



King County

ENVIRONMENTAL CHECKLIST

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:*

Derby Creek Restoration Project

2. *Name of Applicant:*

**King County Department of Natural Resources and Parks
Parks and Recreation Division**

Seattle Public Utilities

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

**King County Parks and Recreation Division
201 South Jackson Street, Suite 700
Seattle, WA 98104-3855
Phone: 206-296-2990
Fax: 206-296-8686**

**Seattle Public Utilities
700 5th Ave., Suite 4900, P.O. Box 340-18
Seattle, WA 98124-4018
Phone: 206-233-1516**

4. *Date checklist prepared:*

May 2011

5. *Agency requesting checklist:*

**King County Department of Natural Resources and Parks
Parks and Recreation Division**

Seattle Public Utilities

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

Work will occur within the allowable fish window after a permit is issued. The proposed schedule is to begin in August 2011

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

No

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

Critical Areas Report and Conceptual Restoration Plan – King County Enforcement Case #e08G0443, Northshore Athletic Fields Corporation (Talasaea Consultants, 2009)

Conceptual Mitigation Plan for the 140th Place/148th Avenue Northeast Road Widening, King County, WA. Project #101091 (King County, Surface Water Management (now Water and Land Resources), 1994).

Stream Special Study for the 140th Place Northeast/148th Avenue Northeast Road Widening Project. (King County WLRD, 1993)

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.*

NA

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

King County Clearing and Grading Permit, Washington Department of Fish and Wildlife - Hydraulic Project Approval, US Army Corp of Engineers - Nationwide 404 Permit

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.)*

This restoration project would relocate and restore approximately 400 feet of Derby Creek and reconnect it with its historic downstream channel which flows into the Sammamish River. The stream will be realigned, dredged, cleaned of reed canarygrass, and contoured to maximize flow through the area. There will also be several pieces of large woody debris placed in the channel. The excavated channel material will be used to create raised hummocks. The project will also be designed to allow flood flows to carry sediment within a flood plain. Because these raised hummocks will be drier, they will then support and be planted with woody vegetation, such as willows, spruce, cedars and cottonwoods. The woody vegetation will greatly improve the structure and diversity of the wetland habitat. Native woody vegetation will be planted along the new channel to increase shading by increasing the diversity and height of streamside vegetation. Native vegetation will also be planted in the wetland to improve aquatic habitat and to increase shade.

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 will occur on two parcels in unincorporated King County. Both are located north of NE 145th Street, west of 148th Avenue NE, east of the Sammamish River and south of the Tolt Pipeline (refer to attached map). King County Parks owns the western parcel; and Seattle Public Utilities (SPU) owns the eastern parcel. Seven baseball fields occupy a portion of the King County Parks parcel and that site is managed by the Northshore Athletic Fields Corporation. The remaining area of the western parcel and the area of the eastern parcel are relatively undeveloped. The western parcel's tax identification number is 1526059070, and the eastern parcel's tax identification number is 1526059055. They are both located in the SE ¼ of Section 15, T26N, R5E. The two parcels total approximately 32.5 acres in area.

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

Flat

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

Less than 5%; site is generally flat.

- 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 are mapped by the Natural Resources Conservation Service (NRCS) as Earlmont silt loam, Everett gravelly sandy loam, 0 – 5 percent slopes, Snohomish silt loam, thick surface variant, and Tukwila muck. The National Technical Committee on Hydric Soils includes the Earlmont, and Tukwila soil series on the King County Area, Washington State hydric soils list.

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

No, none known.

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

The stream restoration project will grade a 400 foot long stream channel for Derby Creek. The average low-flow channel will be approximately 5-feet wide, with side slopes having no greater than a 2:1 slope. The stream channel will be approximately 15 feet in width. This will involve excavating approximately 195 cubic yards of material and depositing it on site in a series of hummocks approximately 1 to 2 feet above the existing grade. The excavated material will be placed in DeltaLoc bags and used to stabilize the bends of the stream in a few areas. This will be used instead of rock for bank protection. The existing channel will remain open as a ditch line along the Tolt-Pipeline. Seattle Public Utilities will continue to maintain this.

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

Erosion control measures, including delineation of clearing limits and placement of silt fences, will be in place on the project site prior to beginning the restoration plan. Derby creek will be diverted around the construction area. Erosion could occur as a result of clearing and grading but the site will be monitored and best management practices will be implemented to prevent any potential erosion.

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

No additional impervious surfaces are proposed.

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

Silt fences, straw bales, plastic sheeting, and other best management practices will be used as necessary during construction to mitigate erosion impacts. BMPs used during construction will be in accordance with the current edition of the Stormwater Management Manual for Western Washington (Washington State Department of Ecology, 2005).

2. Air

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

BMPs will be used to minimize and control dust during construction. The completed project will have no emissions.

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

None known.

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

Dust control measures, such as wetting exposed soils will be implemented as necessary during construction.

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 parcel is located east of the Sammamish River. Two Type F streams (Stream 1 and Stream 2) are located on the project site. The Stream 1 channel (also known as Derby Creek) originates east of 148th Avenue NE. This stream channel shows evidence of recent alterations. Currently, the Derby Creek (Stream 1) channel flows under 148th Avenue NE through a box culvert, is routed north to the Tolt Pipeline Trail, flows in a linear direction adjacent to the southern border of the Tolt Pipeline Trail, and discharges to the Sammamish River through a large-diameter corrugated metal pipe. The second stream channel (Stream 2) is a remnant of the former Derby Creek channel. Stream 2 originates on the subject property in the vicinity of the east central material storage area. Stream 2 receives hydrology from direct precipitation, surface flows, and a high groundwater table. Stream 2 also discharges to the Sammamish River through a large-diameter corrugated metal pipe. Evidence of the origins of the former abandoned Derby Creek (Stream 2) channel was noted at the eastern property boundary. The streams are surrounded by a Category II wetland (palustrine emergent) that is covered primarily by reed canarygrass.

- 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 stream restoration project will grade a 400 foot long stream channel for Derby Creek. This will involve excavating approximately 195 cubic yards of material and depositing it on site in a series of hummocks approximately 1 to 2 feet above the existing grade. Derby Creek will be diverted as it enters the property around the construction zone. Some of the excavated material will be placed in DeltaLoc bags and used to stabilize the bends of the stream in a few areas. This will be used instead of rock for bank protection, and will allow plants

to be planted that will grow through them. In addition, sediment material deposited in Derby Creek filling the box culvert across 148th Ave. NE in December 2009 could be used to provide gravel for the stream channel.

- 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.*

There will be approximately 195 cubic yards of material removed from the proposal stream alignment that will be deposited in hummocks on site to create more diversity of habitat in the surrounding wetland.

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

Yes, the existing Derby Creek channel has recently moved during the December 2010 storm event to include the proposed location, so the flow of Derby Creek, about 150 feet of length, will temporarily need to be diverted in a pipe during the construction period to allow the new stream channel to be constructed in this area. Timing of the diversion will be timed to be completed with stream work upstream of this project by King County Department of Transportation.

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

The entire project will be located within the 100-year floodplain of Derby Creek. This project will benefit the flow pattern of Derby Creek by keeping a majority of the flow in a channel during flood flows, while not reducing the floodplain storage of the creek. No fill will be brought into the site. The project is located about 600 feet from the Sammamish River and outside the 100-year floodplain of the Sammamish 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

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

- 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.

NA

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.*

Any storm water runoff generated in the project area will be discharged into the new alignment of Derby Creek. During construction, Derby Creek will be diverted as it enters the property around the construction zone to limit any sediment from getting into the stream.

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

County standards for construction will be followed during the construction process, including best management practices (BMPs) such as the use of silt fences, siltation traps, and other temporary erosion prevention measures.

An intergraded pest management protocol will be used for treatment of the reed canarygrass. It will be mowed first to greatly reduce the volume of material to be treated. The remaining reed canarygrass area after the new stream channel is constructed and outside of the channel area will be treated with an aquatic approved glyphosate in a 2% solution in early fall. This solution is approved for application in wetlands and will be applied by staff that has an aquatic herbicide certification license. There should be no runoff of this material outside the project area or into Derby Creek.

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

Silt fences, straw bales, plastic sheeting, and other best management practices will be used as necessary during construction to mitigate erosion impacts. BMPs used during construction will be in accordance with the current edition of the Stormwater Management Manual for Western Washington (Washington State Department of Ecology, 2005).

4. Plants

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

- Deciduous trees: alder, maple, aspen, other
 Evergreen trees: fir, cedar, pine, other
 Shrubs
 Grass
 Pasture
 Crop or grain
 Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other – **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?

Reed canarygrass (*Phalaris arundinacea*) will be removed over 5,000 sq feet and 25,000 square feet will be treated with an herbicide to control the reed canarygrass during the first season. The wetland will be enhanced by planting approximately 3,000 willow and black cottonwood stakes, with a diversity of other wetland species (i.e. cedar, Sitka spruce, red-osier dogwood, ninebark, and twinberry) on the hummocks.

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

No known threatened or endangered plant species are found in the project area.

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

A total of 25,000 sf of wetland and wetland and stream buffer restoration area will be planted with site-appropriate native species, and habitat features will be provided where appropriate, including placement of large woody debris in the channel.

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 fall Chinook salmon (Federally Threatened), Puget Sound bull trout (Federally Threatened), coho Salmon (Federal Species of Concern), and Puget Sound winter steelhead trout (Federally Threatened) are identified in the Sammamish River, west of the project site. Fish in the Sammamish River only have access to Derby Creek during high flood flows through large-diameter corrugated metal pipes located at the outfall of these streams into the Sammamish River. These culverts are typically about 6 feet above the water level of the Sammamish River.

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

Not known.

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

Approximately 25,000 square feet of reed canarygrass will be treated or removed (where the new stream channel is located) and replaced with a diversity of native plants (See plant section).

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.*

NA

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:*

NA

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.*

No

- 1) *Describe special emergency services that might be required.*
None anticipated.
 - 2) *Proposed measures to reduce or control environmental health hazards, if any:*
NA
- b. Noise:
- 1) *What types of noise exist in the area that may affect your project (for example, traffic, equipment, operation, other)?*
None
 - 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.*
Some noise may occur during construction of restoration areas resulting from equipment operation. Equipment would be operated during daylight hours, after 7am and before 7pm.
 - 3) *Proposed measures to reduce or control noise impacts, if any:*
The project will adhere to King County noise standards.

8. Land and Shoreline Use

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

Recreational baseball fields are located on the property, south of the proposed project. The Tolt Pipeline Trail and utility is located north of the proposed project. Properties north of the Tolt Pipeline Trail consist of single-family residential homes and agricultural uses. Properties to the east are single-family residential and commercial uses. South of the subject property are commercial properties. The Sammamish River Trail and Sammamish River are located west of the western property boundary.

- b. *Has the site been used for agriculture? If so, describe.*

Yes, the site was used for agriculture prior to development of the adjacent baseball fields.

c. Describe any structures on the site.

There is a barb wire fence along the property boundary between SPU and King County Parks properties.

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

A section of this fence will be removed for construction of the restored Derby Creek.

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

A-10

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

Agriculture

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

Rural

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

Yes, one Category II wetland and two stream corridors are identified in the project area. This project is to enhance and restore these resources.

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:

NA

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

The proposed restoration plan will support land use and development consistent with that adopted by the King County Comprehensive Plan.

9. Housing

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

NA

- 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:*

NA

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?*

NA

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

From the pipeline trail or the ball fields the site will be observed to have native trees and shrubs growing where there is now reed canarygrass.

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

NA

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?*

NA

- 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.*

NA

12. Recreation

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

A portion of the property contains seven baseball fields operated by the non-profit organization NAFCO (Northshore Athletic Fields Corporation). The Tolt Pipeline Trail is located on the north side of the property.

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

No

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

NA

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.*

None known.

- 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 known cultural resources within the project area. There have been a number of surveys within a mile. Most of these surveys were conducted at a recorded prehistoric archaeological site in a developed area. These surveys recorded ground disturbance and artificial fill to varying depths, but also documented intact site deposits (including human remains) about 7 inches below the surface. Because the project area is in the Sammamish River floodplain near where other archaeological resources have been located and there are two areas with ethnographic place names (indicating Indian use of the area) occur less than 1,000 feet from Derby Creek, this project completed an archeology survey (Paragon, 2010) of the proposed stream channel.

The cultural resources assessment found that there were four ethnographic places identified within 1 mile of the project area, but none within the project area. A surface and subsurface survey (shovel probes) occurred in August and September 2010 along the proposed stream alignment and no cultural resources were observed or documented. Although the project area is within 0.3 miles of an eligible archaeological site it is located in a different geomorphic condition. The archaeology deposits are located in an alluvial fan above the wet floor of the Sammamish Valley where the project is located, between two streams and in a

wetland. Based on the study, Paragon extends no recommendations for further cultural resources work.

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

In the event prehistoric or historic resources are found during construction, the County will cease construction in the vicinity and contact the Department of Archaeology and Historic Preservation (DAHP) in Olympia and, if warranted, tribal cultural resources representatives

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.*

The site is accessed from 148th Ave. NE.

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

No

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

NA

- 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

- 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:*

NA

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:*

NA

16. Utilities

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

Electricity, natural gas, water, refuse service, telephone, and sanitary sewer are available.

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:

Time Miller

Title:

Project Manager

Date Submitted:

5/4/11