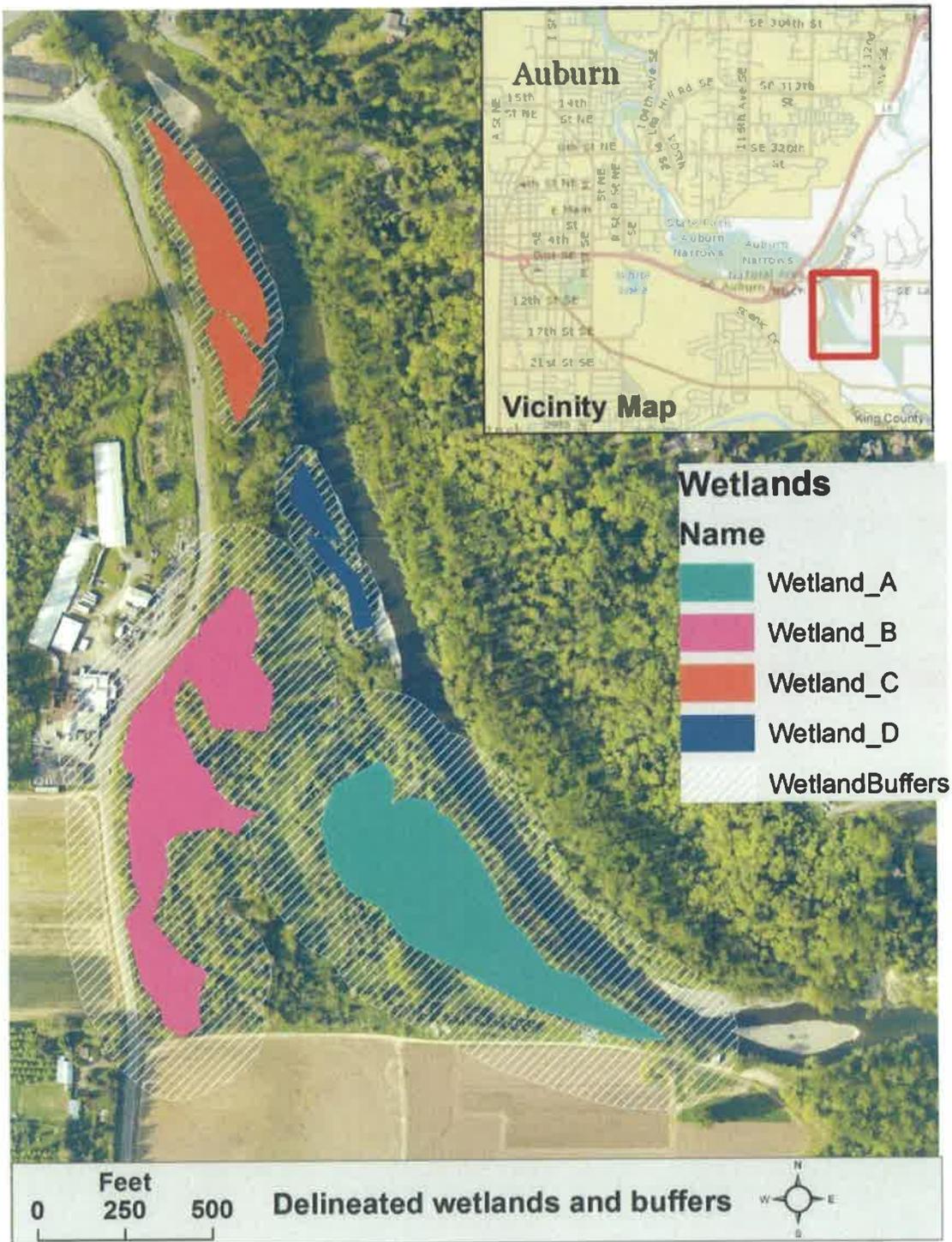


Figure 4. Delineated wetlands and buffers.

**PLEASE NOTE: AMENDED TEXT IS PRESENTED IN BOLD, UNDERLINED TYPEFACE**

- The Green River is a mainstem river (SAO Stream Class 1; WRIA Tributary 09.1030) approximately 130 feet wide in the project reach (Figure 3). A springbrook channel—formerly the mainstem river in the early 1900’s—is adjacent and parallel to the SE Green Valley Road. A springbrook channel contains channelized flow of ground water emerging from the subsurface aquifer (hyporheic zone) into flood channels (Stanford et al. 2006). The springbrook channel is associated with Wetland B, which is an oxbow pond created when the levee was built across the mainstem of the river in 1961.
- Wetland A (5.56 acres) is a Category I wetland located behind the Porter Levee on the left (west) bank of the Green River (Figure 4). It is a riverine wetland classified as palustrine forested scrub-shrub deciduous and palustrine aquatic bed. It is primarily supported by surface water. It contains an oxbow pond.
- Wetland B (5.12 acres) is a Category I wetland located in the southwest corner of the site (Figure 4). It is a riverine wetland classified as palustrine forested scrub-shrub deciduous and palustrine aquatic bed. It is primarily supported by ground water, but also a backwater channel connected to the Green River and by flood runoff through a 24-inch culvert draining fields to the south. It contains a springbrook channel.
- Wetland C (2.27 acres) is a Category III riverine wetland at the north end of the site, consisting of two patches separated by a narrow channel (Figure 4). Hydrology is supported by the river. It is classified as a palustrine scrub-shrub deciduous wetland type.
- Wetland D (1.67 acres) is a Category III riverine wetland similar to Wetland C (Figure 4).

PLEASE NOTE: AMENDED TEXT IS PRESENTED IN **BOLD, UNDERLINED TYPEFACE**

- 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, the project will require work in or adjacent to each of the described waters during summer low flow conditions (Figure 5). In-water work will last for approximately two months.

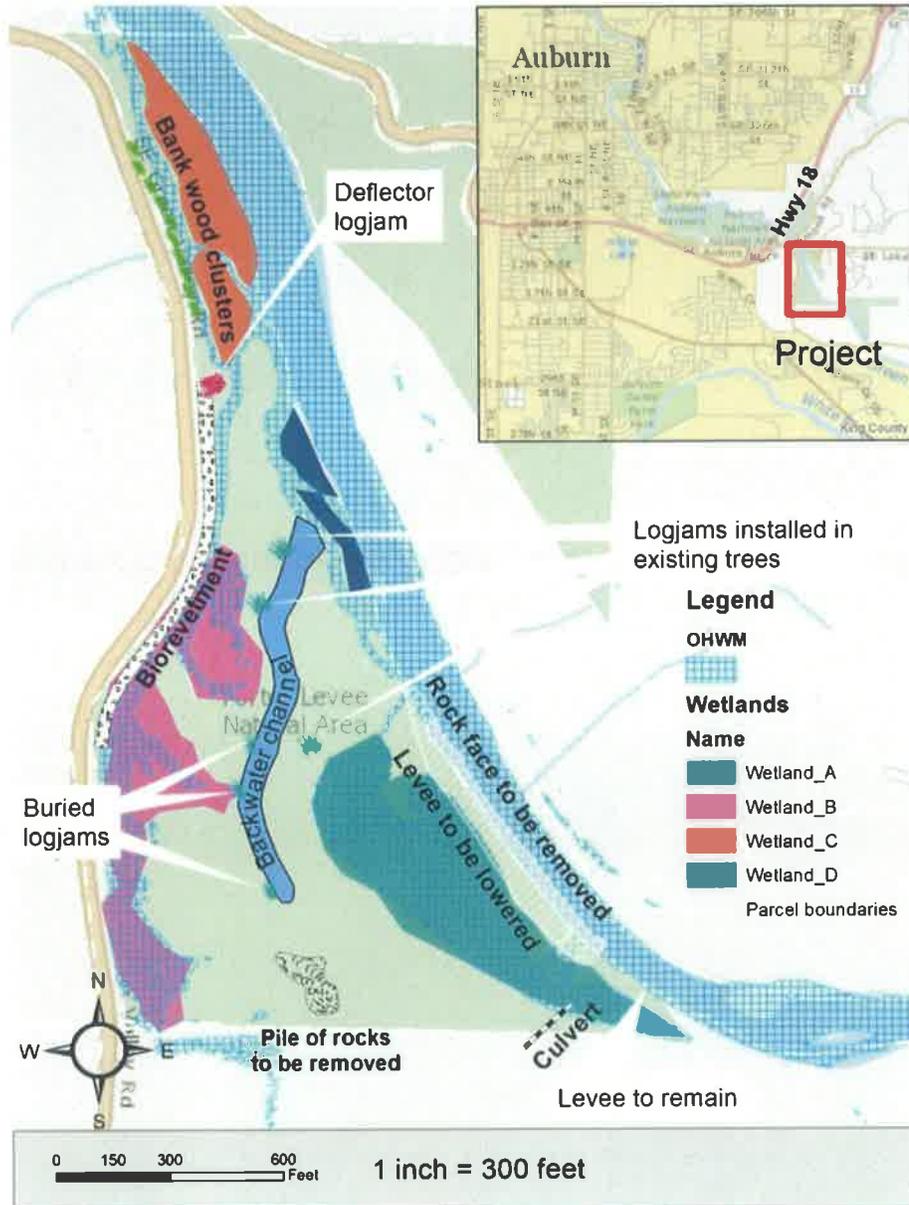


Figure 5. Proximity of work to river, oxbow pond, springbrook, and wetlands.

Tracked excavators (or similar) will be used to remove angular rock from the toe and face of the existing levee, and to remove several feet of fill from the top of the levee. This work will help to restore floodplain functions. Heavy equipment (e.g., excavators and dozers) will also be used to

**PLEASE NOTE: AMENDED TEXT IS PRESENTED IN BOLD, UNDERLINED TYPEFACE**

excavate a backwater channel in the floodplain interior, adjacent to Wetlands A, B, and D. The outlet of the channel will enter a side channel to the Green River. The backwater will expand the OHWM and create new wetland areas. King County plans to apply for a 401 Water Quality Certification from the Department of Ecology. This permit will stipulate conditions for minimizing water quality impacts from in-water work in the Green River and associated channels.

Logjams will be embedded in the floodplain below existing grade, or laced between existing trees. Three of the logjams will be embedded by excavating a hole in the floodplain, placing the wood, and backfilling to approximate existing grade. This work will occur adjacent to the river channel and wetlands, but will not require any in-water work, or wetland impacts. Placing logjams will improve the ecological function of the floodplain.

Heavy equipment will be used to construct a new biorevetment to protect Green Valley Road from flood and erosion hazards. In-water work will be required in the springbrook channel to install a launchable rock toe below existing grade. Angular rock will be placed within the ordinary high water mark (OHWM) in the springbrook channel along SE Green Valley Road, associated with Wetland B.

Bank wood clusters will be placed along the eastern edge of the Green Valley Road to deter bank erosion and avulsion. No excavation or in-water work is required. Boulders will be placed adjacent to or within OHWM of the Green River.

A deflector logjam will be built at the downstream end of the biorevetment. In-water work is required in the springbrook and backfill will be placed inside the structure, for ballast.

- 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.*

**Levee removal**

- *Fill removal from surface water or wetlands:* Approximately 3,300 cubic yards of large angular rock will be removed from the face of the existing levee over an area of approximately 17,000 square feet (0.39 acres; Figure 6).
- *Fill placement in surface water or wetlands:* None.

**Biorevetment construction**

- *Fill removal from surface water or wetlands:* Approximately 11,500 cubic yards will be excavated over an area of approximately 20,000 square feet (0.46 acres; Figure 6).
- *Fill placement in surface water or wetlands:* Approximately 5,500 cubic yards of large angular rock, much of which is a rock toe buried below the ground surface. The area affected is approximately 20,000 square feet (0.46 acres; Figure 6).

PLEASE NOTE: AMENDED TEXT IS PRESENTED IN  TYPEFACE

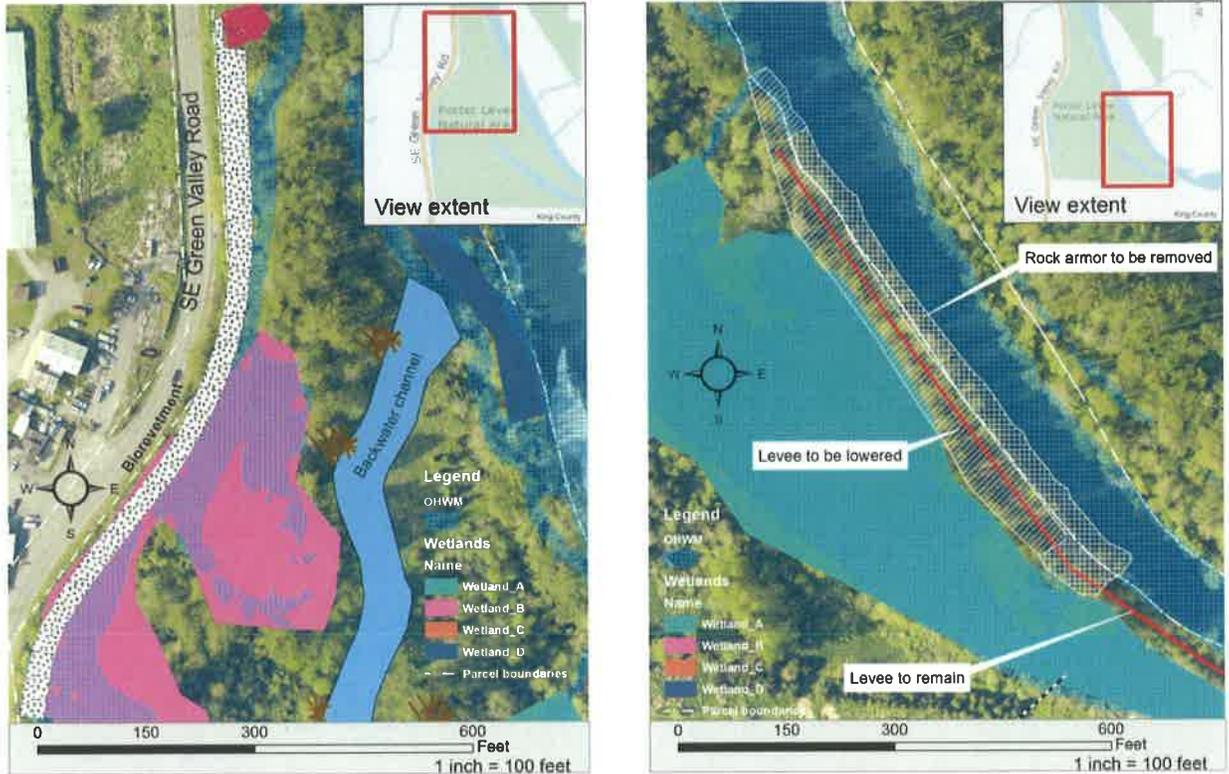


Figure 6. Close-up of areas where work will take place within, over, or adjacent to the river, oxbow pond, springbrook, or wetlands.

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

Surface water withdrawals are not anticipated, but the isolation of the work area may be required for work on the existing levee and the biorevetment along the road. For example, the Green River may need to be locally diverted away from the work site while rip-rap is being removed from the existing levee, using gravel-filled bulk bags or a turbidity curtain. In the event that turbid water needs to be pumped out and dispersed on land, screened pumps would be used to move turbid water to a stable location providing adequate dispersal or water quality improvement to prevent turbid runoff from entering wetlands or aquatic areas. Construction of the biorevetment along the SE Green Valley Road may also require isolation and temporary dewatering of the work area where the rock toe is being installed below grade. If so, bulk bags, temporary sheet piles, or similar measures would be used, in conjunction with a screened pump system.

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

Yes, the entire project is located within the 100-year floodplain of the Green 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.*

No waste material will be discharged to surface or groundwater.

**PLEASE NOTE: AMENDED TEXT IS PRESENTED IN BOLD, UNDERLINED TYPEFACE**

b. *Ground:*

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

No. This project will not withdraw from or discharge to groundwater.

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

No waste material will be discharged to groundwater.

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.*

The well-drained alluvial soils on the project site will allow most rain to infiltrate or disperse on site and limit stormwater runoff from leaving the work site. ~~No impervious surfaces will be added to the site.~~ **An existing road surface will be replaced along a 930-ft section of SE Green Valley Road raised by approximately one to two feet, in compliance with the King County 2016 Stormwater Manual.**

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

No.

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

See **Section 3a(4)** above.

Discharges of turbid water will be managed to comply with state water quality standards. Techniques include but are not limited to the following: isolating the work area from flowing water; slowing the rate of in-water work; pumping turbid water to a dispersal area; and impounding turbid water within work areas using BMP's such as booms or curtains.

**The raised road section will comply with the King County 2016 Stormwater Manual.**

[BREAK]

#### 14. Transportation

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

Access to the site is from SE Green Valley Road, immediately southwest of Highway 18 in Auburn, Washington.

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

No. The nearest transit stop is approximately two miles south of the project site in Auburn.

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

The proposed project will neither create nor eliminate any 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).*

**No. The project requires raising a 930-ft section of the SE Green Valley Road by approximately one to two feet adjacent to the biorevetment. This work will replace an existing section of road.**

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

No.

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

None.

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

Construction will probably require the temporary closure of at least one lane of SE Green Valley Road. Transportation impacts will be reduced with signage, flaggers, and similar methods to be developed in a traffic control plan.

[BREAK]

PLEASE NOTE: AMENDED TEXT IS PRESENTED IN **BOLD, UNDERLINED TYPEFACE**

**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:



Title:

John Taylor, Interim Director, WLR Division,  
DNRP

Date Submitted:

12/19/16