



King County

## ENVIRONMENTAL CHECKLIST

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# SR 169 FLOOD RISK REDUCTION PROJECT

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### *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:*

SR 169 Flood Risk Reduction 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:*

Thomas Bannister, Senior Ecologist  
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4. *Date checklist prepared:*

January 2021

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 construction is scheduled for Summer 2022.

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

No future additions or expansions are anticipated in connection with this project. Future efforts adjacent to the culvert system are expected to be reduced after vegetation has successfully established and native plantings reduce the area requiring on-going maintenance.

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

A Hydraulic Design Report (NHC April 2020), Wetland Hydroperiod Analysis (Indicator Engineering October 2020), Level A Fish Passage Barrier Assessment (The Watershed Company [TWC] April 2020), TWC November 2020 Water Quality Monitoring and Protection Plan, Abbreviated Biological Evaluation, Joint Aquatic Resources Permit Application (JARPA), Restoration Plan, and Critical Areas Report have been completed for this project. In consultation with local tribes and the US Army Corps of Engineers, King County developed an Incidental Discovery Plan (IDP) for construction of the 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.*

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 Marine Fisheries Service and US Fish and Wildlife Service)
- National Historic Preservation Act Section 106 Review
- Coastal Zone Management Consistency
- Section 401 Water Quality Certification (Washington State Department of Ecology)
- Hydraulic Project Approval (Washington Department of Fish and Wildlife)
- Clearing and Grading Permit (King County Department of Local Services – Permitting Division)
- Shoreline Substantial Development Permit or Exemption (King County Department of Local Services – Permitting Division)
- Flood Hazard Certification (King County)
- Procedures for Considering Public Safety When Placing Large Wood in King County Rivers, Public Rule LUD 12-1, King County Ordinance 16581
- King County Parks Partnership Permit (King County Parks Division)

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

The project will replace culverts under SR-169 and King County's Cedar River Trail to provide fish passage and alleviate localized flooding issues along the highway between Renton and Maple Valley, Washington. The existing culverts, which consist of a series of three 18-inch pre-cast concrete culverts, convey flow to the northeast under SR-169, then to the northwest between SR-169 and Cedar River Trail, and again to the northeast under the Cedar River Trail. These culverts are undersized, creating a fish passage barrier and stream constriction which impounds local runoff during high-rainfall events. During these events, the impounded runoff can ultimately result in localized flooding of SR-169, necessitating closure of the highway. Closure of the highway occurred most recently in early February 2020 for a period of about five days.

The proposed replacement culverts, consisting of two box culverts (6'4" height x 15' width x 100' total length) placed in line with one another, will allow for unrestricted stream flow as Stream ABC passes under SR-169 and the Cedar River Trail. The increased culvert size will eliminate the existing fish passage barrier, providing unimpeded access to upstream habitat.

While the current culvert configuration is dog-legged and includes a culvert running between SR-169 and the Cedar River Trail, the proposed in-line configuration will allow for approximately 60 feet of the additional stream length to be daylighted. Rather than directing flow between the two parallel prisms of SR-169 and the Cedar River Trail, flow will be directed straight through both prisms. Downstream of the Cedar River Trail, a new segment of stream channel will be created. While the construction of this new stream segment will necessitate the removal of several trees, the banks of this segment will be replanted with native vegetation and will have large wood placed along the banks. The removed trees will be repurposed as large wood in the stream channel.

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.*

SR-169 and Cedar River Trail, approximately ¼ mile northwest of Cedar Grove Road SE, near Cedar River, Rivermile 11.1, Maple Valley, WA 98038; parcel number 3223069023; 47.440707 N lat/ - 122.070103 W long; NW S32, T23N, R6E; Legal Description: C P S R/W OVER E 3/4 OF SEC

## **B. ENVIRONMENTAL ELEMENTS**

### **1. Earth**

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

Cedar River floodplain exist on both sides of the SR-169 and the Cedar River Trail fill prisms. Because of the highway, this area is heavily developed and disturbed.

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

Other than short shoulder slopes of the fill prisms, most of the project area in the historic Cedar River floodplain is relatively flat. Slopes approaching or exceeding 40% are found approximately 400 feet west of the project work area.

- 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 soil in the project area is mapped as Sultan silt loam. Agricultural land does not occur within the project area, nor does the project propose removing or otherwise impacting agricultural soils.

- d. *Are there surface indications or history of unstable soils in the immediate vicinity?*

Soils on the hillslope to the southwest and west of the project area were mapped by the County as having erosion (1990 iMap data), steep slope, and landslide hazards (2016 iMap data). The erosion hazard area is mapped approximately 475 feet southwest of the project area; the steep slope hazard, 475 feet to the west; and the landslide hazard, 175 feet to the southwest. The entire project area is within a seismic hazard area as well.

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

Approximately 7,007 square feet (SF) of wetland, stream, and buffer habitat will be temporarily impacted due to culvert and stream channel excavation, resulting in 15 SF of temporary impacts to Wetland A. Unsuitable materials will be disposed of appropriately off site; native materials may be used for culvert backfill. In addition to this, 1,763 SF of permanent and beneficial impacts will occur associated with the culvert replacement and stream enhancement: stream impacts (2 SF), buffer to stream conversion (1,116 SF), stream buffer impacts (621 SF), and wetland buffer impacts (24 SF).

Fill includes 710 CY of stream sediment in the culverts and channel of Stream ABC and placement of large woody debris within the riparian area to enhance wetland/stream habitat

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

Erosion is possible during construction of the project. This erosion will be avoided, minimized and managed with deployment of necessary Best Management Practices (BMPs) detailed in the Temporary Erosion and Sediment Control (TESC) plan for the project. Long term erosion and deposition within the restored stream channel are expected and desirable outcomes of the project. The purpose of the project is to restore habitat-forming processes, including the erosion and deposition of alluvial sediments and organic debris.

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

The project will restore approximately 5,300 square feet of existing roadway and trail surfaces. No new impervious surface is proposed.

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

TESC measures will be deployed, such as installing silt fences and covering exposed soils as necessary to prevent any silt-laden water from reaching surface waters. BMPs will be followed in accordance with the 2016 King County Surface Water Design Manual and permit conditions for the full duration of the project. In-stream work will coincide with low baseflows and only occur within the allowable fish window. The streams may be dry during construction, however, plans are in place to bypass stream flows around the work area, if needed. Placement of composted mulch over disturbed areas will occur immediately after construction, followed by the installation of native vegetation.

## **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, air quality impacts and dust generation from heavy equipment and construction vehicle emissions would be temporary and rapidly dissipated. After project completion, no further impacts to air will occur. Emergency maintenance of the existing and chronically failing culverts will be eliminated. Therefore, this project projects to reduce overall air emissions. The Greenhouse Gas (GHG) Emissions Worksheet is attached to the end of this checklist.

- 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 the air, if any:*

Construction will be performed in accordance with the regulations of the Puget Sound Clean Air Agency. Clearing of vegetation will be minimized. Disturbed areas will be replanted with native vegetation where appropriate. Construction engines will not idle unnecessarily and will be kept in proper working order with all filters and other emission control devices functional.

### 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.*

Two wetlands, Wetlands A and B, were identified and delineated within the project area. The two wetlands, located west of SR-169, were likely one wetland unit historically. A gravel driveway and associated culvert now separate the two units. A berm separates portions of the two wetland areas from a road-side ditch that parallels SR-169; the ditch conveys stormwater runoff and natural stream flows.

Three streams, Streams A, B, and C, were identified and delineated west of SR-169. Stream A flows through the eastern portion of Wetland B, and Stream B flows through the western portion of Wetland A. While an open channel segment was not observed for Stream C, previous investigations concluded that it is conveyed via a roadside drainage system and discharges into Wetland A before it converges with Streams A and B before flowing under SR-169 as Stream ABC through a series of culverts and catch basins. Stream ABC flows north and discharges into the Cedar River after approximately 120 feet. Streams A, B, C, and ABC are mapped as Type N per DNR FPARS mapping. However, fish have been observed in Streams A and ABC; therefore, they are classified as Type F. The Cedar River is mapped as a Type S water, a shoreline of the state.

- 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 proposed work takes place mainly within Stream ABC, and to a lesser degree, Wetland A and Streams A, B, and C. To better allow Stream ABC to provide flow conveyance and fish passage within the project area, two 18-inch pipe culverts will be replaced with larger, 15-foot-wide box culverts, daylighting more of Stream ABC and creating more habitat (see the JARPA and Restoration Plans for more details). Impacted areas will be regraded and replanted with native vegetation.

- 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.*

Approximately 7,007 SF of wetland, stream, and buffer habitat will be temporarily impacted due to culvert installation and stream channel enhancement, resulting in 15 SF of impacts to Wetland A. Unsuitable materials will be disposed of appropriately off site; native materials may be used for culvert backfill. In addition to this, 1,763 SF of permanent impacts will occur: stream impacts (2 SF), buffer to stream conversion (1,116 SF), stream buffer impacts (621 SF), and wetland buffer impacts (24 SF). Fill includes 710 CY of stream sediment in the culverts and channel of Stream ABC and placement of large woody debris within the riparian area to enhance wetland/stream habitat. Fill material will be sourced from a local aggregate yard

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

Water from Stream ABC will be temporarily diverted through a bypass system so that in-stream work can be conducted with reduced potential impact to fish species, if present. Construction will include a temporary bypass of storm and surface water around the site to isolate the in-water work area as the two culverts are installed and Stream ABC's channel is enhanced. Work is planned in

stages, where standard heavy equipment such as an excavator and dump trucks will be used. The bypass will include components such as pumps, fish screens, and berms. Much of the work is anticipated to occur below the water table, and dewatering will be required in order to install the two culverts.

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

Portions of the project are within the 100-year floodplain of the Cedar 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.

b. *Ground Water:*

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

The contractor may elect to dewater excavations by pumping groundwater during construction. Shallow groundwater, the levels of which are directly related to those in the adjacent Cedar River, may be pumped out of the active construction area to facilitate excavation and to protect water quality. This will be limited to the immediate project area and for short durations that are not expected to affect deeper groundwater conditions or drinking water wells. Any groundwater discharged to the adjacent Cedar River will maintain State water quality standards. There will be no discharges 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.*

No excess runoff will result from the proposed project. Stream water will be diverted around the work area using a pumped bypass system. Water collected within the work area is expected to infiltrate; however, if silt-laden water collects within the work area, it will be pumped to a tank-based stormwater treatment system prior to being discharged to Stream ABC.

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

No.

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

The proposed project will enlarge stream channels in the project area to allow for uninterrupted flow in and out of the project area to reduce flooding occurrences and increase fish passage.

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

Discharge of turbid water will be managed to maintain Washington State Water Quality Standards by implementation of the TESC project plan as described above.

#### 4. Plants

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

- Deciduous trees: alder, maple, aspen, other: black cottonwood
- Evergreen trees: fir, cedar, pine, other:
- Shrubs: willow, dogwood, twinberry, salmonberry, snowberry, non-native: blackberry,
- Grass:
- Pasture:
- Crop or grain:
- Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other:non-native: 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 9,000 square feet of vegetation (e.g., Himalayan blackberry, red alder, and grasses) will be impacted due to culvert installation and stream enhancement.

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

There are no threatened or endangered plant species known to exist on the site. The Washington Department of Natural Resources' (DNR) Natural Heritage Information System Priority Habitat and Species and Washington Wetlands of High Conservation Value maps (accessed January 2021) indicated no rare or threatened species are found within or near the project site.

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

- During construction: Clearing limits will be flagged or fenced off to reduce risk of inadvertent clearing of native vegetation.
- Post-construction: Temporarily disturbed areas will be revegetated with native plants following construction to stabilize the site and enhance existing plant communities.



## 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: sculpin, stickleback, suckers, dace

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

Fish: Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*Oncorhynchus mykiss*) and bull trout (*Salvelinus confluentus*) are mapped as potentially present in the Cedar River and are currently listed as Threatened species under the Endangered Species Act (ESA). Coho salmon (*O. kisutch*), currently a species of concern under the ESA, are also present in the Cedar River.

Wildlife: No threatened or endangered wildlife species are known to be on or near the project site.

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

Yes. Numerous salmonid species, including Chinook and steelhead trout use the Cedar River to migrate upstream to spawning grounds and downstream as smolts to Puget Sound and the Pacific Ocean.

The site is also located on the Pacific Flyway and is used by waterfowl and other migratory bird species.

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

The project is intended to enhance spawning and rearing opportunities for resident and anadromous fish. Prior to construction, fish will be removed from the work area. King County will conduct bird nest surveys prior to clearing and grading. Noxious weeds will be removed and disturbed areas will be restored to existing conditions or better.

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

None.

## 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.*

None. The completed project will require no energy.

- 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:*

Not applicable as the finished project will have no energy demand.

## 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.*

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

There is no known contamination at the site.

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

There are no known hazardous chemicals or conditions at the project site.

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.*

Hydraulic fluid and fuel will be used to operate heavy equipment during construction. All equipment will be maintained in proper working order to prevent leaks and spills. Any fuel stored on site will be kept off the surface of the ground and sheltered from the elements.

4) *Describe special emergency services that might be required.*

None.

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

Excavators and other heavy equipment working within the project area will use a vegetable-based hydraulic fluid. All equipment will be inspected on a daily basis to determine if there are leaking seals or gaskets that require replacement. Maintenance and refueling of equipment will be completed in designated areas set up to prevent release of oil, gas, or other pollutants into the stream or wetlands. Appropriate containment and spill response materials will be present on the site to ensure crews are well prepared to deal with any accidental spills.

b. Noise:

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

Heavy traffic from SR 169 is in the project area, but the traffic noise will not affect this 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.*

Heavy equipment operation associated with construction of the project will cause temporary noise increases. However, most of the construction activities are within baseline levels of the existing traffic noise at the site. Heavy equipment operation will include earth moving equipment, haul trucks, and vibratory pile drivers.

The completed project will not change existing noise levels.

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

Construction activities will comply with the provisions of the King County Noise Ordinance (Ordinance No. 3139).

## 8. Land and Shoreline Use

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

The current project area is used as a public trail and state highway. Adjacent properties consist primarily of single-family residences. The project will not affect current land uses.

b. *Has the site been used for agriculture? If so, describe.*  
No.

c. *Describe any structures on the site.*

The project site is currently developed as a state highway and paved recreational trail, which run parallel to each other. Stream ABC flows under both of these prisms through a series of three 18-inch pre-cast concrete culverts. Non-standard catch basins occur as transitions between each of the three culverts. A triplet of 12-inch line corrugated PolyEthylene pipes were also recently placed as a measure to relieve flooding at the Cedar River Trail. A Verizon fiber optic cable runs approximately five feet below and parallel to the Cedar River Trail. A 12-inch ductile iron leachate pipe and CenturyLink cable run approximately four feet below ground and along the southwestern boundary of SR-169 (see Sheet 15 of the project plans). An existing revetment known as Cedar River Trail 6 protects the east edge of the trail in the project vicinity. No other structures are present within the construction footprint.

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

The existing culvert under SR 169 will be removed.

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

The project site is located in the SAR 169 and Cedar River Trail right-of-ways and is not zoned. Adjacent areas are currently zoned as RA-10, rural area with one dwelling unit per 10 acres.

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

The adjacent area is currently zoned as Rural Area 2.5-10 acres per dwelling unit.

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

The site is mapped as Rural Shoreline.

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

The site are considered seismic hazard areas, erosion hazard areas, and within the 100-year floodplain of the Cedar River. The Cedar River is part of a wildlife network and is designated a Type S aquatic area under the King County Critical Areas Ordinance (CAO). The Watershed Company (TWC), delineated wetlands and streams within the project boundaries.

- i. *Approximately how many people would reside or work in the completed project?*  
None.
- j. *Approximately how many people would the completed project displace?*  
None.
- k. *Proposed measures to avoid or reduce displacement impacts, if any:*  
Not applicable.
- l. *Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:*  
The proposed project will not impact existing land use.
- m. *Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:*  
The proposed project will not affect agricultural or forest lands.

## **9. Housing**

- a. *Approximately how many units would be provided, if any? Indicate whether high-, middle-, or low-income housing.*  
None.
- b. *Approximately how many units, if any, would be eliminated? Indicate whether high-, middle-, or low-income housing.*  
None.
- c. *Proposed measures to reduce or control housing impacts, if any:*  
Does not apply.

## **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?*  
No above-ground structures are proposed.
- b. *What views in the immediate vicinity would be altered or obstructed?*  
None.
- c. *Proposed measures to reduce or control aesthetic impacts, if any:*  
Not applicable, no new structures 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?*

None.

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

No.

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

None.

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

Not applicable, no light or glare impacts associated with project.

## 12. Recreation

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

The Cedar River Trail is recreational feature that runs through the project area. Several parks and natural areas are in the greater vicinity. The adjacent Cedar River is regularly used by recreational boaters. Tubers, drift boats, canoes and kayaks are common in this reach.

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

The proposed project will temporarily displace recreational uses of the Cedar River Trail during construction activities

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

The Cedar River Trail will be temporarily blocked during project construction activities to ensure public safety. Implementation of the proposed project will maintain recreational uses in the project vicinity.

## 13. Historical 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? If so, specifically describe.*

According to King County's Historic Preservation Program (KCHPP), the Cedar River Trail occupies the historic Columbia & Puget Sound railway grade which has been recorded as a historical archeological site. The Washington State Department of Archeology and Historic Preservation (DAHP) has determined that the site is not eligible listing in the National Register of Historic Places. The project maintains the integrity of the railway prism and KCHPP is coordinating with the USACE and DAHP. KCHPP developed an inadvertent discovery plan for the project.

- 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.*

According to KCHPP, the project area contains no known evidence of Coastal Salish use or occupation. The site is located within areas historically occupied by the Cedar River. As such, intact artifacts are unlikely to be present in the project area. KCHPP developed an inadvertent discovery plan (IDP) for the project.

- 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.*

The King County Historic Preservation Program did an initial review of known cultural and historic resources in or near the project site in 2019.

- 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.*

King County developed the IDP for the project and will be updated as necessary prior to construction. Construction crews will be briefed on the possibility of discovery of cultural resources during construction and on the procedures to follow should such an event occur. On-site, check-in, or on-call archeological monitoring will be undertaken during construction for certain project elements as described in the IDP. If at any time cultural or archaeological resources are uncovered or encountered during project construction, work will cease immediately and appropriate steps necessary to protect those resources will be taken prior to resuming construction. Details are outlined in the IDP including the chain of notification if resources are discovered.

The project requires permitting from the U.S. Army Corps of Engineers and is therefore considered a federal undertaking subject to Section 106 of the National Historic Preservation Act of 1966 as amended. Under Section 106, agencies involved in a federal undertaking must take into account the undertakings potential effects to historic properties within the defined area of potential effects.

## **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.*

SR 169 is within the project site and will be subject to a weekend closure to install the new culvert.

- 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?*

There are bus stops on SR-169 approximately 0.25 miles to the northwest and southeast of the project area.

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

No additional parking spaces will be created as part of the project.

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 project proposes restoration to SR-169 and the Cedar River Trail associated with culvert improvements. No other transportation improvements are required.

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?*

None.

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.

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

Construction will require the temporary closure of SR 169. Transportation impacts will be reduced with detours, signage, flaggers, and similar methods in the project traffic control plan.

## 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.*

No.

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

Not applicable.

## 16. Utilities

a. *Underline utilities currently available at the site:*

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

CenturyLink and Verizon cables; and a King County Solid Waste leachate line pass through project area.

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 as part of this 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: Thomas Bannister

Position and Agency/Organization: Senior Ecologist, King County Dept of Natural Resources & Parks

Date Submitted: January 11, 2021



Greenhouse Gas (GHG) Emissions Worksheet

**Project Name: SR 169 Flood Risk Reduction Project**

Project Manager: Tracy Winjum

Assessment Completed by: Thomas Bannister

Date of completion: 12/7/2020

Project Description: Upgrade culverts under CedarRiver Trail and SR 169 to reduce flooding risk and remove fish passage barriers.

**Construction-related Greenhouse Gas Emissions**

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	<u>Pounds</u>	<u>Metric tons</u>
Emissions from fuel-burning activities (in CO2e):	70331.546	31.910865
Emissions from embedded materials (in CO2e):	4415875	2003.57305
Emissions resulting from site impacts (in CO2e):		
<b>Total Emissions (in CO2e):</b>	<b>4486207</b>	<b>2035.484</b>

**Project-Related Carbon Sequestration**

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	<u>Pounds</u>	<u>Metric tons</u>
Total Carbon Sequestration 35 years after planting:	9008.56	4.08736842