DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 15-106580-LO

Project Name/Address: PSE Programmatic Vegetation Management Plan/ City-wide

Planner: Heidi M. Bedwell

Phone Number: 425-452-4862/hbedwell@bellevuewa.gov

Minimum Comment Period: April 16, 2015

Materials included in this Notice:

- ☒ Blue Bulletin
- ☒ Checklist
- ☒ Vicinity Map
- ☒ Plans
- ☐ Other:

OTHERS TO RECEIVE THIS DOCUMENT:

- ☒ State Department of Fish and Wildlife / Sterwart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
- ☒ State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
- ☐ Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
- ☐ Attorney General ecyolyef@atg.wa.gov
- ☒ Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us

Environmental Checklist Reviewed by
Heidi M. Bedwell (HMB) 3/31/2015

City of Bellevue Submittal Requirements | **27a**

ENVIRONMENTAL CHECKLIST

2/11/2015

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service). .

BACKGROUND INFORMATION

Property Owner: **Puget Sound Energy (easement and franchise holder)**

Proponent: **Puget Sound Energy**

Contact Person: **Kerry Kriner**
(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: **PO Box 97034, PSE 9N, Bellevue WA 98009**

Phone: **425-462-3821**

Proposal Title: **PSE Vegetation Management Programmatic Permit**

Proposal Location: **Various locations – see attached map**
(Street address and nearest cross street or intersection) Provide a legal description if available.

Please attach an 8 ½" x 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

1. General description: **Puget Sound Energy (PSE) performs routine vegetation management along existing overhead transmission and distribution line corridors to ensure the safety and reliability of our electrical system. Electrical utility corridors are linear and often align with public rights-of-way or are cross country. Some of the maintenance activities will occur within critical areas or critical area buffers, including: wetlands and wetland buffers, stream buffers, steep slopes and steep slope buffers, and shoreline buffers that abut or intersect the public rights-of-way and cross country corridors. Maintenance activities occur in yearly cycles to ensure clearance standards are being met.**

2. Acreage of site: Site acreage varies by location. **Project area is dependent upon vegetation conditions and corridor width and length. Corridors receiving vegetation management will be reported to the City of Bellevue on an annual basis.**

3. Number of dwelling units/buildings to be demolished: **None/Not Applicable**

4. Number of dwelling units/buildings to be constructed: **None/Not Applicable.**

5. Square footage of buildings to be demolished: **None/Not Applicable.**

6. Square footage of buildings to be constructed: **None/Not Applicable.**

7. Quantity of earth movement (in cubic yards): **Excavation and fill are not proposed as part of this proposal.**

8. Proposed land use: **No change from current use – electrical utility corridors.**

9. Design features, including building height, number of stories and proposed exterior materials: **Not Applicable.**

10. Other

Estimated date of completion of the proposal or timing of phasing:

This is a programmatic proposal. Vegetation management activities occur year round.

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

No. No further plans regarding vegetation management however PSE is in process of planning for new transmission lines extending from Redmond to Renton through Bellevue. For more information see the following http://www.energizeeastsideeis.org/

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

Programmatic Permit: Critical Areas Land Use Permit/Clearing and Grading Permit/SEPA for Puget Sound Energy. The Watershed Company. August 2014

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

There are no other known applications pending that may affect the property covered by the proposal.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

Programmatic approval of a Critical Areas Land Use Permit, SEPA threshold determination, and a Clearing and Grading Permit are being requested.

Please provide one or more of the following exhibits, if applicable to your proposal.
(Please check appropriate box(es) for exhibits submitted with your proposal):

☐ Land Use Reclassification (rezone) Map of existing and proposed zoning

☐ Preliminary Plat or Planned Unit Development
Preliminary plat map

X Clearing & Grading Permit
Plan of existing and proposed grading
Development plans

☐ Building Permit (or Design Review)
Site plan
Clearing & grading plan

☐ Shoreline Management Permit
Site plan

A. ENVIRONMENTAL ELEMENTS HMB 3/31/2015

1. Earth

a. General description of the site: X Flat X Rolling X Hilly X Steep slopes ☐ Mountains ☐ Other

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

Steep slopes may be present within cross country utility corridors exceeding 40 percent in grade.

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

Various types of soil are found within the City of Bellevue. The most prominent soil types within the city based on the National Resource Conservation Service Web Soil Survey include: Alderwood gravelly sandy loam, Alderwood and kitsap soils, Arents, Everett gravelly sandy loam, Everett-alderwood gravelly sandy loam, Kitsap silt loam, and Seattle muck. None of PSE's existing overhead facilities is known to cross farmland.

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

There are no known indications or history of unstable soils along the transmission and distribution corridors.

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

No filling or grading is proposed as part of this programmatic permit.

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

Erosion is not anticipated due to the limited ground disturbance as a result of the vegetation maintenance activities.

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

No impervious surface is proposed as part of this programmatic permit.

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

Appropriate BMPs as outlined in the programmatic permit will be implemented as necessary to reduce or control erosion.

Erosion control per BCC 23.76

2. AIR

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

Minimal air emissions may result from vegetation maintenance activities. Emissions will result in areas where machinery is used.

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

There are no known off-site sources of emissions or odor that will affect the proposal.

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

No substantial impacts are anticipated, therefore no measures are proposed.

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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 type and provide names. If appropriate, state what stream or river it flows into.

There are several areas along transmission and distribution corridors that are within the immediate vicinity of a surface water body. The attached map "Bellevue Critical Areas" shows general locations of corridors within close proximity to streams, wetlands, and lakes.

(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.

Vegetation management work will occur within regulated stream, wetland, and shoreline buffers, as well as within wetland areas.

(3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Dredging and filling is not proposed as part of the vegetation management programmatic.

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

The proposal will not require surface water withdrawals or diversions.

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

Vegetation management activities may occur within areas designated as 100-year floodplain, but will not impact floodplain capacity.

(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 discharge is proposed as part of the vegetation management program.

b. Ground

(1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

No ground water withdrawal or discharges to groundwater are proposed.

(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 into the ground as part of this proposal.

c. Water Runoff (Including storm water)

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(1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater runoff is not anticipated as a direct result of the vegetation management activities.

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

It is not anticipated that waste will enter ground or surface waters from vegetation management activities.

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

Impacts are not anticipated, however BMPs will be employed to prevent impacts as appropriate.

4. Plants

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

x deciduous tree: alder, maple, aspen, other

x evergreen tree: fir, cedar, pine, other

x shrubs

x grass

☐ pasture

☐ crop or grain

x wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

x water plants: water lily, eelgrass, milfoil, other

☐ other types of vegetation

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

Vegetation removal will be dependent upon maintaining required clearances from transmission and distribution lines. Most impacted vegetation will be trimmed. Generally, trees growing over 25 feet in height must be trimmed or removed to ensure clearances are met.

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

No threatened or endangered plant species are known to be located within any PSE corridors within the City of Bellevue.

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

A majority of the impacted vegetation will be trimmed and not removed. When removals take place, replacement with native species compatible with utility line clearances and appropriate to the impacted critical area will occur. In most cases, off-site mitigation will result in a better

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environmental outcome.

5. ANIMALS

a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

x Birds: hawk, heron, eagle, songbirds, other:

x Mammals: deer, bear, elk, beaver, other:

x Fish: bass, salmon, trout, herring, shellfish, other:

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

Coho, chinook, steelhead trout, and bull trout are all threatened under the Federal Endangered Species Act. These species occur in Lake Sammamish, Lake Washington, and tributary streams (see Fish and Wildlife maps attached).

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

The City of Bellevue is located within the Pacific Flyway.

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

All significant trees and vegetation will be preserved that do not conflict with utility clearance requirements. Where incompatible vegetation is removed, lowing growing species appropriate for the applicable critical area environment may be planted. For best success, off site mitigation will be used where successful onsite mitigation is not feasible. Off-site mitigation locations will be coordinated with the City of Bellevue.

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 need? Describe whether it will be used for heating, manufacturing, etc.

Not applicable.

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

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

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

Not applicable.

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.

There are no anticipated health hazards that will result from the vegetation management activities.

(1) Describe special emergency services that might be required.

No emergency services are anticipated to be required.

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(2) Proposed measures to reduce or control environmental health hazards, if any.

No impacts are anticipated, therefore no measures are proposed.

b. Noise

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

Noise near the utility corridors will not affect the vegetation management activities.

(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, operation, other)? Indicate what hours noise would come from the site.

Short-term noise impacts include those associated with vegetation management tools and equipment.

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

Vegetation management activities will comply with the noise regulations in BCC 9.18.

8. Land and Shoreline Use

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

The vegetation management activities will take place within transmission and distribution utility corridors located on PSE has fee owned property, on easement, or within a public right-of-way by franchise. The surrounding uses vary and include parks and open space, residential, commercial, and industrial.

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

There is a possibility that maintenance activities may occur in areas used for agriculture in the past, but these areas have not been identified at this time.

c. Describe any structures on the site.

There are no structures within vegetated areas that will be maintained.

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

No structures will be demolished as part of the vegetation management activities.

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

The zoning varies by location – including residential, commercial, office, and industrial districts.

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

The comprehensive plan designation varies by location – including residential, commercial, office, and industrial designations.

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

Some utility vegetation management activities may occur within 200 feet of a designated shoreline waterbody. These areas do not have master program designations.

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

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Critical areas including wetlands, streams, and steep slopes coincide in some areas with PSE transmission and distribution corridors. See attached map "Bellevue Critical Areas" for locations.

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

Not applicable.

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

Not applicable.

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

No impacts will occur, therefore no measures are proposed.

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

There are no proposed changes in existing land use.

9. Housing

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

Not applicable. Housing is not a part of this proposal.

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

Not applicable. Housing is not a part of this proposal.

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

Not applicable. Housing is not a part of this proposal.

10. Aesthetics

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

The proposal does not involve adding structures.

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

View impacts are not anticipated, however there may be minimal view improvement as vegetation is altered or removed.

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

Impacts are not anticipated, therefore no measures are proposed.

11. Light and Glare

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

No light or glare will result from the maintenance activities.

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

Not applicable. No light or glare will result from the maintenance activities.

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

No off-site sources of light or glare will affect the proposal.

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

No measures are proposed as not impacts are anticipated.

12. Recreation

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

Some of the maintenance activity will take place within or adjacent to city parks and trails.

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

No recreational activities will be displaced as a result of the maintenance activities.

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

No impacts are anticipated, therefore no measures are proposed.

13. Historic 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.

According to the Washington State Department of Archaeology and Historic Preservation (DAHP) WISAARD database, there are three historic register sites within the City of Bellevue. The Frederick W. Winter's House is located along Bellevue Way SE, the Wilburton Trestle located east of I-405 over SE 8th Street, and the Twin Valley Dairy located within Kelsey Creek Park.

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

There is no known evidence of historic, archeological, scientific, or cultural importance within or next to the transmission or distribution corridors aside from those sites listed in 13a.

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

No impacts are anticipated, therefore no measures are proposed.

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.

Many of the transmission and distribution corridors align with public rights-of-way that may abut

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critical areas or critical area buffers. Please see attached map [insert title].

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

Transit is not applicable to this project.

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

Not applicable.

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

The proposal will not require any new roads or streets or improvements to roads or streets.

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

The vegetation management activities will not use water, rail, or air transportation.

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

Not applicable.

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

Transportation impacts are not anticipated, therefore no measures are proposed.

15. Public Services

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

Vegetation management activities will not result in an increased need for public services.

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

No impacts are anticipated, therefore no measures are proposed.

16. Utilities

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

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Not applicable. The proposal is to maintain existing electrical transmission and distribution facilities.

Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is

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Signature.....

Date Submitted.....3/26/15

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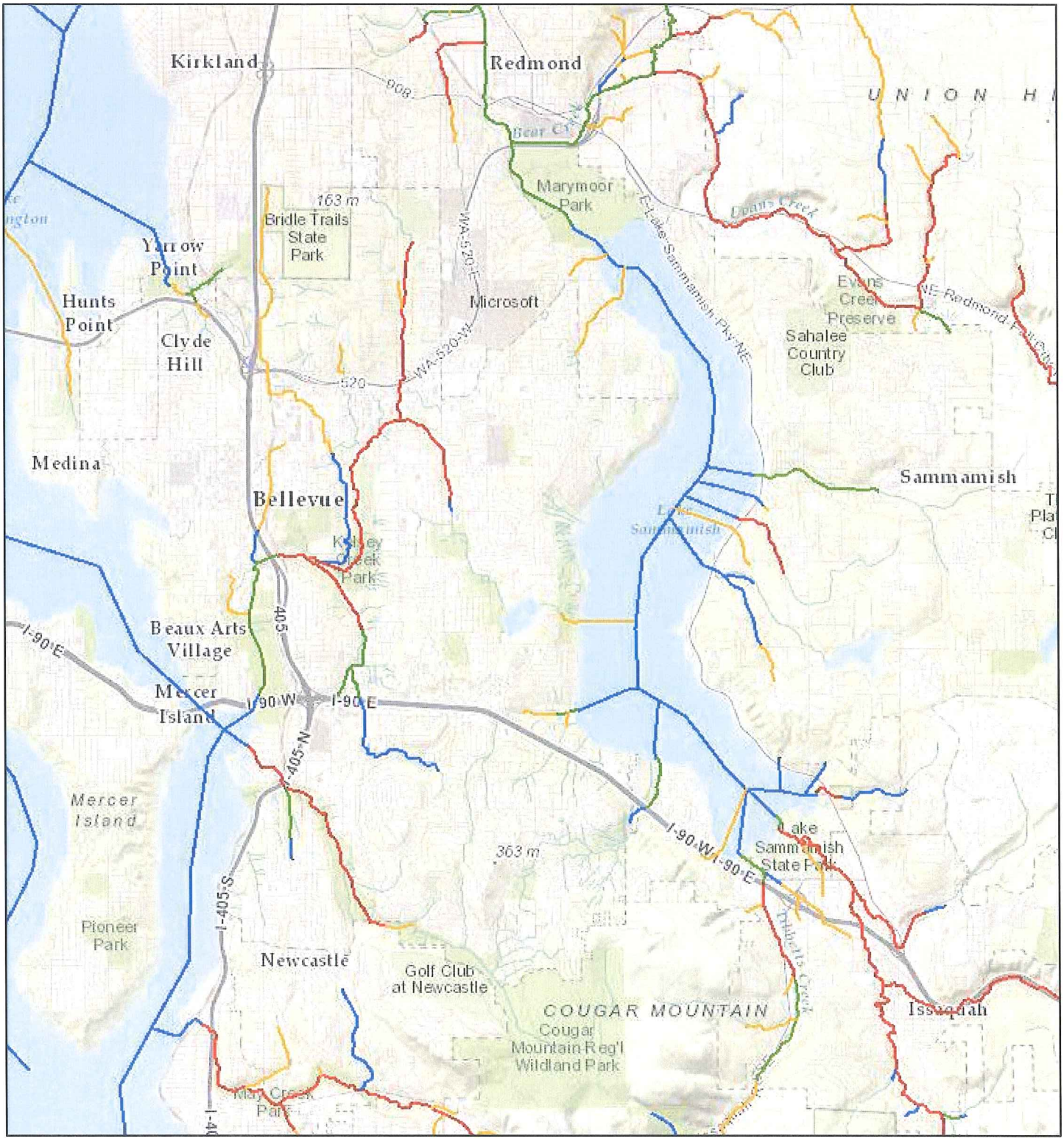
Coho Streams



November 11, 2014

1:144,448

0 1.25 2.5 5 mi

0 2 4 8 km

- Documented Presence
- Documented Spawning
- Documented Rearing
- Modeled Presence
- Presumed Presence
- Potential: Blocked
- Documented Historic Presence
- Transported Presence
- Transported Spawning
- Transported Rearing
- Documented-Artificial, Presence
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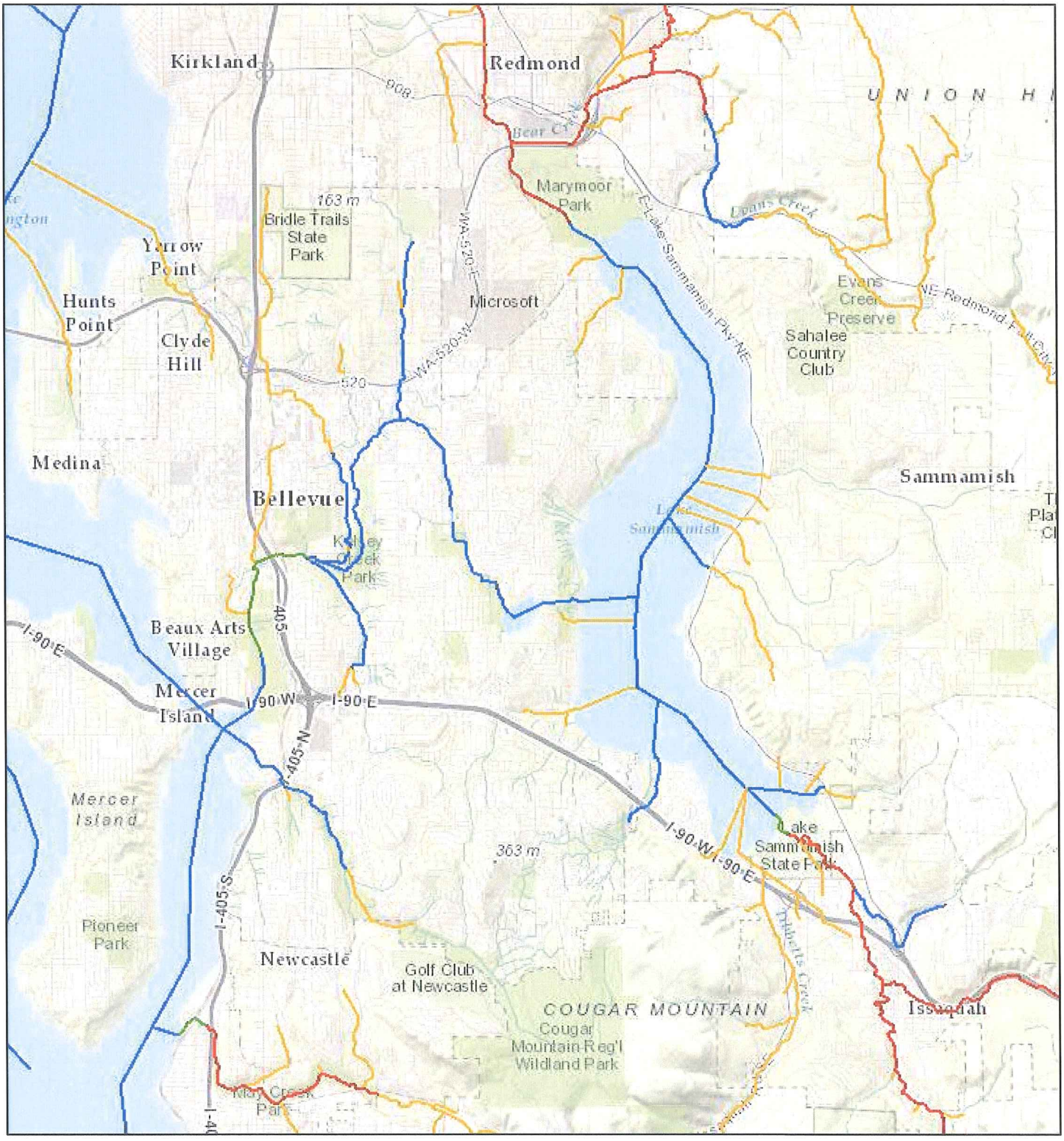
Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
WDFW

Fall Chinook Streams



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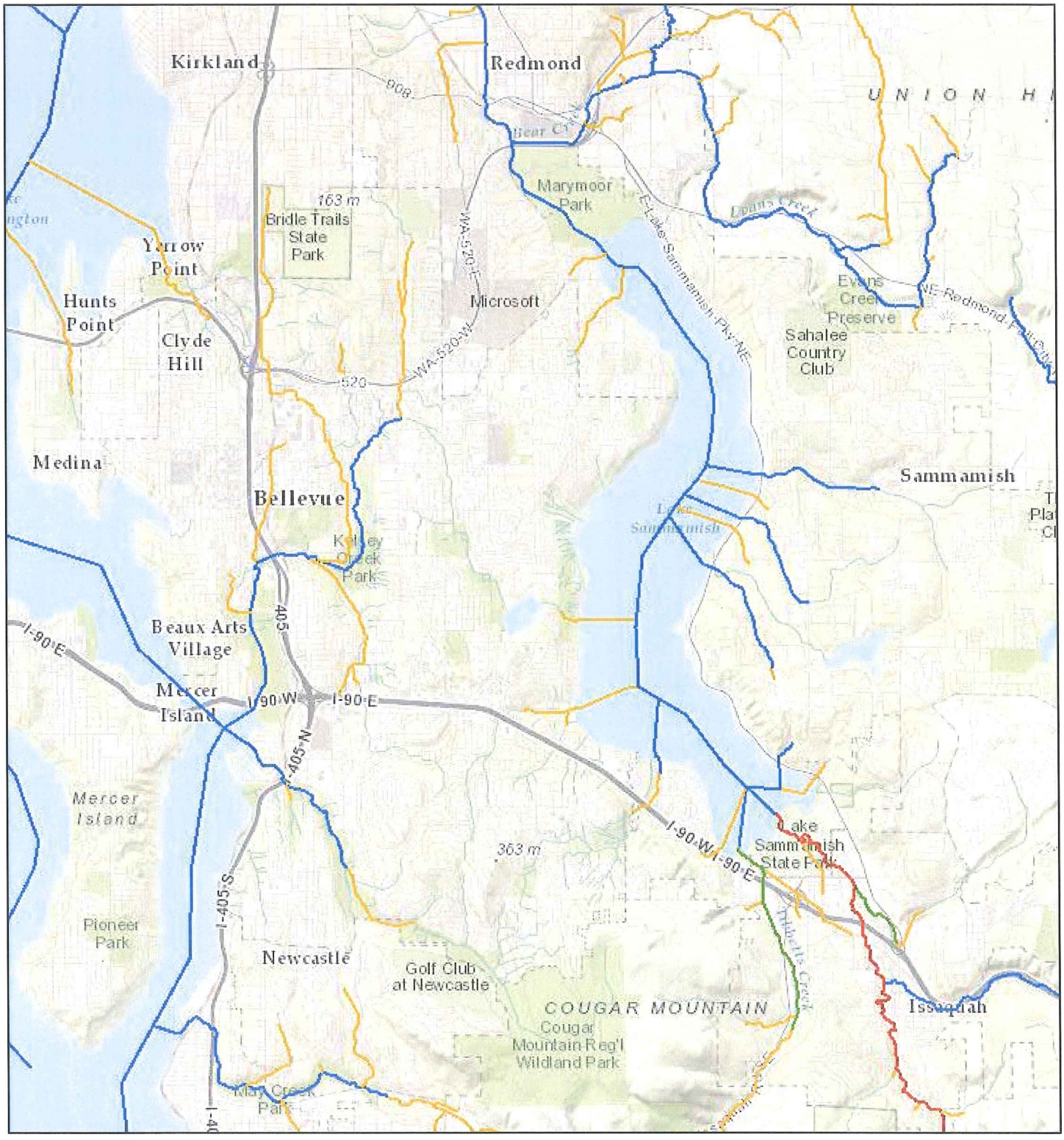
Winter Steelhead Streams



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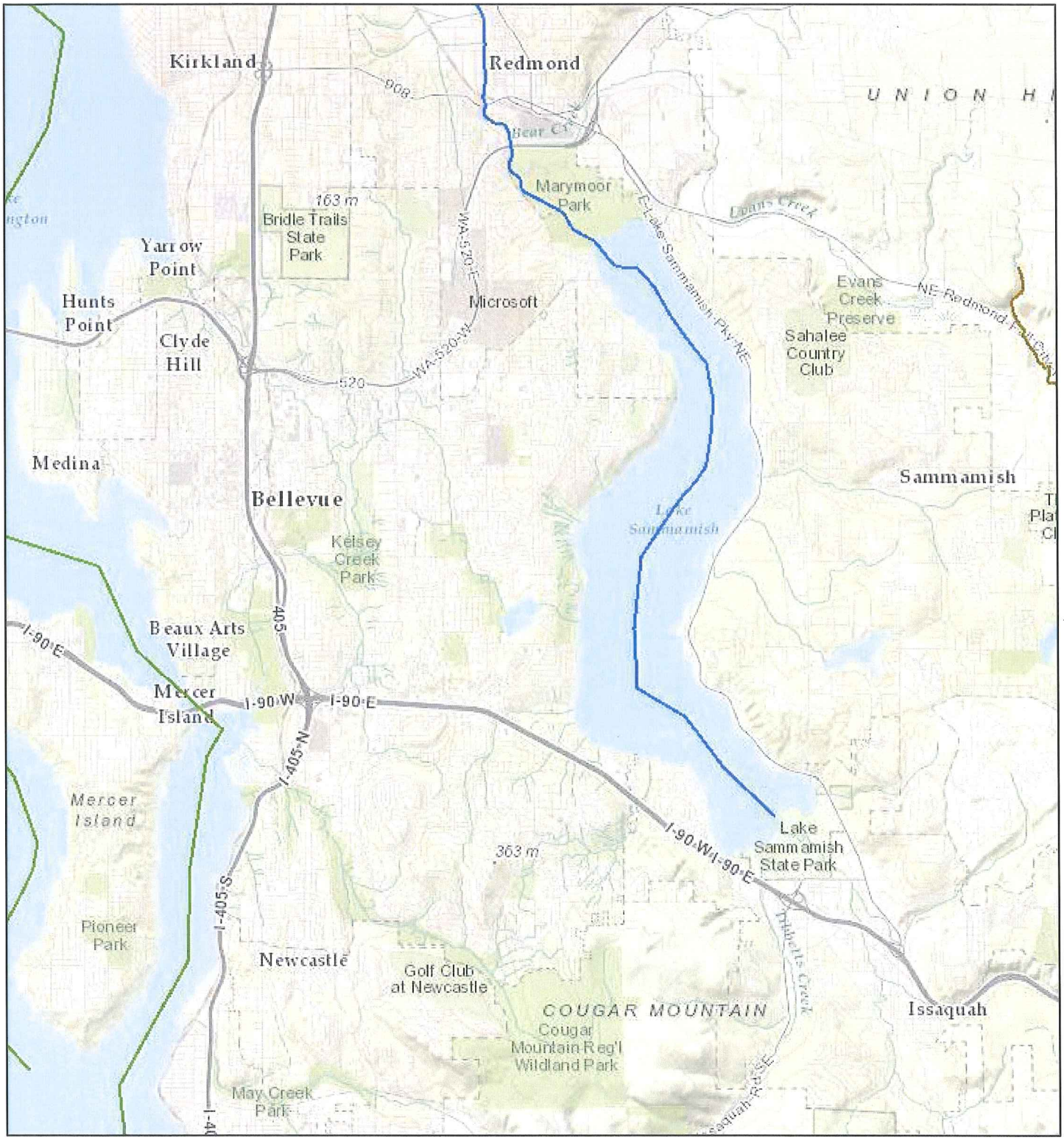
Bull Trout



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PSE PUGET SOUND ENERGY

Bellevue Critical Areas

55kV PSE	115kV PSE
230kV PSE	Overhead Feeder
Overhead Lateral (3-Phase)	Overhead Lateral (1/2-Phase)
Stream	City Boundary
Slope over 40% and >= 1000Sq Ft	Wetlands

The information on the attached maps is subject to change without notice. Puget Sound Energy makes no warranty, expressed or implied, concerning the suitability of this information for any purpose. This map is not to be used for determining the actual location of any PSE facilities. Copyright © ESRI 2010, Copyright © NAVTEQ 2010, Copyright © PSE 2010, Copyright © City of Bellevue 2014 All rights reserved.

Property of Puget Sound Energy
355 110th Ave. NE. Bellevue, WA. 98004
Maps, Records and Technology.
NAD_1983_StatePlane_Washington_North_FIPS_4601_Feet
Date: 11/07/2014
Drawn By: Steven Mar
File Location: ..\MRT\MRT_Projects\TinsleyClayton\...

PROGRAMMATIC PERMIT

February 2015

CRITICAL AREAS LAND USE PERMIT / CLEARING AND GRADING PERMIT / SEPA FOR PUGET SOUND ENERGY

Prepared for:

City of Bellevue
Development Services Department
450 110th Avenue NE
Bellevue, WA 98004

The Watershed Company

PROGRAMMATIC PERMIT

Critical Areas Land Use Permit/ Clearing and Grading Permit/SEPA for Puget Sound Energy

Prepared for:

City of Bellevue
Development Services Department
450 110th Avenue NE
Bellevue, WA 98004

Prepared on behalf of:

Puget Sound Energy
Vegetation Management Program
355 110th Avenue NE, PSE-09S
Bellevue, WA 98004

Prepared by:

THE WATERSHED COMPANY

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watershedco.com

February 2015

The Watershed Company
Reference Number: 140226

Printed on 30% recycled paper.

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PROGRAMMATIC PERMIT

CRITICAL AREAS LAND USE PERMIT/CLEAR AND GRADE/SEPA FOR PUGET SOUND ENERGY

1 PURPOSE & NEED

Puget Sound Energy (PSE) manages and maintains many miles of overhead electric powerlines in the City of Bellevue. As part of its routine operations, PSE must clear vegetation, including large trees, which pose a hazard to the safe and reliable operation of these powerlines. In some locations, lines pass through, or alongside, critical areas as defined by City of Bellevue Land Use Code (LUC).

The purpose of this document is to provide the City of Bellevue Development Services Department (DSD) with programmatic guidelines and practices to substitute for the issuance of Critical Areas Land Use Permits (CALUP) and Clearing and Grading Permits when PSE proposes routine vegetation management activities on overhead electrical systems within critical area buffers and certain critical areas. This permit is intended to include coverage under the City's CALUP, Clearing and Grading Permit, and State Environmental Policy Act (SEPA) requirements.

Vegetation management is a requirement of overhead line construction and subsequent maintenance programs, allowing PSE to provide customers with service reliability. To ensure service continuity, essential for domestic use and providing vital services, it is necessary to maintain an open route to accommodate the flow of electricity. Properly maintained corridors are essential to providing safety for PSE's customers and workers, minimizing tree-related outages, and restoring service in a timely manner during emergency conditions. This is mandated by the Washington Administrative Code and National Electric Safety Code.

Management of vegetation within PSE transmission line corridors has typically centered on promoting and encouraging the growth of existing native vegetation while maintaining and protecting the improved portions of the corridor and ensuring public safety. In PSE's vegetation management program, tree species that can grow taller than 25 feet at maturity, primarily senescent second growth deciduous species, are removed. Non-hazardous trees remain, in addition to the undergrowth shrub and groundcover layers. This balance is often complicated by the numerous codes and regulations that apply when a critical area or critical area buffer extends into the corridor. This document sets forth a standard set of guidelines and practices that can be followed in such situations to allow continued vegetation management and

corridor protection, while programmatically satisfying critical area regulations, SEPA standards, and clearing and grading regulations.

The permitting obligations addressed within LUC 20.25H, along with the SEPA requirements addressed within LUC 22.02, and the clearing and grading requirements addressed within LUC 23.76, will be satisfied as part of the approval of this programmatic permit. Therefore, future individual PSE applications will not need to receive individual review pursuant to LUC 20.25H, LUC 22.02 and LUC 23.76. Individual activities authorized under this programmatic permit are clearly defined within this document, but are primarily related to the management of vegetation within critical areas and critical area buffers located within PSE transmission and distribution corridors. Additionally, pursuant to LUC 20.25H.215, PSE must make all reasonable efforts to avoid, minimize, and where appropriate mitigate for impacts to the critical area and/or critical area buffer.

The objective of PSE's programmatic permit is to comply with Bellevue's regulations in a manner that also does not jeopardize PSE's economic and operational efficiencies. The Best Management Practices (BMPs) developed in this document will be implemented in order to preserve the function and value of critical areas and critical area buffers to the maximum extent possible.

In addition to following the BMPs and procedures outlined in this document, PSE will notify DSD annually of projects to be completed under this programmatic as outlined in Section 3.1. Beyond this notification, individual projects will not need to undergo the comprehensive CALUP/Clearing and Grading Permit/SEPA review on each routine project.

2 GEOGRAPHIC AREA

Included in Appendix A is a map showing PSE's overhead systems within the City of Bellevue. This map also shows Bellevue's mapping of critical areas within the city limits, the areas covered by this programmatic permit.

The map includes the locations of the following critical areas: streams, wetlands, shorelines, steep slopes, and lakes or ponds less than 20 acres. A summary of the regulatory buffers for each critical area is presented below in Table 1. As detailed in the table, streams and wetlands have buffers that vary depending upon the classification or category of the critical area.

However, the City has not inventoried and classified every wetland within City limits. For that reason, for the purposes of this permit (and as shown on the corresponding map in Appendix A), a 225-foot buffer will apply to those larger and

well known wetlands within the City (wetlands associated with the Mercer Slough system; Phantom and Larsen Lakes; and Richards Creek), while a 110-foot buffer will apply to all other wetlands in the City regardless of their categorization.

Therefore, it is possible that some proposed activities might actually fall outside the limits of the "true" wetland buffer. However, to ensure that all proposed activities within the vicinity of wetlands are covered under this programmatic permit, the most stringent buffer will be applied.

Alternatively, if PSE suspects that the critical area in question does not meet the rating criteria of a wetland requiring the maximum buffer, they may choose to have the actual wetland classification and standard regulatory buffer determined on a case-by-case basis. Such a determination must be made by a qualified professional and approved by DSD. In the event a determination is submitted and approved, the appropriate standard buffer for the wetland under investigation will apply. In those instances when activities are proposed within a wetland, they will be identified and noted by a PSE Consulting Forester or other qualified professional (see Section 4.3).

Shorelines within the City include Lake Washington, Mercer Slough upstream to Interstate 405, Lake Sammamish, Phantom Lake, and lower Kelsey Creek. Shoreline buffers range from 25 to 50 feet, depending upon whether a site is developed. For the purposes of this permit, a minimum 50-foot buffer will apply to all shorelines. In addition, Mercer Slough and lower Kelsey Creek are also regulated as Type S streams and thus are subject to the more restrictive 100-foot stream buffer.

Pursuant to LUC 20.25H.120(A)(2), steep slopes are defined as slopes of 40 percent or more with more than 10 feet of rise and exceeding 1,000 square feet in area. Steep slopes require a 50-foot buffer from the top-of-slope, and thus any activities proposed within 50 feet of the top of a slope of 40 percent or greater are covered by this permit.

The LUC defines geologic landslide hazard areas as those areas of at least 15 percent slope with more than 10 feet of rise that also display one or more additional characteristics. Landslide hazard regulations are intended to address geologic issues, as opposed to more surficial concerns such as erosion and sedimentation. Landslide hazards are not a central concern of the activities addressed by this programmatic permit. Subsequently, activities proposed in areas of between 15 and 40 percent slope do not require compliance with this permit, provided they do not overlap with another regulated critical area or critical area buffer.

Table 1. Critical Area Buffers

Critical Area	Buffers pursuant to LUC 20.25H	Buffers pursuant to this programmatic permit
Streams	Type S – 100 feet	100 feet
	Type F – 100 feet	100 feet
	Type N – 50 feet	50 feet
	Type O – 25 feet	25 feet
Wetlands	Category I – 75 feet to 225 feet	• Wetlands associated with Mercer Slough, Phantom/ Larsen Lakes, & Richards Creek - 225 feet • Other wetlands – 110 feet
	Category II – 75 feet to 225 feet	
	Category III – 60 feet to 110 feet	
	Category IV – 40 feet	
Shorelines	50 feet	50 feet
Steep Slopes	50 feet (from top-of-slope)	50 feet
Ponds < 20 acres, where no other critical area designation applies	35 feet	35 feet
Areas of Special Flood Hazard	None, except that the 2008 Biological Opinion on the National Flood Insurance Program includes a 250-foot Riparian Buffer Zone	250 feet (regardless of intervening development)

Areas of special flood hazard are designated as critical areas under LUC 20.25H. Additionally, the City is required to comply with provisions in a 2008 biological opinion issued by the National Marine Fisheries Service in order to maintain its eligibility for participation in the National Flood Insurance Program (NFIP). Per the 2008 biological opinion, the protected area includes designated floodplains, floodways, and a Riparian Buffer Zone (RBZ), which extends 150 to 250 feet from the ordinary high water mark of a waterbody or water course, depending on its designation. The biological opinion specifically identifies the normal maintenance of public utilities as an allowed activity within the RBZ without a detailed assessment of floodplain impacts. Additionally, vegetation management activities, such as removal of noxious weeds; replacement of non-native vegetation with native vegetation; and removal of hazard trees are also specifically allowed in the RBZ per the biological opinion. Activities addressed by this programmatic permit do not include grading, filling, paving, or rerouting of stormwater, which could affect floodplain hydrologic functions. Therefore, activities conducted in accordance with this permit are allowed per the 2008 biological opinion, and they do not require additional documentation or consultation.

It should also be noted that while coal mine hazard areas have been deemed critical areas by the City, they do not require regulatory buffers and are therefore not included in this permit. Vegetation management activities proposed within these

critical areas or their buffers can proceed without the need for coverage under this programmatic permit.

Habitat Associated with Species of Local Importance (HASLI) is a designated critical area in the City. A list of designated species of local importance is included in LUC 20.25H.150, along with a process to identify additional species. In general, species of local importance are native species that are declining or in danger of extirpation based on existing trends, and that are not afforded adequate protection on a local scale by existing State and federal policy. All habitat associated with species of local importance (outside of other designated critical areas) is also considered a critical area. HASLI areas do not require standard buffers (except for naturally occurring non-wetland ponds of less than 20 acres as described below). Instead, they are subject to additional regulatory requirements beyond the standard Critical Areas Report. These may include completion of a Habitat Assessment. The presence of a species of local importance may also require adherence to management recommendations put forth by State agencies, and other State or federal policies or regulations may apply. Because species of local importance are found throughout the City, this permit assumes their occurrence in all instances. Therefore, for the purposes of this programmatic permit, all proposed maintenance activities must comply with the BMPs outlined in Section 6.

HASLIs also include naturally occurring non-wetland ponds of less than 20 acres, depicted on the Vegetation Management map in Appendix A, which require a 35-foot buffer (whereas ponds greater than 20 acres in size are designated as shorelines and typically require a 50-foot buffer). Impacts to ponds less than 20 acres are not covered under this permit. However, work proposed within the 35-foot buffer of such ponds is covered under this permit.

In general, activities authorized under this permit may take place in the following areas:

1. PSE corridors within critical area buffers (those identified in Table 1). It should be noted that the buffers of critical areas end at the edge of an improved right-of-way (sidewalk, curb, gravel shoulder, etc.). Therefore, areas located within the area between the edge of the improved right-of-way and the outer edge of a PSE corridor (adjacent to a critical area) are covered under this permit.

2. PSE corridors within critical areas, limited to wetlands and steep slopes only in this scenario. Wetlands must be identified by a PSE Consulting Forester or other qualified professional and shown in the PSE notification log book submitted annually to DSD prior to approval under this programmatic permit (see below). Work within wetlands and areas of steep slopes are subject to the provisions detailed in the following sections.

3 OPERATIONAL GUIDELINES & STANDARDS

PSE uses a combination of control methods for corridor management. Control options include selective removal of problem trees, tree and shrub trimming, thinning, and selective use of herbicides. Choice of control option is based on effectiveness, environmental considerations, critical area impacts, public safety and economics. Under PSE's vegetation management program, all powerline corridors are included in a regular maintenance cycle which typically varies from every three to six years. The annual routine maintenance schedule is prioritized based on:

- The number of service interruptions on the line.
- The length of time since the line was last maintained.

3.1 Workload Identification Procedures

1. Annual workload is prioritized and submitted by PSE to City of Bellevue DSD. This information includes a written listing of distribution projects and circuit maps of upcoming work as described below.

2. Specific information is generated for each location, including property owner information and description of needed work (i.e. remove trees, convert trees to wildlife snags, tree trimming, brush removal, etc.). Critical areas and mitigation needs are identified at this time.

3. PSE highlights the distribution projects and circuit routes on GIS maps. One copy is provided to DSD, one copy is provided to PSE notification personnel, and one copy is provided to the Consulting Forester.

4. PSE will meet annually with DSD staff and Right-of-Way inspectors in January or February of each year to review upcoming work within the City, identify traffic control issues, possible construction conflicts, and any issues from the previous year's work.

5. At the same time, PSE will provide DSD with a summary report of the previous year's activities. The report will document numbers and species of trees removed or converted to wildlife snags, average diameter at breast height (DBH), and mitigation actions completed.

3.2 General Customer Notification

Once the annual workload is identified, prioritized, and approved by DSD under this programmatic permit, customers fed by each distribution system are notified by PSE

of upcoming scheduled tree work in their neighborhood through a bulk mailing system (see example Form in Appendix B).

PSE notification staff reviews each specific project and identifies and documents the following in the Notification Log Book:

- Candidates for tree removal
- Critical areas that are mapped or field-observed
- Mitigation needs and measures

Information in the Notification Log Book is used to prepare the summary report that is to be submitted annually to DSD for review.

Owners with proposed activities on their property are contacted in person, by letter or phone of necessary tree work and asked to sign a removal permission form. At this time, work agreements between PSE and the landowner (i.e. leave or haul away chips) are also specified.

3.3 Obtain Necessary Permits

Prior to beginning work, PSE will secure all permits, when applicable, required by federal, State and local regulatory agencies. In addition to City of Bellevue, these may include the Washington State Department of Transportation, Washington Department of Fish and Wildlife, Department of Ecology, and/or U.S. Army Corps of Engineers. Impacts to sensitive areas and any required mitigation would be included in permit applications to relevant agencies.

3.4 Perform Work

Maintenance work is scheduled and work is completed.

PSE adheres to the American National Standards Institute (ANSI) A-300-2008 for Tree, Shrub and other Woody Plant Maintenance Standard Practices. The standards were written by representatives from all aspects of tree care, including utility arborists. Components of the standards are listed in Section 4.2 below.

3.5 Mitigation and Monitoring

Any required mitigation is implemented. Mitigation and monitoring reports are submitted on an annual basis to DSD.

4 AUTHORIZED ACTIVITIES

This section describes in detail the common characteristics of a typical PSE corridor, including standard features and management objectives. PSE's Vegetation Management Zones are described and illustrated. The various activities allowed under this permit are outlined, along with the general Best Management Practice (BMP) approach required to be taken for each activity.

4.1 Management Objectives

Properly maintained corridors are essential to providing safety for PSE's customers and workers, minimizing tree-related outages, and for timely restoration of service during emergency conditions. In general, vegetation management activities must comply with a variety of codes and regulations, while also maintaining and encouraging growth of existing native vegetation, protecting the electrical system, and ensuring public safety. Vegetation management includes consideration of the following factors: erosion control, maintaining water quality, stormwater infiltration, reducing fire risks, public safety requirements, invasive species control, vegetation and wildlife habitat preservation and enhancement, and hazard abatement.

Many of PSE's powerline corridors are vegetated with native, non-native invasive, naturalized, or ornamental plant species. These areas often serve a vital function in the City's ecosystem by providing habitat for native wildlife species, particularly within highly developed portions of the City. Regulatory critical area buffers may fully or partially encumber portions of the corridors. Vegetation management activities located within PSE corridors and within critical areas and/or their buffers are covered under this permit, as detailed below.

Many of these activities currently require a CALUP. Additionally, SEPA review and a Clearing and Grading Permit may also be applicable. This programmatic permit aims to satisfy the CALUP criteria, SEPA compliance criteria, and Clearing and Grading Permit compliance criteria for all described activities and therefore streamline the permitting process for routine vegetation management activities. Additionally, vegetation management authorized by this permit is not subject to the preparation of a Vegetation Management Plan [currently required pursuant to LUC 20.25H.055(C)(3)(i)(v)]. Mitigation and enhancement plans must be prepared by a qualified professional pursuant to LUC 20.25H.220.

4.2 Vegetation Management Zones

In most instances throughout the City, the PSE corridor area can be divided into three distinct zones on distribution rights-of-way. These are the wire zone, border zone, and danger tree zone, as illustrated in Figures 1 and 2. These zones are defined to maintain adequate tree-to-conductor clearances. Clearances shown are optimal but

may, on a case-by case basis, be reduced if conditions placed by a permitting agency or agreements with property owners do not allow them.

- Wire Zone – This zone is located directly beneath the conductors. In this zone, all trees maturing at a height of greater than 25 feet should be removed. All overhanging branches are also removed to minimum of 12 feet above the conductors, when practical for existing 4 kV, 7.2 kV, 12.5 kV, and 34.5 kV construction. All overhanging branches are removed for existing 55 kV, 66 kV, and 115 kV construction.

- Border Zone – This zone is located along those portions of the right-of-way not directly under the conductors. In this zone is a diverse plant community of herbaceous and woody plants, including shrubs and small trees. Vegetation management is accomplished through the selective removal of incompatible trees. Structurally sound trees with a mature height greater than 25 feet may be pruned according to ANSI standards and ISA Best Management Practices for Utility Pruning of Trees.

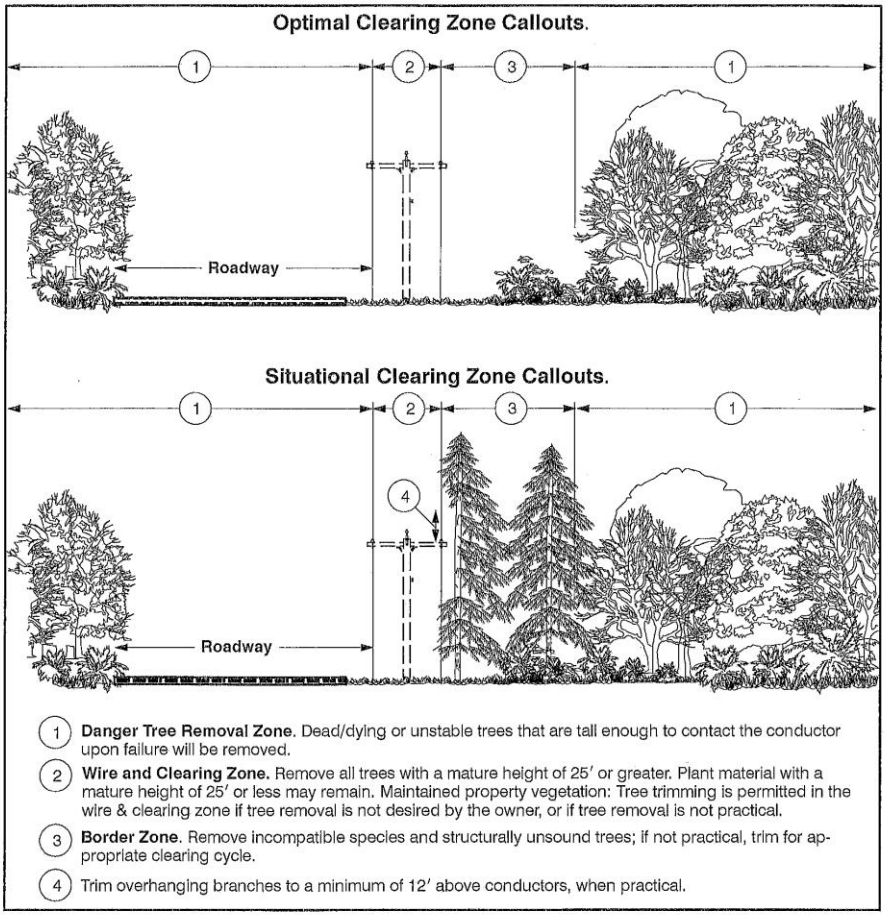
- Danger Tree Zone – This zone is located adjacent to the right-of-way. Dead, dying or unstable trees should be removed. The goal in the danger tree zone is to maintain reliability over the course of the prescribed maintenance cycle, typically four to six years for existing 4 kV, 7.2 kV, 12.5 kV, and 34.5 kV construction, or three years for 55 kV, 66 kV, and 115 kV construction.

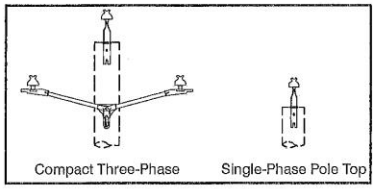
The following clearance requirements also apply to existing construction:

- Clearing requirements will conform to existing and/or original clearing limits.
- All distances are measured from the conductor.
- The clearing area represents a combination of the border and wire zones.
- Brush control includes removal of incompatible tree species 6 inches DBH or less, such as alder, maple, cottonwood, or conifers).
- Construction Notes:
  - All zoned distances are measured from the wire regardless of construction type to minimize tree-conductor interference under adverse weather conditions and prescribed maintenance cycle.
  - DBH is measured at 4-½ feet above ground.
  - Previously topped trees within the clearing zones are not considered structurally sound.

Distribution and High Voltage Distribution Vegetation Management Requirements **0400.4000**

Clearance Requirements for Existing 4 kV, 7.2 kV, 12.5 kV, and 34.5 kV Construction, *continued*





ALTERNATE CONSTRUCTION

Effective on: 10/23/14D
Canceling: 08/06/09
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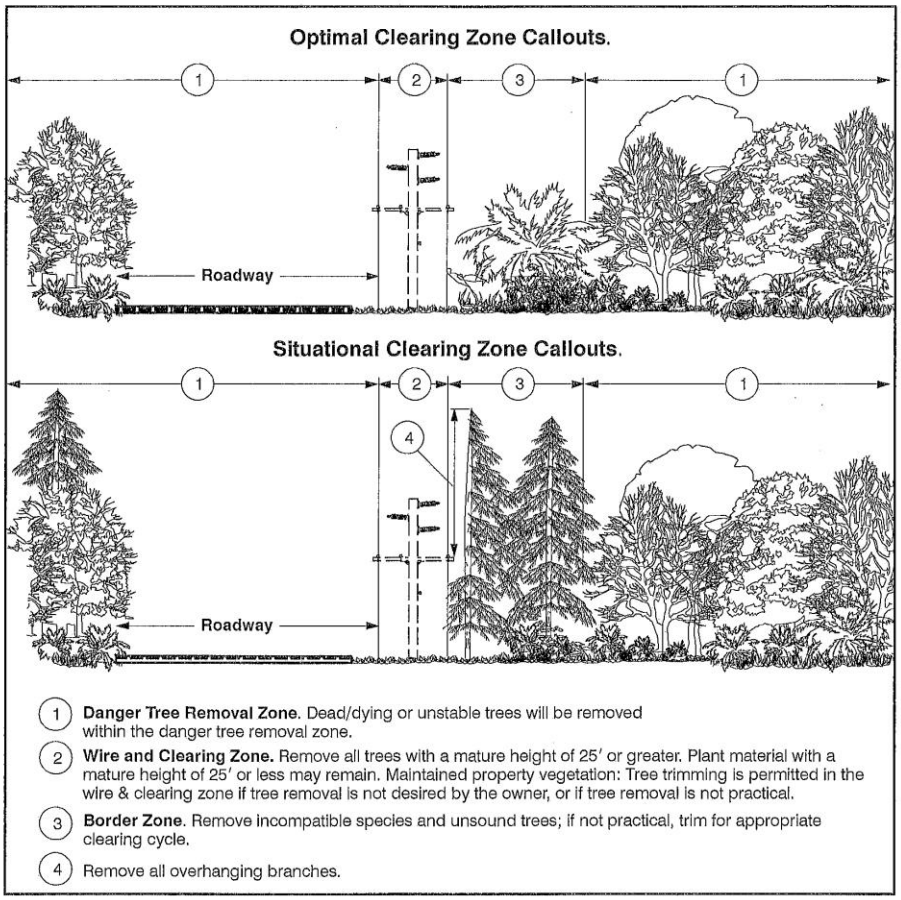
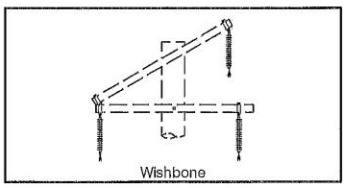
Figure 1. Clearance Zones for existing 4 kV, 7.2 kV, 12.5 kV, and 34.5 kV construction.

Distribution and High Voltage Distribution
Vegetation Management Requirements **0400.4000**

Clearance Requirements for Existing Roadside 55 kV, 66 kV, and 115 kV Construction,
continued





ALTERNATE CONSTRUCTION

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Figure 2. Clearance Zones for existing 55 kV, 66 kV, and 115 kV construction.

4.3 Authorized Activities within Critical Areas and Critical Area Buffers

This permit allows for limited vegetation management activities within certain critical areas, including only wetlands and steep slopes. Therefore, while activities may be allowed within the *buffers* of streams, wetlands, shorelines, steep slopes, and ponds less than 20 acres in size, only work *within* wetlands and areas of steep slopes is allowed by this permit. The presence of a wetland or steep slope may be indicated on the Vegetation Management Map in Appendix A; however, either critical area may exist when the map does not depict one. It is the responsibility of PSE to ascertain the presence of a wetland or steep slope in the area proposed for maintenance activities.

A description of each individual activity allowed within PSE powerline corridors by this permit is presented below along with associated BMPs. Any wetland or steep slope area in which activities are proposed will be identified in the workload identification procedures detailed in Section 3 of this document.

In general, for the purposes of routine vegetation management, the use of heavy equipment will be limited to improved hard surfaces only. This programmatic permit authorizes certain activities within wetlands as a substitute for City of Bellevue permits; however, it is the responsibility of PSE (through consultation with DSD) to ensure that all State and/or federal permits have been obtained.

4.3.1 Hazard Tree Removal

Description

Trees will be selected for removal if they are hazardous and could cause service interruptions. For the purposes of this permit, hazard trees are those determined to have a structural defect, or combination of defects or disease resulting in structural defect, which under the normal range of environmental conditions could pose a risk to existing powerlines. In addition, if a tree is determined to no longer meet clearance standards, it will also be considered hazardous and subject to removal under this permit.

Hazard tree identification and selection are performed by qualified Consulting Foresters. Tree removal is especially important where pruning alone cannot achieve safe clearances from the powerline and where, because of the tree's proximity to the line, it threatens property or public safety or is not in compliance with State and/or federal codes.

General BMP Approach

Tree removal will be performed in a manner that will minimize impacts to underlying shrubs, groundcover and other trees. In most cases there will be no

disturbance to soil. Any equipment or vehicles used during vegetation management activities will be staged and refueled outside of critical areas and critical area buffers. If this is not possible, then a "safe area" within the buffer shall be used for staging and refueling.

The method of tree removal may include:

- Remove all branches from the canopy in small pieces in such a way as to minimize impacts to surrounding vegetation.
- Remove main trunk as to minimize impacts.
- When feasible, limbs, trunk and chips will remain on site in such a way that they do not create a fire hazard, become an attractive nuisance and/or create other liability, or increase slope instability or erosion.
- Roots and stumps will remain intact and undisturbed on site.
- Debris may be left on site, or chipped on site and disposed off site.

Wildlife trees or snags will be created when feasible, as follows.

- Conifers

    1. Remove all branches from the canopy in small pieces in such a way as to minimize impacts to surrounding vegetation.
    2. Top the tree at appropriate clearance below the powerline.
    3. Leave the main trunk standing as a wildlife tree or snag in such a way that it does not create a fire hazard, become an attractive nuisance and/or create other liability.

- Deciduous

    1. Remove all branches from the canopy in small pieces in such a way as to minimize impacts to surrounding vegetation.
    2. Top the tree at appropriate clearance below the powerline.
    3. Girdle the main stem of the tree.
    4. Leave the main trunk standing as a wildlife tree or snag in such a way that it does not create a fire hazard, become an attractive nuisance and/or create other liability.

Mitigation will be provided for tree removal in critical areas and their buffers. Impacts will be assessed and mitigation sites chosen for tree replacement. See Section 4.4 below.

BMPs Specific to Wetland and Stream Buffers, Shoreline Buffers, and Buffers of Non-Wetland Ponds Less than 20 Acres

Locations where trees are proposed for removal within mapped and field-observed buffers will be documented by a qualified Consulting Forester in the Notification Log Book. This information will be provided to Bellevue on an annual basis (see Section 3.1).

Removal of felled trees should be completed without damage to native vegetation, riparian vegetation, or banks of streams, lakes or wetlands. Where possible, hazard trees will be felled over the buffer areas and left in place without endangering downstream properties.

Additional light introduction to streams or stream buffers will be minimized to the extent possible.

BMPs Specific to Steep Slope Buffer Areas:

- Work will be performed in a manner that will minimize impacts and disturbance to soil, underlying shrubs, groundcover and other trees. Removing vegetation from the ground layer should be minimized, and plantings should be stabilized with appropriate bioengineering techniques (e.g. netting, wattling, hydro-mulching, etc.) as necessary.

- Stormwater runoff will be prevented from saturating or loading adjacent steep slopes. If soil disturbance is to occur, an appropriate drainage system will be in place and adequately maintained to intercept runoff flows before reaching the slope.

Wetland Specific BMP Approach:

Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional.

Steep Slope Specific BMP Approach:

Same as above, except requires documentation by qualified Consulting Forester.

Locations where trees are proposed for removal within field-observed steep slopes with indications of soil or tree movement, will be documented by a qualified Consulting Forester in the Notification Log Book. This information will be provided to Bellevue on an annual basis (see Section 3.1).

4.3.2 Tree Trimming/Crown Thinning

Description

Pruning undesirable vegetation to protect PSE's distribution system, or to allow the ingress and egress for maintenance of such utilities. The described activities will be

performed in a manner that will minimize impacts and disturbance to underlying shrubs, groundcover and non-targeted trees. Activities include branch trimming to maintain clearance around powerlines, topping when necessary, crown reduction, and crown thinning to reduce sail area.

General BMP Approach

The extent of clearing will be the minimum necessary to alleviate the described condition and is not to exceed that needed for access and turn-around for specific equipment to be used. Any equipment or vehicles used during vegetation management activities should be staged and refueled outside of critical areas and critical area buffers. If this is not possible, then a "safe area" within the buffer shall be used for staging and refueling.

PSE adheres to the American National Standards Institute (ANSI) A-300-2008 Tree, Shrub and Other Woody Plant Maintenance Standard Practices (Standard). The Standard was written by representatives from all aspects of tree care, including utility arborists. Components of the Standard are:

- Branches should be cut at laterals or at the parent branch and not pre-established clearing limits.
- Branches should be pruned without damaging the parent stem or branch collar, and without leaving a stub.
- Cuts should be made to avoid splitting or tearing of the bark.
- A minimum number of cuts should be made to discourage the regrowth of sprouts.
- Care should be taken to avoid damage to other parts of the tree and to surrounding property and vegetation.
- Wound treatments should not be routinely used.
- Trees growing along the side of a right-of-way, and growing into or toward the utility space, should be pruned by removing the entire branches. Branches that, when cut, will produce sprouts that would grow into the utility space should be removed.
- Climbing spurs may be used when limbs are more than throw line distance apart, or when the bark is thick enough to prevent damage to the cambium, or there are no other practical means of climbing the tree.
- During a utility declared emergency when service outages have occurred, utilities must restore service as quickly as possible. At such time, it may

be necessary to deviate from the use of proper pruning techniques as defined in the Standard. Following the emergency, corrective pruning should be done; see Section 4.5.

Other provisions include:

- Prune branches and main trunk in small pieces.
- When feasible, trunks, limbs and/or chips will remain on site in such a way that they do not pose a fire hazard, become an attractive nuisance, interfere with prominent plant growth conditions and/or create other liability.
- Sound pruning practices shall be used to take into consideration safety first, arboriculturally correct pruning methods, and natural appearance.

BMPs Specific to Stream Buffers

Additional light introduction to streams or stream buffers will be minimized to the extent possible.

BMPs Specific to Steep Slope Buffer Areas

- Pruning will be performed in a manner that will minimize impacts and disturbance to soil, underlying shrubs, groundcover and other trees. Removing vegetation from the ground layer should be minimized, and plantings should be stabilized with appropriate bioengineering techniques (e.g. netting, wattling, hydro-mulching, etc.) as necessary.
- Stormwater runoff will be prevented from saturating or loading adjacent steep slopes. If soil disturbance is to occur, an appropriate drainage system will be in place and adequately maintained to intercept runoff flows before reaching the slope.

Wetland Specific BMP Approach

Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional.

Steep Slope Specific BMP Approach:

Same as above, except requires documentation by qualified Consulting Forester.

4.3.3 Herbicide Use

Description

Herbicide use can greatly lower the impacts to critical areas and buffers by eliminating stump re-sprouting and by selectively treating tall-growing species while

still small and manageable. The ultimate goal is a powerline corridor that has been converted to a plant community that is smaller in height and requires little or no maintenance. PSE contracts with only qualified licensed herbicide applicators and utilizes only licensed and approved herbicides. There are two methods of application for distribution spray: 1) stump treatment, and 2) basal treatment, described below.

General BMP Approach

Herbicide use will be conducted according to guidelines set forth in the Bellevue Environmental Best Management Practices and Design Standards (EBMP&DS, 2012) and methodology detailed below. Property owners will be contacted prior to any herbicide work on their respective properties. Any equipment or vehicles used during vegetation management activities will be staged and refueled outside of critical areas and critical area buffers. If this is not possible, then a "safe area" within the buffer will be used for staging and refueling.

The two methods of application for distribution spray are: 1) stump treatment and 2) basal treatment.

Stump Treatment:

Stump treatment is applied to control stump re-sprouting of deciduous trees within 12 feet of the overhead powerlines. Cut stump treatment will occur on all deciduous trees whenever they are removed, and is generally applied during routine maintenance tree work.

The cut stumps of deciduous species are treated with Garlon 4 (active ingredient: triclopyr). Garlon is applied as a 25% mixture with an oil base and blue dye. Care will be taken to limit the application of the selected herbicide to the stump surface only. The outer ring of the cut surface is treated with a low-pressure applicator tool. This method of controlled low volume application significantly reduces the possibility of over spray and drift in addition to reducing the potential for treating unintentional targets.

Basal Treatment:

One to three years after the completion of a maintenance cycle on all powerline circuits, brush crews patrol looking for stump re-sprouts and other inappropriate young trees in the corridors. They will typically target tall-growing species less than 2 - 3 inches in diameter. The majority are less than 1 inch in diameter.

The lower 18 inches of the stem of each tree is treated with Garlon 4 (25%) or Rodeo (50%) depending on the proximity to water. The method of application is with a low-pressure applicator tool, as described above. The herbicides essentially target the root system and cut off all food and water transportation within the tree. Deciduous trees over 8 feet tall will generally be removed with their stumps treated instead of

being basally treated (described above). Conifers over 6 feet in height would also be targeted for removal.

BMPs Specific to Wetland and Stream Buffers, Shoreline Buffers, and Buffers of Non-Wetland Ponds Less than 20 Acres

No herbicides will be used within 25 feet of a water body unless using an approved aquatic herbicide by licensed applicators and approved by DSD. Typically, in the vicinity of standing or running water, PSE uses the herbicide Rodeo (active ingredient: glyphosphate). Rodeo is labeled for use in and around all water. It is used at a 50% mixture with water as a base and is applied using the same methods as Garlon.

All herbicide applications within shoreline, wetland and riparian buffers will be made under an approved NPDES Aquatic Noxious Weed Permit. The King County Noxious Weed Control Program Best Management Practices (King County 2010) will also be consulted for species-specific guidelines.

Wetland Specific BMP Approach

Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional.

Steep Slope Specific BMP Approach

Same as above, except requires documentation by qualified Consulting Forester.

4.4 Mitigation

4.4.1 Hazard Tree Removal

Mitigation will be provided for tree removal in critical areas and their buffers. Impacts will be assessed and mitigation sites chosen for tree replacement.

LUC 20.25H.215 requires mitigation sequencing for impacts proposed in critical areas and their buffers. For PSE vegetation management activities, avoidance is not possible since the powerlines already exist in critical areas and some vegetation must be cleared in order to maintain their safe and reliable operation. The BMPs described above minimize impacts by limiting disturbance in critical areas and specify the creation of habitat snags where possible when felling trees. Therefore, mitigation proposed for PSE's tree removal activities is a combination of rectification and compensation for necessary impacts.

Tree replacement in critical areas and buffers may be accomplished in a number of ways. When possible, PSE will replace hazard trees at a 4:1 ratio, with appropriate native species acceptable for use in powerline corridors, using planting templates in the Handbook for guidance. A PSE Consulting Forester or other qualified

professional should select species that will likely not require similar future remediation at the site. If a PSE Consulting Forester or other qualified professional determines that site conditions are not favorable to tree replacement, then native shrubs and/or groundcover can be substituted onsite or tree replacement can occur at an off-site mitigation location at a 4:1 ratio.

PSE routinely works with the City of Bellevue Parks Department to choose appropriate mitigation sites for tree replacement. Mitigation is planned from a "Total Resource Management" perspective, meaning when off-site mitigation is proposed, it will generally remain within the same watershed as the impacted area. Some compensatory mitigation may be carried out on sites that were not directly impacted by tree removal activities if, in consultation with the appropriate resource managers, that site is identified as a priority for habitat restoration.

The goal of the mitigation program is to replace the contribution of the felled trees in terms of the following ecological functions:

- Providing overstory shade;
- Reducing erosion by root binding of soils and canopy absorption of rainfall; and
- Providing habitat for wildlife (food and cover values, species and structural diversity, enhancing connectivity where possible).

Other goals include reducing or limiting encroachment by invasive species, and designing mitigation plans that will help minimize future conflicts with powerlines.

In order to avoid recreating conditions that will require future line clearing impacts, some restrictions must be incorporated into mitigation design. For example, replacement trees are to be located at least 30 feet from any powerline, and only small- to medium-sized trees (60-foot maximum height) are allowed within 50 feet of any powerline. If the site slopes away uphill from the powerlines, effectively increasing the height of the trees, these minimums will be increased accordingly.

4.4.2 Invasive Species Removal

Description

The removal of non-native invasive species for the purposes of promoting the successful establishment of native plantings as part of an approved mitigation or enhancement plan.

General BMP Approach:

Invasive species removal should be conducted according to guidelines set forth in the Bellevue Critical Areas Handbook (City of Bellevue 2007) and the Bellevue

Environmental Best Management Practices and Design Standards (EBMP&DS 2012). Any potentially soil-disturbing activity, such as grubbing or root removal, should be accomplished by hand and appropriate erosion control measures taken. In no case shall mechanized equipment be used within a wetland or steep slope area. When possible, English ivy that has grown into existing trees or snags will be girdled to help prevent further spread and to lessen the threat of it toppling or killing a tree.

Removal of ground-level vegetation should be minimized; activities on slope-type wetlands and steep slopes should be stabilized using bioengineering techniques such as wattling, mulching, and biodegradable netting if removal of ground-level vegetation is unavoidable. Such measures will not spread non-native plants into critical areas and/or critical area buffers. Therefore, hydroseeding, hand seeding, and the use of straw mulch are not permitted means of controlling erosion in areas of invasive species removal.

All cut or grubbed non-native vegetation will be disposed of off-site. Removal of homogeneous vegetation patches will most likely result in areas supporting little or no native vegetation. In this case, it is imperative to replace removed vegetation with native trees, shrubs, and/or groundcovers appropriate for use in PSE corridors. When replanting is proposed, replacement species, densities, and methods should be conducted using the guidelines in the Handbook and a qualified professional shall develop the enhancement plan. In general, only native species should be planted within critical areas and their buffers, unless the subject area is part of one of the agricultural areas that are preserved within the Bellevue Parks system.

Access trails should be minimal and staging areas placed outside of the critical area and buffer.

BMPs Specific to Wetland and Stream Buffers, Shoreline Buffers, and Buffers of Non-Wetland Ponds Less than 20 Acres

Herbicide use will be avoided wherever removal by hand or mechanical means is possible. When necessary, herbicide use will follow guidelines in Section 4.3.3. All herbicide applications within shoreline, wetland and riparian buffers will be made under an approved NPDES Aquatic Noxious Weed Permit. The King County Noxious Weed Control Program Best Management Practices (King County 2010) will also be consulted for species-specific guidelines.

BMPs Specific to Steep Slope Buffer Areas

Removal of ground-level vegetation on steep slope buffers will be minimized, and stabilization techniques such as wattling, mulching, and netting will be employed when such removal cannot be avoided.

Wetland-Specific BMP Approach

Mechanical, cultural, or biological methods of control are preferred. The use of herbicides in wetlands is of particular concern because of the potential to contaminate groundwater and the unique sensitivity of aquatic organisms. Effective control of invasive species in wetlands can sometimes only be accomplished by herbicides. However, herbicides should only be utilized in wetlands where the benefits of invasive species removal outweigh the risks, based on the recommendation of a qualified ecologist. When necessary, herbicide use will follow guidelines in Section 4.3.3. All herbicide applications within wetlands will be made under an approved NPDES Aquatic Noxious Weed Permit. The King County Noxious Weed Control Program Best Management Practices (King County 2010) will also be consulted for species-specific guidelines.

Steep Slope-Specific BMP Approach

Removing vegetation from the ground layer should be minimized, and plantings should be stabilized with appropriate bioengineering techniques described above. Storm-water runoff must be prevented from saturating or loading steep slopes. An appropriate drainage system should be in place and adequately maintained to intercept runoff flows before reaching the slope.

4.4.3 Temporarily Disturbed Areas

Areas disturbed for temporary access and staging will be restored in place following completion of maintenance activities. Only native seed mixes and/or native plantings will be installed in critical areas or critical area buffers.

Mitigation plans for hazard tree removal and temporarily disturbed areas will include monitoring and maintenance provisions as required in LUC 20.25H.220. Mitigation sites are designed to be maintenance-free whenever possible, such as prescribing infill planting within healthy existing plant communities to increase species and structural diversity. A mix of bare root and container plants are typically used. Watering regimes and invasive plant control are designed as needed.

Mitigation and monitoring reports will be submitted on an annual basis to DSD. As detailed in Section 3.1 of this document, PSE typically meets with City staff in January or February of each year to review upcoming work within the City. At the same time, PSE provides DSD with a summary report of the previous year's activities. This report documents numbers and species of trees removed or converted to wildlife snags, average DBH, and mitigation actions completed.

4.5 Emergency/Storm Work

Pursuant to LUC 20.25H.055(C)(3)(b), emergency actions are defined as those that must be undertaken immediately or within a time too short to allow full compliance with the LUC, to prevent an imminent threat to public health or safety. After

emergency actions are taken, DSD must be notified and an enhancement and/or mitigation plan be prepared based on the impacts of the emergency activities.

This programmatic permit covers activities described in this document that are undertaken on an emergency basis. PSE will notify DSD with a report of all hazard tree removals if possible conducted on an emergency basis that weren't covered in the annual workload notification. The report will not include trees that have fallen into the infrastructure. No further permit coordination is required as long as the emergency activity is covered by this programmatic permit.

5 CLEARING AND GRADING GUIDELINES

The preceding section described general BMPs for each of the individual activities covered under this programmatic permit. The intent of this section is to describe general BMPs applicable to all covered activities, as required by the Clearing and Grading Code (LUC 23.76), specifically LUC 23.76.060, *Clearing – Vegetation preservation and replacement* and LUC 23.76.090, *Erosion and sedimentation control*. Also included in this section is a description of erosion control measures to be taken for all covered activities.

5.1 Clearing and Grading Standard Notes

In addition to the general BMPs described in the preceding section for each individual activity and the specific BMPs provided in Section 6, all activities covered under this programmatic permit shall adhere to all relevant City of Bellevue clearing and grading standard notes. For reference, the standard notes are listed below in their entirety.

1. All clearing & grading construction must be in accordance with City of Bellevue (COB) Clearing & Grading Code, Clearing & Grading Development Standards, Land Use Code, Uniform Building Code, permit conditions, and all other applicable codes, ordinances, and standards. The design elements within these plans have been reviewed according to these requirements. Any variance from adopted erosion control standards is not allowed unless specifically approved by the City of Bellevue Development Services (DSD) prior to construction.

   It shall be the sole responsibility of the applicant and the professional civil engineer to correct any error, omission, or variation from the above requirements found in these plans. All corrections shall be at no additional cost or liability to the COB.

2. Approval of this erosion/sedimentation control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g. size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).

3. A copy of the approved plans and drawings must be on-site during construction. The applicant is responsible for obtaining any other required or related permits prior to beginning construction.

4. The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the applicant/contractor until all construction is completed and approved and vegetation/landscaping is established.

5. The ESC facilities shown on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to insure that sediment and sediment laden water do not enter the drainage system, roadways, or violate applicable water standards.

6. The ESC facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded as needed for unexpected storm events and to ensure that sediment and sediment-laden water do not leave the site.

7. All locations of existing utilities have been established by field survey or obtained from available records and should, therefore, be considered only approximate and not necessarily complete. It is the sole responsibility of the contractor to independently verify the accuracy of all utility locations and to discover and avoid any other utilities not shown which may be affected by the implementation of this plan.

8. The boundaries of the clearing limits shown on this plan shall be clearly flagged in the field prior to construction. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the applicant/contractor for the duration of construction.

9. Clearing shall be limited to the areas within the approved disturbance limits. Exposed soils must be covered at the end of each working day when working from October 1st through April 30th. From May 1st through September 30th, exposed soils must be covered at the end of each construction week and also at the threat of rain.

10. At no time shall more than one foot of sediment be allowed to accumulate within a trapped catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.

11. Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project.

12. The contractor must maintain a sweeper on site during earthwork and immediately remove soil that has been tracked onto paved areas as result of construction.

13. The ESC facilities shall be inspected daily by the applicant/contractor and maintained as necessary to ensure their continued functioning.

14. Any excavated material removed from the construction site and deposited on property within the City limits must be done in compliance with a valid clearing & grading permit. Locations for the mobilization area and stockpiled material must be approved by the Clearing and Grading Inspector at least 24 hours in advance of any stockpiling.

15. The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month or within the 48 hours following a major storm event.

16. Final site grading must direct drainage away from all building structures at a minimum 5% slope, per the International Residential Code (IRC) R401.3.

5.2 Erosion and Sediment Control Plan

Pursuant to LUC 23.76.090, all construction activities covered by this programmatic permit shall comply with the following erosion and sedimentation control BMPs. The described BMPs are necessary to prevent sediment from leaving the project area and impacting downstream waters. In general, it the PSE's responsibility to ensure sediment does not leave the project area in an amount that would violate applicable State or City water quality standards.

1. All necessary temporary erosion and sedimentation control measures shall be installed prior to any clearing or vegetation removal.

2. Construction access into critical area buffers shall be limited to one route if possible. Sediment deposited on a paved right-of-way shall be removed in a manner that prevents it from entering the drainage system.

3. Adjacent and downstream properties, storm drain inlets, and the downstream natural and built drainage system shall be protected from sediment deposition using the BMPs described in Section 6.

4. No stockpiling of materials shall occur on-site.

5. Whenever possible, staging and refueling areas are to occur outside of critical areas and critical area buffers and also away from areas of exposed soil.

6. Filter fabric will be installed around storm drains located in the vicinity of any vehicle staging areas.

7. The project area will be inspected daily to ensure that no additional sediment and erosion control BMPs are necessary.

6 SUMMARY OF BEST MANAGEMENT PRACTICES

The general BMP approach for each individual authorized activity has been described in Section 4. A more detailed analysis of the specific management controls and appropriate BMPs are presented in this section.

BMPs for each individual activity are presented below in Table 2. In addition to the BMPs presented below, proposed vegetation management activities must also be in compliance with the specific applicable performance standards for each individual critical area or critical area buffer described in the LUC. These include streams (LUC 20.25H.080), wetlands (LUC 20.25H.100), shorelines (LUC 20.25E.080) and steep slopes (LUC 20.25H.125).

Compliance with the BMPs described in this section shall also constitute compliance with the performance standards for HASLI (LUC 20.25H.160). The LUC (20.25H.160) requires that a wildlife management plan developed by the Washington Department of Fish and Wildlife (WDFW) be implemented on sites where a project or activity has the potential to impact habitat associated with species of local importance. Several species of local importance are also Priority Habitat Species (PHS) and therefore have had wildlife management recommendations developed for them by WDFW. Of these species, the following may use PSE corridors and subsequently could be impacted by activities covered under this permit:

- Bald eagle
- Peregrine falcon
- Pileated woodpecker
- Great blue heron
- Vaux's swift
- Purple martin
- Oregon spotted frog

- Western pond turtle

PHS on the Web (http://wdfw.wa.gov/mapping/phs/) will be consulted when PSE submits their annual maintenance workload to City of Bellevue DSD. If occurrences of these species are identified on proposed work sites, PSE will work with the City and WDFW as needed to identify management practices to minimize impact to their habitat. The BMPs required under this permit address the majority of the recommendations developed by WDFW for these species through the permit's overall goal of minimizing impacts, mitigating for tree removals, and restoring temporarily impacted access and staging areas. Specific management strategies recommended by WDFW and also employed by the programmatic permit include the replacement of hazard trees, the retention and/or creation of snags and large stumps, supervision of activities by a Consulting Forester and/or Wildlife Biologist, avoiding alteration and protection of wetlands, avoiding removal of riparian vegetation, and the use of herbicides under the guidelines set forth in the Bellevue Environmental Best Management Practices and Design Standards (EBMP&DS, 2012) and methodology detailed in Section 4.3.

Table 2. Summary of Best Management Practices (BMPs)

PSE Action Location	**Best Management Practice**
Hazard Tree Removal	
General	• Identification and selection of hazard trees are performed by qualified Consulting Foresters. • Minimize disturbance to soil, shrubs, groundcover, and non-targeted trees. • Stage and refuel equipment outside critical areas and buffers, or if not possible, designate a "safe area" within the buffer. • Follow specified tree removal methods. • Leave limbs, trunk and wood chips when not creating a hazard or increasing instability. • Leave roots and stumps when feasible. • Create wildlife trees or snags where possible. • Removal of felled trees should be completed in a manner that does not damage native vegetation, riparian vegetation, or banks of streams, lakes or wetlands. • Minimize additional light introduction to streams or stream buffers. • Replace with native trees at 4:1 ratio, either on site or at a designated off site mitigation area. If PSE Consulting Forester or qualified professional determines that site conditions are not favorable to tree replacement, native shrubs and/or groundcover can be substituted onsite or tree replacement can occur at an off-site mitigation property at a 4:1 ratio.
Wetlands	• Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional.

PSE Action Location	**Best Management Practice**
Steep Slopes	• Same as above, except requires documentation by qualified field Consulting Forester. • Stabilize plants with appropriate bioengineering techniques when necessary. • Prevent stormwater runoff from saturating or loading slopes.
Tree Trimming/Crown Thinning	
General	• Extent of clearing will be minimum necessary. • Minimize disturbance to soil, shrubs, groundcover, and non-targeted trees. • Stage and refuel equipment outside critical areas and buffers, or if not possible, designate a "safe area" within the buffer. • Perform work in accordance with ANSI A-300-2008 Standards. • Leave healthy limbs and wood chips when not creating a hazard or increasing instability. • Protect existing vegetation from falling plant materials. • Minimize additional light introduction to streams or stream buffers.
Wetlands	• Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional.
Steep Slopes	• Same as above, except requires documentation by qualified Consulting Forester. • Stabilize plants with appropriate bioengineering techniques when necessary. • Prevent stormwater runoff from saturating or loading slopes.
Herbicide Use	
General	• All herbicide applications within shoreline, wetland and riparian buffers will be made under an approved NPDES Aquatic Noxious Weed Permit. • Stage and refuel equipment outside critical areas and buffers, or if not possible, designate a "safe area" within the buffer. • Use Garlon 4 (25%) or Rodeo (50%) depending on proximity to water. • Follow specified application guidelines. • Do not use herbicides within 25 feet of a water body unless using an approved herbicide by licensed applicators and approved by DSD.
Wetlands	Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional.
Steep Slopes	Same as above, except requires documentation by qualified Consulting Forester.
Invasive Species Removal	
General	• Removal of ground-level vegetation should be minimized; activities on slope-type wetlands and steep slopes should be stabilized using bioengineering techniques such as wattling, mulching, and biodegradable netting if removal of ground-level vegetation is unavoidable. • Any potentially soil-disturbing activity, such as grubbing or root removal, should be accomplished by hand whenever possible. • Properly identify target species.

PSE Action Location	**Best Management Practice**
	• Mark all desirable vegetation around control area to ensure that non-targeted native plants are protected. • Use soil from roots to fill in any divots to lessen the amount of disturbed soil. • Use mechanical means such as mowers and string trimmers when hand removal is not feasible; do not use string trimmers near native vegetation. • Stage and refuel equipment outside critical areas and buffers, or if not possible, designate a "safe area" within the buffer. • Girdle English ivy infestations on trees to prevent further spread and weakening of the tree. • Remove all cut or grubbed non-native vegetation off-site, or can be left on site in areas of existing non-native vegetation in a manner that would not cause the spread of invasive species. • Replant bare areas when necessary, following guidelines specified in the Handbook. • Use selective herbicide application only where manual and mechanical removal are not possible and only in accordance with guidelines specified in this document. • Do not use hydroseeding, hand seeding, or straw mulch as means of controlling erosion in areas of invasive species removal.
Wetlands	• Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional. • Do not use mechanized equipment within a wetland.
Steep Slopes	• Same as above, except requires documentation by qualified Consulting Forester. • Do not use mechanized equipment within a steep slope area. • Minimize removal of vegetation from the ground layer. • Stabilize plants with appropriate bioengineering techniques when necessary. • Prevent stormwater runoff from saturating or loading slopes.

7 POTENTIAL CONSERVATION OUTCOMES

It is the intention of this programmatic permit to preserve and enhance the functions and values of critical areas and critical area buffers located in PSE corridors within the City of Bellevue. The activities covered under this permit provide the opportunity to couple routine maintenance with habitat management and enhancement. The following paragraphs describe how the methods required by this permit accomplish the goal of protecting and enhancing ecological functions.

BMPs designed for hazard tree removal include retention of standing and downed wood. These are extremely valuable habitat features for wildlife, including birds, herptiles, and small mammals. When safety dictates the removal of a hazard tree and snag, the enhancement of the area with native species designed to meet future safety needs preserves habitat function by promoting a low-maintenance corridor that requires less intrusion for ongoing maintenance. Pruned native vegetation provides low cover for wildlife and adds complexity to habitat. Replanting with more appropriate tree and shrub species reduces the need for future disturbance. Following guidelines in this document and the Handbook will also ensure a more diverse habitat designed to enhance not only habitat function, but other buffer functions such as slope stabilization, stormwater flow attenuation, and water quality improvement.

Removal of invasive species, when implemented, will be designed within the parameters of this permit to result in improvement in vegetated corridors. Any removal that results in bare ground will be accompanied by installation of replacement plants in the form of native species. Not only is this likely to result in denser, more complex vegetative structure than the existing infestation, and provide an aesthetic visual screen, the resultant native plant community will represent an improvement from a wildlife perspective. Limiting the use of herbicides further protects the functions of buffers and critical areas.

This permit recognizes the need for expedient and financially unrestrictive maintenance. Provisions for authorized activities and implementing mitigation plans enable routine maintenance to be conducted hand-in-hand with ecological improvement, without cumbersome regulatory processing. With careful application, it will result in powerline corridors and designated mitigation sites that provide dense and complex screens of native vegetation, habitat features for wildlife, and enhanced functions as critical area buffers.

8 REFERENCES

American National Standards Institute (ANSI). 2008. A300-2008 standards.

Barbour, Michael G., et al. 1987. Terrestrial Plant Ecology. Benjamin/Cummings. Menlo Park, California. 634 pp.

City of Bellevue. 2007. Critical Areas Handbook.

City of Bellevue. 2008. City of Bellevue Geographic Information System (GIS) database.

City of Bellevue. 2012. Environmental Best Management Practices and Design Standards.

City of Bellevue. 2012. Stormwater Management Guide.

Cowardin, L. M. et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. Publication FWS/OBS-79/31. U.S. Fish and Wildlife Service.

Demaerschalk, J.P. and S.A.Y. Omule. 1982. Estimating Breast Height Diameters from Stump Measurements in British Columbia. The Forestry Chronicle. v. 58 (3): 143-145.

Hayes, J. P. et al. 1997. Wildlife response to thinning young forests in the Pacific Northwest. Journal of Forestry. Vol. 95, No. 8, pp. 28-33.

ISA Best Management Practices for Utility Pruning of Trees. 2004. International Society of Arboriculture. 22 pp.

King County Department of Natural Resources and Parks. January 2010. King County Noxious Weed Control Program. Best Management Practices (http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/weed-control-practices/bmp.aspx)

Marzluff, J.M. and A.D. Rodewald. 2008. Conserving biodiversity in urbanizing areas: nontraditional views from a bird's perspective. Cities and the Environ. 1:1-28.

National Marine Fisheries Service. 2008. Endangered Species Ac t- Section 7 Consultation Final Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation on the Implementation of the National Flood Insurance Program in the State of Washington Phase One Document - Puget Sound Region.

Sauer, L.J. 1998. The Once and Future Forest: A guide to forest restoration strategies. Island Press. Washington D.C. 381 pp.

Shandas, V. and M. Alberti. 2009. Exploring the role of vegetation fragmentation on aquatic conditions: Linking upland with riparian areas in Puget Sound lowland streams. Landscape Urban Planning 90(1-2):66-75.WDOE (Washington State Department of Ecology). 2012. Wetlands & CAO Updates: Guidance for Small Cities. Ecology Publication No. 10-06-002.

Smith, J.H.G. 1968. Growth and Yield of Red Alder in British Columbia. Proceedings of the Symposium for the Northwest Science Association. 40th: 273-286.

Snell, J.A.K. and Susan N. Little. 1983. Predicting Crown Weight and Bole Volume of Five Western Hardwoods. PNW Research Paper #151. p. 31.

Temple, S. 1996. Ecological Principles, Biodiversity, and the Electric Utility Industry. Environmental Management, Vol. 20, No. 6, pp. 873-878.

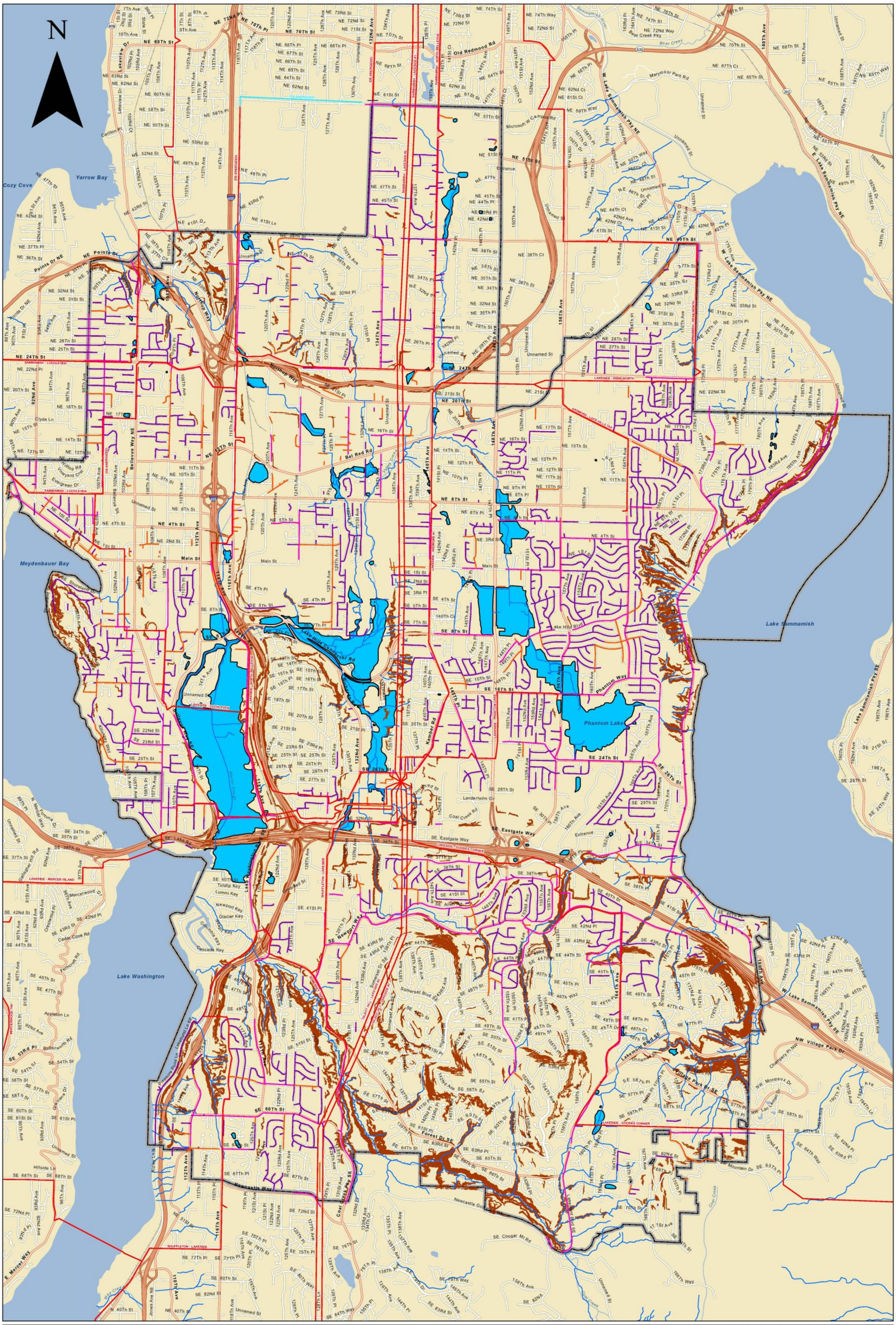
Thibodeau, F.R. and N.H. Nickerson. 1986. Impact of Power Utility Rights-of-Way on Wooded Wetland. Environmental Management, Vol. 10, No. 6, pp. 809-814.

Tiner, R.W. Wetland Indicators: A Guide to Wetland Identification, Delineation, Classification, and Mapping. Lewis Publishers. Washington, D.C. p. 106.

Washington Department of Ecology. 2006. Wetland Mitigation in Washington State: Part 2 – Developing Mitigation Plans. Publication #06-06-011b.

APPENDIX A

Vegetation Management Programmatic Map



PUGET SOUND ENERGY

Bellevue Critical Areas

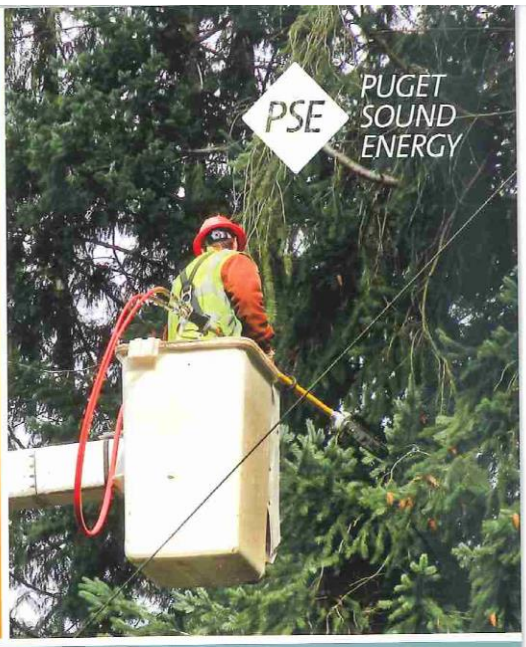
- 55kV PSE
- 115kV PSE
- 230kV PSE
- Overhead Feeder
- Overhead Lateral (3-Phase)
- Overhead Lateral (1/2-Phase)
- Stream
- City Boundary
- Slope over 40% and >= 1000Sq Ft
- Wetlands

APPENDIX B

PSE Customer Notification Form

maintaining
safe, reliable
power

"THAT'S my PSE"



We'll be in your neighborhood trimming trees

ASPLUNDH
TREE EXPERT CO.

PSE PUGET SOUND ENERGY

PRSRT STD
US POSTAGE
PAID
SEATTLE, WA
PERMIT NO 2389

Trees are a major cause of power outages. Over the next few weeks, our crews will be in your area trimming limbs that have grown too close to power lines.

Traffic may slow down while we're working, but we'll do our best to be quick and efficient.

Our certified arborist can answer any questions or concerns you might have during our time in your neighborhood.

und Energy | P.O. Box 97034 | Bellevue, WA 98009-9734

Tree-wise tip: Deciduous trees shed leaves in the winter. By planting them around your home, you'll let light in during winter and gain more shade in the summer. This can be an energy-saving solution.

NIXIE

BC:

pse.com/trees

6082 08/13

APPENDIX C

Suggested Plants for Mitigation Sites

Suggested Plants for Mitigation Sites

Species to replace overstory cover

Western red cedar	*Thuja plicata*
Douglas-fir	*Pseudotsuga menziesii*
Sitka spruce	*Picea sitchensis*
Oregon ash	*Fraxinus latifolia*
Black hawthorn	*Crataegus douglasii*
Pacific willow	*Salix lasiandra*

Species for erosion control

Willow species (container or stakes)	*Salix spp.*
Red-osier dogwood (container or stakes)	*Cornus sericea*
Black hawthorn	*Crataegus douglasii*
Snowberry	*Symphoricarpos albus*
Rose species	*Rosa spp.*
Serviceberry	*Amelanchier alnifolia*
Vine maple	*Acer circinatum*
Black twinberry	*Lonicera involucrata*
Sitka spruce	*Picea sitchensis*
Beaked hazelnut	*Corylus cornuta*
Tall Oregon grape	*Mahonia aquifolium*
Oceanspray	*Holodiscus discolor*
Salmonberry	*Rubus spectabilis*

Low canopy species acceptable under powerlines

Indian plum	*Oemleria cerasiformis*
Oceanspray	*Holodiscus discolor*
Red-flowering currant	*Ribes sanguineum*
Sweet mock orange	*Philadelphis lewisii*
Salmonberry	*Rubus spectabilis*
Rose species	*Rosa spp.*

Low canopy species to replace cover within 30 feet of powerlines

Vine maple	*Acer circinatum*
Beaked hazelnut	*Corylus cornuta*
Red elderberry	*Sambucus racemosa*

APPENDIX D

PSE Glossary of Terms

PSE Glossary of Terms

ATTRACTIVE NUISANCE - A potentially hazardous object such as a swimming pool, or a condition such as an open pit on a parcel of land, that is inviting and potentially dangerous to young children.

CANOPY - The uppermost layer of branches and foliage of forest or a single tree.

CONSULTING FORESTER – An individual trained in hazard tree assessment and actively involved in practice, or educated in forestry or arboriculture for at least one year. Also trained as Certified Arborist. Training in geologic hazard areas, wetlands, streams and their buffers will occur bi-annually.

CROWN THINNING - Removing superfluous live growth in a tree crown to admit light, reduce weight, and lessen wind resistance.

CROWN REDUCTION - The reduction of the top, sides, or individual limbs by the means of removal of the leader or longest portion of a limb to a lateral no less than one-third of the total diameter of the original limb removing no more than one-quarter of the leaf surface.

GIRDLE -To encircle a tree with ax cuts or a saw kerf to sever the bark and cambium layer, thus killing the tree (24).

HAZARD TREE – Hazard tree means any tree, determined by a person with five years' experience with the assessment of such hazards or the equivalent educational training and professional experience, to have a structural defect, combination of defects or disease resulting in structural defect which, under the normal range of environmental conditions at the site, will result in the loss of a major structural component of that tree in a manner that will:

A. Damage a dwelling unit, accessory dwelling unit, buildings that are a place of employment or public assembly, or approved parking spaces for such structures;

B. Damage an approved road or utility facility; or

C. Prevent emergency access in the case of medical emergencies.

MULCH - Any organic material that is spread on the ground to protect the soil and the roots of plants from the effects of soil crusting, erosion, or freezing; it is also used to retard the growth of weeds. A mulch may be made of materials such as straw, sawdust, grass clippings, peat moss, wood chips, or leaves.

SAIL AREA - The area of tree canopy extended to the wind that catches the wind in such a way as to transmit the force of the wind to the main stem of the tree.

TREE REMOVAL – Felling or removal of a mature tree greater than 6" diameter at breast height, when the main stem, bole or trunk of the tree is cut to ground level.

THINNING – See ANSI A300-2008.

TOPPING - The removal of the top portion of a leader stem.

UTILITY DECLARED EMERGENCY – See Section 4.5. Emergency Storm Work.

WILDLIFE TREE – A dead or dying tree that exhibits sufficient decay characteristics to enable cavity excavation or use by wildlife as nest habitat or for foraging.