

#### 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. 20-110538-LO

Project Name/Address: PSE Vegetation Management Programmatic CALUP

Planner: David Wong

425-452-4282

DWong@Bellevuewa.gov

Minimum Comment Period: 01/12/2023

Materials included in this Notice:

✓ Blue Bulletin
✓ Checklist
✓ Vicinity Map
✓ Plans
✓ Other:

#### OTHERS TO RECEIVE THIS DOCUMENT:

☑ State Department of Fish and Wildlife

☑ State Department of Ecology, Shoreline Planner N.W. Region

☑ Army Corps of Engineers

☑ Attorney General

☑ Muckleshoot Indian Tribe



# SEPA Environmental Checklist

The City of Bellevue uses this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

#### **Instructions**

The checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully and to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions.

You may respond with "Not Applicable" or "Does Not Apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies and reports. Please make complete and accurate answers to these questions to the best of your ability in order to avoid delays. For assistance, see <a href="SEPA Checklist Guidance">SEPA Checklist Guidance</a> on the Washington State Department of Ecology website.

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

#### **Background**

- Name of proposed project, if applicable <u>PSE Vegetation Management Programmatic Permit</u>
   Name of applicant <u>Puget Sound Energy</u>
   Contact person <u>Kerry Kriner</u> Phone <u>425-462-3821</u>
   Contact person address <u>PO Box 97034, EST 4W Bellevue WA 98009</u>
   Date this checklist was prepared <u>5/29/2020</u>
- 6. Agency requesting the checklist City of Bellevue

7.	Proposed timing or schedule (including phasing, if applicable)
	Ongoing maintenance year round over 5 year period (duration of permit).
8.	Do you have any plans for future additions, expansion or further activity related to or connected with this proposal? If yes, explain.
	No further activity is proposed beyond routine vegetation management.
9.	List any environmental information you know about that has been prepared or will be prepared, that is 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
	Addendum to the Existing Bellevue Programmatic Vegetation Management Plan. HDR Engineering. May 2020
10.	Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
	There are no other know applications pending that may affect the properties covered by this proposal.
11.	List any government approvals or permits that will be needed for your proposal, if known.
	Programmatic approval of a Critical Areas Land Use Permit, SEPA threshold determination, and a Clearing and Grading Permit. There is an active Clearing and Grading Permit for the current Programmatic Permit. Upon expiration in 2022, that Clearing and Grading Permit will be renewed by PSE.

12. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Puget Sound Energy (PSE) performs routine vegetation management along existing overhead transmission and distribution line corridors, as well as underground gas distribution corridors to ensure the safety and reliability of our system. Electric and gas 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.

13. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and the section, township and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

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 and site specific information will be provided under GK permit applications.

#### **Environmental Elements**

#### **Earth**

1.	Ge	neral description of the site:
		Flat
		Rolling
		Hilly
		Steep Slopes
		Mountainous
		Other
2.	Wh	nat is the steepest slope on the site (approximate percent slope)? 40% +

3.	What general types of soils are found on the site (for example, clay, sand, gravel, peat,
	muck)? If you know the classification of agricultural soils, specify them and note any
	agricultural land of long-term commercial significance and whether the proposal results in
	removing any of these soils.

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.

4.	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.

5. Describe the purpose, type, total area and approximate quantities and total affected area of any filling, excavation and grading proposed. Indicate the source of the fill.

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

6. 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.

7. 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.

8. 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 regulated by BCC 23.76

#### Air

1. What types of emissions to the air would result from the proposal during construction, operation and maintenance 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.

2. 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.

3. Proposed measures to reduce or control emissions or other impacts to air, if any.

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

#### Water

- 1. Surface Water
  - a. 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 electric transmission and distribution corridors within close proximity to streams, wetlands, and lakes. Gas distribution corridor locations will be identified on a case-by-case basis through the GK permit process.

b.	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.

c. 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 the fill material.

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

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

The proposal will not require surface water withdrawals or diversions.

e. Does the proposal lie within a 100-year floodplain? <u>Vegetation management activities may one</u>
If so, note the location on the site plan.

f.	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.		
Gr	ound Water		
a.	Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.		
	No ground water withdrawal or discharges to groundwater are proposed.		
b.	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.		

2.

a.	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.
b.	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.
c.	Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.
	Vegetation management activities will not alter or otherwise affect drainage patterns in the vicinity.
	dicate any proposed measures to reduce or control surface, ground and runoff water, and drainage pattern impacts, if any.
In	npacts are not anticipated, however BMPs will be employed to prevent impacts as ppropriate.

#### **Plants**

	•	
1.	Ch	eck the types of vegetation found on the site:
	V	deciduous tree: alder, maple, aspen, other
	V	evergreen tree: fir, cedar, pine, other
	V	shrubs
	V	grass
		pasture
		crop or grain
		orchards, vineyards or other permanent crops
	V	wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
	V	water plants: water lily eelgrass, milfoil, other
		other types of vegetation
2.	Wh	nat kind and amount of vegetation will be removed or altered?
	tra im	egetation removal will be dependent upon maintaining required clearances from ansmission and distribution lines and selective brush clearing for gas lines. Most apacted vegetation will be trimmed. Generally, trees growing over 25 feet in height in erial electric distribution and transmission corridors must be trimmed or removed to assure clearances are met.
3.	Lis	t any threatened and endangered species known to be on or near the site.
	E	cho, chinook, steelhead trout, and bull trout are all threatened under the Federal ndangered Species Act. These species occur in Lake Sammamish, Lake ashington, and tributary streams.
	N	o endangered or threatened plants are known to be in the area.
4.		oposed landscaping, use of native plants or other measures to preserve or enhance getation on the site, if any.
	re cle	majority of the impacted vegetation will be trimmed and not removed. When movals take place, replacement with native species compatible with utility line earances and appropriate to the impacted critical area will occur, where feasible. In ost cases, off-site mitigation will result in a better environmental outcome.

5.	List all noxious weeds and invasive species known to be on or near the site.
	Noxious weeds and invasive species will vary by site, but may include himalayan blackberry, reed canarygrass, knotweed, and english ivy or many others.
Anim	als
1.	List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:
	Birds: ☑hawk, ☑heron, ☑eagle, ☑songbirds, □other
	Mammals: ☑deer, ☑bear, ☑elk, ☑beaver, □other
	Fish: □bass, ☑salmon, ☑trout, □herring, □shellfish, □other
2.	List any threatened and 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.
3.	Is the site part of a migration route? If so, explain.
	The City of Bellevue is located within the Pacific Flyway.
4	Duran and an analysis of a sure of the sur
4.	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 through the GK permit process.

5.	List any invasive animal species known to be on or near the site.
	No known invasive animal species are on or near the work areas.
Energ	gy and Natural Resources
1.	What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
	Not applicable to vegetation management activities.
2.	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.
3.	What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.
	Not applicable to vegetation management activities.

#### En

Are fire	nental Health the there any environmental health hazards, including exposure to toxic chemicals, risk of and explosion, spill or hazardous waste, that could occur as a result of this proposal? If describe.
	nere are no anticipated health hazards that will result from the vegetation anagement activities.
a.	Describe any known or possible contamination at the site from present or past uses.
	There is no known contamination at or near the work areas.
b.	Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
	There are no known existing hazardous chemicals/conditions that might affect the vegetation management activities. PSE shares corridors with liquid and gas transmission pipelines; however no ground disturbance will occur over the pipelines, including grading or planting.
c.	Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
	No toxic or hazardous chemicals will be stored, used, or produced during vegetation management activities aside from fuel for machinery and tools.

d.	Describe special emergency services that might be required.
	No special emergency services are anticipated to be required.
e.	Proposed measures to reduce or control environmental health hazards, if any.
	No environmental health hazards are anticipated. Spill containment will be used during refueling activities.
No	isa
	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.
b.	What types and levels of noise would be created by or associated with the project on a short-term or a 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.
c.	Proposed measures to reduce or control noise impacts, if any.
	Vegetation management activities will comply with the noise regulations in BCC 9.18.
	Noise regulated by BCC 9.18

2.

#### **Land and Shoreline Uses**

1. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

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.

2. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to non-farm or non-forest use?

There is a possibility that maintenance activities may occur in areas used for agriculture or forest lands in the past, but these areas have not been identified at this time. No conversion of existing agricultural or forest lands of long-term commercial significance is proposed.

a. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling and harvesting? If so, how?

The proposed activities will not affect or be affect by surrounding working farms or forest land normal operations.

3. Describe any structures on the site.

There are no structures within the corridors.

4. Will any structures be demolished? If so, what?			
	No structures will be demolished associated with vegetation management activities.		
5.	What is the current zoning classification of the site? The zoning varies by location.		
6.	What is the current comprehensive plan designation of the site? Varies by location.		
7. 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. Shoreline designations will be identified on a case-by-case basis.		
8.	Has any part of the site been classified as a critical area by the city or county? If so, specify.		
	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.		
9.	Approximately how many people would reside or work in the completed project? <u>N/A</u>		
10.	Approximately how many people would the completed project displace? <u>N/A</u>		
11.	Proposed measures to avoid or reduce displacement impacts, if any.		
	No impacts will occur, therefore no measures are proposed.		
12.	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.		
	There are no proposed changes in existing land use.		

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

Vegetation management activities are compatible with and will not impact nearby agricultural or forest lands of long-term commercial significance. No such lands are known to be present within the City of Bellevue.

#### Housing

1. 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.

2. 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.

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

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

#### **Aesthetics**

1. 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.

2. 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.

3.	Proposed measures to reduce or control aesthetic impacts, if any				
	Impacts are not anticipated, therefore no measures are proposed.				
	and Glare				
1. What type of light or glare will the proposal produce? What time of day would it occur?					
	No light or glare will result from the maintenance activities.				
2.	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.				
3.	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.				
4.	Proposed measures to reduce or control light and glare impacts, if any.				
	No measures are proposed as not impacts are anticipated.				
Recre	eation				
1.	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.				
2.	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.				

3. 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.

#### **Historic and Cultural Preservation**

1. Are there any buildings, structures or sites located on or near the site that are over 45 years old listed in or eligible for listing in national, state or local preservation registers located on or near the site? If so, specifically describe.

Structures over 45 years of age may be located near the vegetation management activities, but have not been specifically identified.

2. Are there any landmarks, features or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

There are no known landmarks, features or other evidence of Indian or historic use or occupation of areas where vegetation management activities will occur. No professional studies have been conducted, as no ground disturbing activities are proposed and existing corridors are highly disturbed.

 Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

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.

4.	Proposed measures to avoid, minimize or compensate for loss, changes to and disturbance to resources. Please include plans for the above and any permits that may be required.				
	No impacts are anticipated, therefore no measures are proposed.				
Trans	portation				
	Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.				
	Many of the transmission and distribution corridors align with public rights-of-way that may abut critical areas or critical area buffers.				
2.	Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?				
	Transit is not applicable to this project.				
3.	How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?				
	Parking is not applicable to this project.				
4.	Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).				
	The proposal will not require any new roads or streets or improvements to roads or streets.				

5.	Will the project or proposal 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.			
6.	How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?			
	Not applicable. Maintenance activities will require vehicle trips to sites by vegetation management personnel and to transport equipment. Activity locations will be vary throughout the year.			
7.	Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.			
	The proposal will not interfere with, affect or be affected by the movement of agricultural or forest products on roads or streets in the area. PSE may transport downed trees from the sites or leave on site depending upon agreements with property owners.			
8.	Proposed measures to reduce or control transportation impacts, if any.			
	Transportation impacts are not anticipated, therefore no measures are proposed.			

#### **Public Service**

1.	protection, police protection, public transit, health care, schools, other)? If so, generally describe.				
	Vegetation management activities will not result in an increased need for public services.				
2.	Proposed measures to reduce or control direct impacts on public services, if any.				
	No impacts are anticipated, therefore no measures are proposed.				
Utiliti	es				
1.	Check the utilities currently available at the site:				
	☑ Electricity				
	□ natural gas				
	□ water				
	□ refuse service				
	□ telephone				
	□ sanitary sewer				
	□ septic system				
	□ other				
2.	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 vegetation around existing electrical transmission and distribution facilities and gas distribution corridors.				

### Signature

The above answers are true and	complete to the	best of my l	knowledge. I	understand	that the I	lead
agency is relying on them to mal	ke its decision.					

Signature
Name of signee Kerry Kriner
Position and Agency/Organization Senior Land Planner, Puget Sound Energy
Date Submitted <u>5/29/2020</u>

## 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





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

#### Prepared for:

City of Bellevue Development Services Department 450 110<sup>th</sup> Avenue NE Bellevue, WA 98004

#### Prepared on behalf of:

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

#### Prepared by:



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February 2015

The Watershed Company Reference Number: 140226

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## TABLE OF CONTENTS

				Page #
1	Purp	ose 8	& Need	1
2	Geog	graph	nic Area	2
3	Oper 3.1 3.2 3.3 3.4 3.5	Wo Ge Ob Per	nal Guidelines & Standards  orkload Identification Procedures  neral Customer Notification  tain Necessary Permits  rform Work  igation and Monitoring	6 6 7
4	Author 4.1 4.2 4.3	Ma Ve	d Activitiesnagement Objectivesgetation Management Zonesthorized Activities within Critical Areas and Critical Area Buffers	8 8
	4.3 4.3 4.3	3.2	Hazard Tree Removal	14
	4.4	Mit	igation	18
	4.4 4.4 4.4	1.2	Hazard Tree Removal Invasive Species Removal Temporarily Disturbed Areas	19
	4.5	Em	ergency/Storm Work	21
5	Clear 5.1 5.2	Cle	and Grading Guidelinesearing and Grading Standard Notesesion and Sediment Control Plan	22
6	Sumi	mary	of Best Management Practices	25
7	Poter	ntial	Conservation Outcomes	28
8	Refe	renc	es	30

Appendix A: Vegetation Management Programmatic Map

Appendix B: PSE Customer Notification Form Appendix C: Suggested Plants for Mitigation Sites

Appendix D: PSE Glossary of Terms

## LIST OF TABLES

Table 1. Table 2.	Critical Area Buffers  Summary of Best Management Practices (BMPs)		
Lis	T OF FIGURES		
Figure 1.	Clearance Zones for existing 4 kV, 7.2 kV, 12.5 kV, and 34.5 kV construction.	10	
Figure 2.	Clearance Zones for existing 55 kV, 66 kV, and 115 kV construction11		

### 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
	Category II – 75 feet to 225 feet	Mercer Slough, Phantom/
	Category III – 60 feet to 110 feet	Larsen Lakes, & Richards
	Category IV – 40 feet	Creek - 225 feet
		Other wetlands – 110 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	None, except that the 2008 Biological	250 feet (regardless of intervening
Hazard	Opinion on the National Flood	development)
	Insurance Program includes a 250- foot Riparian Buffer Zone	

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-ofway 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.

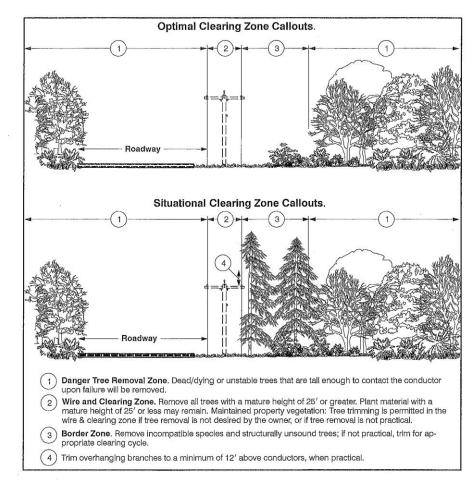
The following clearance requirements also apply to existing construction:

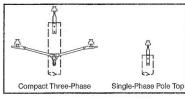
- Clearing requirements will conform to existing and/or original clearing limits.
- All distances are measured from the conductor.
- The clearing area represents a combination of the border and wire zones.
- Brush control includes removal of incompatible tree species 6 inches DBH or less, such as alder, 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.
  - o 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

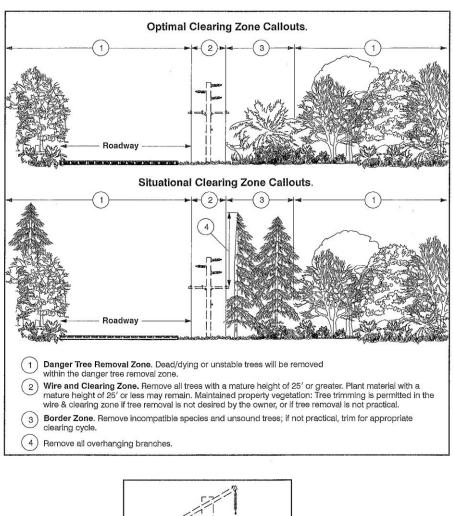
Effective on: 10/23/14D Canceling: 08/06/09 Page 2 of 6 ©1998 Puget Sound Energy INTERNAL USE ONLY

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





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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 preestablished 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 (<a href="http://wdfw.wa.gov/mapping/phs/">http://wdfw.wa.gov/mapping/phs/</a>) 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	<ul> <li>Identification and selection of hazard trees are performed by qualified Consulting Foresters.</li> <li>Minimize disturbance to soil, shrubs, groundcover, and non-targeted trees.</li> <li>Stage and refuel equipment outside critical areas and buffers, or if not possible, designate a "safe area" within the buffer.</li> <li>Follow specified tree removal methods.</li> <li>Leave limbs, trunk and wood chips when not creating a hazard or increasing instability.</li> <li>Leave roots and stumps when feasible.</li> <li>Create wildlife trees or snags where possible.</li> <li>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.</li> <li>Minimize additional light introduction to streams or stream buffers.</li> <li>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.</li> </ul>			
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	<ul> <li>Same as above, except requires documentation by qualified field         Consulting Forester.</li> <li>Stabilize plants with appropriate bioengineering techniques when         necessary.</li> </ul>
Tree Trimming/C	Prevent stormwater runoff from saturating or loading slopes.  rown Thinning
General	<ul> <li>Extent of clearing will be minimum necessary.</li> <li>Minimize disturbance to soil, shrubs, groundcover, and non-targeted trees.</li> <li>Stage and refuel equipment outside critical areas and buffers, or if not possible, designate a "safe area" within the buffer.</li> <li>Perform work in accordance with ANSI A-300-2008 Standards.</li> <li>Leave healthy limbs and wood chips when not creating a hazard or increasing instability.</li> <li>Protect existing vegetation from falling plant materials.</li> <li>Minimize additional light introduction to streams or stream buffers.</li> </ul>
Wetlands	Same as above, except requires a wetland determination and recommendation by a PSE Consulting Forester or other qualified professional.
Steep Slopes	<ul> <li>Same as above, except requires documentation by qualified Consulting Forester.</li> <li>Stabilize plants with appropriate bioengineering techniques when necessary.</li> <li>Prevent stormwater runoff from saturating or loading slopes.</li> </ul>
Herbicide Use	
General	<ul> <li>All herbicide applications within shoreline, wetland and riparian buffers will be made under an approved NPDES Aquatic Noxious Weed Permit.</li> <li>Stage and refuel equipment outside critical areas and buffers, or if not possible, designate a "safe area" within the buffer.</li> <li>Use Garlon 4 (25%) or Rodeo (50%) depending on proximity to water.</li> <li>Follow specified application guidelines.</li> <li>Do not use herbicides within 25 feet of a water body unless using an approved herbicide by licensed applicators and approved by DSD.</li> </ul>
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	<ul> <li>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.</li> <li>Any potentially soil-disturbing activity, such as grubbing or root removal, should be accomplished by hand whenever possible.</li> <li>Properly identify target species.</li> </ul>

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

# 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.

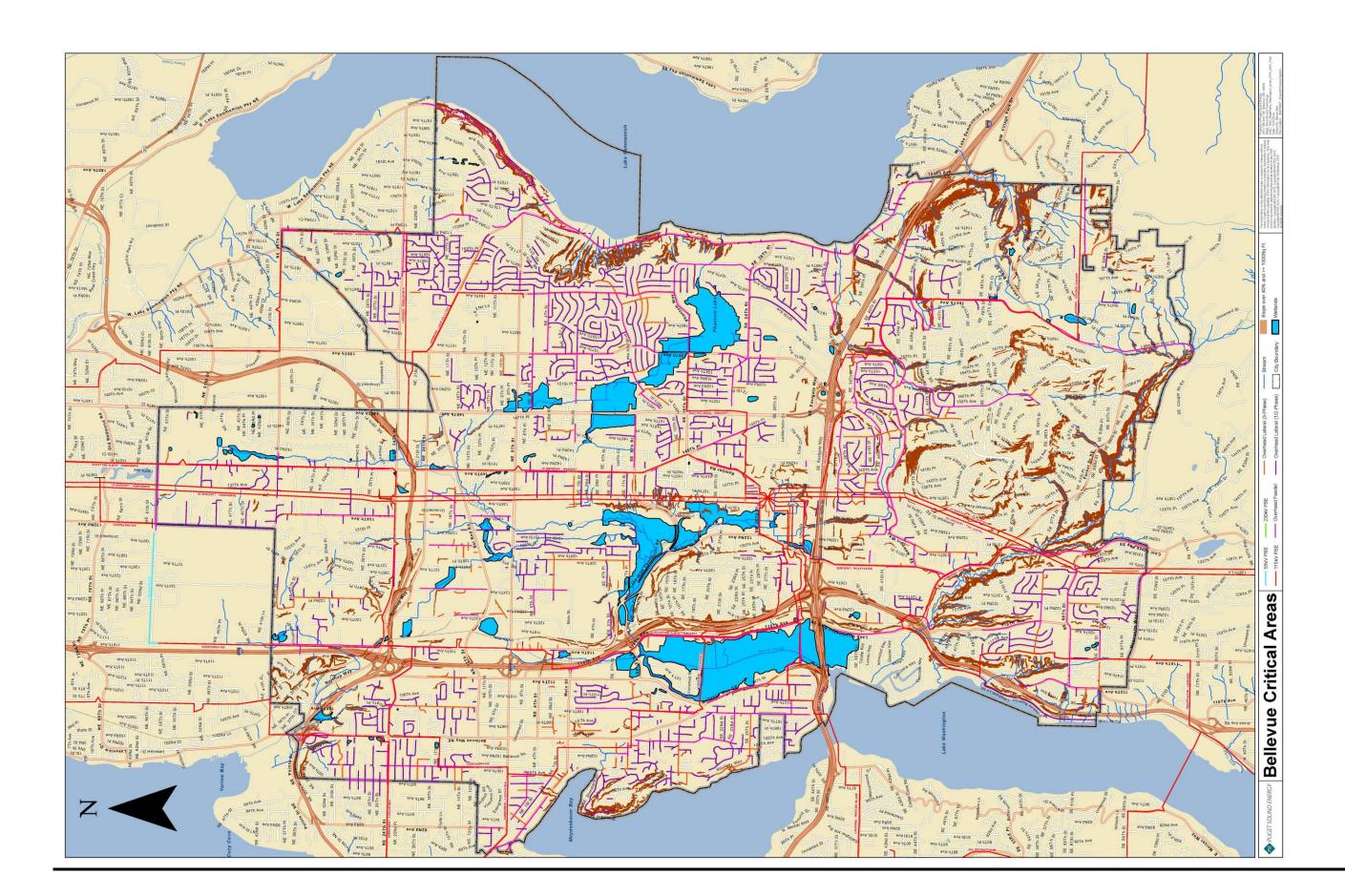
This permit recognizes the need for expedient and financially unrestrictive maintenance. Provisions for authorized activities and implementing mitigation plans enable routine maintenance to be conducted hand-in-hand with ecological improvement, without cumbersome regulatory processing. With careful application, 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.

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# **Vegetation Management Programmatic Map**



# **PSE Customer Notification Form**

# maintaining safe, reliable power



We'll be in your neighborhood trimming trees



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.

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.



pse.com/trees 6082 08/13

**PUGET** SOUND

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# **Suggested Plants for Mitigation Sites**

# **Suggested Plants for Mitigation Sites**

## Species to replace overstory cover

Western red cedar
Douglas-fir
Sitka spruce
Oregon ash
Black hawthorn
Pacific willow

Thuja plicata
Pseudotsuga menziesii
Pseudotsuga menziesii
Pseudotsuga menziesii
Preasitchensis
Fraxinus latifolia
Crataegus douglasii
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 Holodiscus discolor Oceanspray Salmonberry Rubus spectabilis

#### Low canopy species acceptable under powerlines

Indian plum
Oceanspray
Oceanspray
Holodiscus discolor
Red-flowering currant
Sweet mock orange
Philadelphis lewisii
Salmonberry
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.

## **Technical Memorandum**



To: Kerry Kriner (Puget Sound Energy)

From: Lisa Danielski, PWS #1873 (HDR Engineering Inc.)

Project: PSE Programmatic Vegetation Management Plan

**Date:** 5/28/2020

Subject: Addendum to the Existing Programmatic Vegetation Management Plan for the City of

Bellevue

## 1.0 Purpose

In 2015, Puget Sound Energy (PSE) received approval of a Programmatic Vegetation Management Plan from the City of Bellevue (City) as part of the issuance of a Critical Areas Land Use Permit (CALUP) for PSE's routine vegetation management activities on overhead electrical systems within critical areas and their buffers. Critical areas are defined by the City in LUC 20.50.014. The purpose of this addendum is to supplement the existing Programmatic Vegetation Management Plan (dated February 2015) by providing additional information regarding PSE's vegetation management practices and proposing mitigation options based on the review of best available science documents. This addendum also incorporates the maintenance and inspection activities for underground gas lines within critical areas and buffers.

#### 2.0 Introduction

PSE manages and maintains overhead electric transmission and distribution lines and underground natural gas distribution lines throughout the City of Bellevue. As part of its routine maintenance operations, PSE must maintain vegetation clearances which pose a hazard to the safe and reliable operation of the overhead power lines and underground natural gas lines. Regular management of PSE corridors predominantly consists of tree trimming and removal of smaller brush and volunteer species. However, it is necessary at times for PSE to remove mature trees when tree trimming is no longer an appropriate means to meet clearance standards and maintain tree health and vitality. Tree removal is done selectively on a case by case basis and, therefore may occur at any location across PSE's existing corridors. 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 the National Electric Safety Code.

## 3.0 Mitigation

## 3.1 Existing Framework for Mitigation Activities

## 3.1.1 Existing City of Bellevue Regulatory Framework

Vegetation management for utilities is allowed within critical areas and critical area buffers (LUC 20.25H.055C(3)(i)) with the approval of a Vegetation Management Plan. One criteria for managing vegetation associated with utilities is "[s]hort- and long-term management prescriptions, including restoration and revegetation requirements" (LUC 20.25H.055C(3)(i)). Cleared areas shall be restored and revegetated with native species to the extent such vegetation does not interfere with the function of the allowed facility or system. Often times, native tree species are not compatible with

overhead transmission and distribution line clearance standards, making replanting of native tree species on-site infeasible. In some cases, depending on the mitigation objectives lower growing species may be utilized for on-site mitigation. However, on-site mitigation including restoration and revegetation must ensure planted species survivability is achievable in the long-term. On-site mitigation is only feasible when PSE has access to the site to monitor and evaluate the success of the mitigation activity and ensure property owners or site users do not impact the mitigation site through disturbance, such as plant removal. For the purposes of this memo, on-site mitigation activity is performed on or adjacent to the impact site, and off-site mitigation is performed at a site other than where the impact will occur (Hruby et al. 2009).

The Bellewe Critical Areas Code contains location preferences for mitigation when each type of critical area is impacted and mitigation is required. On-site mitigation is generally preferred over off-site mitigation through prescriptive application of the location sequencing criteria. However, off-site locations may be approved by the City when on-site locations are not feasible. Furthermore, because the code is geared towards parcel based development and consolidated impact areas, it does not necessarily consider linear development with fragmented impact areas characteristic of PSE's utility corridors. Based on Best Available Science described below, isolated on-site mitigation sites with low survival rates are far less desirable than consolidated off-site mitigation sites with higher functional ecological value. For linear PSE projects, off-site mitigation is often a better alternative than on-site mitigation for implementing the goals and objectives of the City's Critical Areas Code.

#### 3.1.2 Current Mitigation Implementation Framework

Since PSE is generally not the underlying property owner where electrical facilities are located and vegetation maintenance activities occur, the actual property owner must grant PSE permission to plant both within and outside of the utility corridor. This is because mitigation is not an allowed activity within PSE's operating rights granted under easement terms or franchise rights. PSE also requires private property access during the required monitoring period and assurance that the property owner or other site users will maintain the plantings and not disturb the mitigation site. PSE cannot guarantee that the property owners will agree with PSE's proposal or that the planted plants will survive since PSE does not have control over the maintenance of the plants on private properties or public right-of-way.

In order to mitigate on-site, PSE often has to find planting areas outside of the existing managed corridors on private property, particularly for planting species that exceed the required vegetation clearances when mature. The complexity of private property owner negotiations for mitigation rights and the existing framework for mitigation activities has resulted in PSE planting native woody vegetation in less suitable areas when on-site mitigation opportunities are limited. Examples of unsuitable planting areas include the following conditions:

- Planting on private property, where PSE has no control over whether property owners remove or damage mitigation plantings.
- Planting in existing fill or altered areas such as compacted fill or other areas that do not support plant survival, and
- Planting in areas adjacent to infested invasive species where the small number of mitigation plants cannot outcompete the larger areas of invasive species.

Transmission and distribution line corridors in urban settings often cross through highly disturbed areas such as private yards and critical areas previously disturbed during development and are not

actively maintained. Disturbed sites allow for invasive species to colonize critical areas or buffers, further diminishing the ecological value of the site. Along PSE's transmission and distribution line corridors suitable tree and understory planting areas are often limited, however on-site mitigation requirements force PSE to plant trees in already disturbed sites such as compacted fill areas, established yards, or areas overrun with invasive species. These factors could potentially result in failure of the on-site mitigation activity.

Invasive species removal at PSE's mitigation sites in the City is part of PSE's best management practices under the current Programmatic Vegetation Management Plan and PSE implements best management practices (BMPs) for invasive species removal within the existing corridors. However, PSE has no control over implementing BMPs outside the mitigation area on private property. When a small number of mitigation trees or shrubs are planted adjacent to or within areas dominated by invasive species such as Himalayan blackberry (*Rubus armeniacus*), reed canary grass (*Phalaris arundinacea*), or English ivy (*Hedera helix*) these invasive species are likely to crowd out and prevent the establishment of the newly planted native species, lowering the potential for success of on-site mitigation.

PSE considers on-site mitigation feasible if the location of the impact is within City or PSE-owned property where mitigation areas can be consolidated into larger planting areas. This provides PSE and the City the ability to have more control over monitoring and maintenance of the site. For example, PSE provided on-site mitigation in the critical areas within the City's Lewis Creek Park to mitigate for vegetation management activities. Lewis Creek Park has a well-established forest habitat and is a primary wildlife habitat corridor connecting Lake Sammamish and the Cougar Mountain Regional Wildland Park (Bellevue 2003). PSE's on-site mitigation restored an area of the contiguous forest by removing Himalayan blackberries and planting native shrubs and trees. This mitigation effort has increased the functional ecological value of the site for wildlife habitat (Figures 1 and 2), while also ensuring long-term monitoring and maintenance is achievable since the site is located within park boundaries. Furthermore, the planting of a greater diversity of native tree species as well as native shrub understory was feasible due to the large size of the mitigation site and the lack of need to adhere to clearance standards that often limit planting options at other sites



Figure 1. Before photo of the on-site mitigation site at Lewis Creek Park



Figure 2. After photo of the on-site mitigation site at Lewis Creek Park

#### 3.2 Best Available Science

#### 3.2.1 Review of Best Available Science

In urban and suburban areas, landscape features such as forests, streams, wetlands, and parks can result in changes to biodiversity and wildlife habitat (The Watershed Company, 2009). Several studies have shown that a large patch of forest habitat contains greater biological diversity and species richness compared to smaller, isolated habitat patches (see Temple 1996, Donnelly and Marzluff 2005; McKinney 2008). In a study of avian biodiversity in the City of Seattle, Marzluff (2005) demonstrated that retaining and enhancing larger forest patches provides greater benefits to wildlife and wildlife habitat when compared to retaining smaller fragmented forest patches. In areas where habitats are fragmented and isolated, functional linkages that connect habitat patches to larger intact forest habitats are important for maintaining ecosystem processes and biodiversity (Adams 1994; Adams and Dove 1989; MacClintock et al. 1977, as cited in City of Bellevue 2003).

Additionally, riparian areas and forested steep slopes provide habitat connectivity for species migration, foraging, and breeding (Kunutson and Naef 1997; O'Connel et al. 2000; Spence 1996, as cited in City of Bellevue 2003).

An important component of preserving large interconnected habitats is maintaining the functional value of critical areas such as streams, wetlands and associated buffers. However, several studies evaluating past efforts for wetland mitigation have shown a low success rate in maintaining or replacing ecological functions (Ecology 2002; National Research Council 2001). One of the primary reasons for mitigation activities not achieving successful outcomes is poor site selection. In response, federal and state policies have shifted towards using a watershed-based approach for mitigation of impacts to streams and wetlands (Hruby et al 2009). Recent guidance suggests that mitigation activities are most beneficial when applied in areas where ecological processes can best be restored (Ecology et al. 2006, USACE & EPA 2008). Mitigation sites should be located appropriately on the landscape, address restoration of watershed processes, be sustainable, and have a high likelihood of ecological success (Hruby et al. 2009). In 2008, the Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) adopted a rule guiding compensatory mitigation for loss of aquatic resources (33 CFR Part 332). This rule requires the permitting agency to use a watershed approach to establish compensatory mitigation requirements to the extent appropriate and practicable.

According to Washington State Department of Ecology (Ecology), current research indicates that onsite mitigation in urban areas is not sustainable without continual monitoring and maintenance to counteract the effects of human disturbance (Hruby et al. 2009). This may be especially true for the City of Bellevue, which typically consists of urban habitats that are more prone to invasion by nonnative and invasive plant and animal species that are more tolerant of human disturbance (Edge 2001 and Ferguson et al. 2001). Furthermore, the future growth of the City is largely limited to the redevelopment of existing areas within the City limits (City of Bellevue 2015). As a result, land use intensity is expected to increase which, will further isolate areas where on-site mitigation could potentially occur.

Ecology also states that mitigation success should not be risked or opportunities bypassed for improving ecological processes in a watershed by unnecessarily prioritizing on-site mitigation over more effective and sustainable off-site options (Hruby et al. 2009). On-site mitigation is appropriate when the functions at the proposed project site are important to the ecological processes of the

watershed, and the opportunities for improving functions on-site have a high likelihood of being successful and sustainable (Hruby et al. 2009).

#### 3.2.2 Best Available Science Justification

Critical areas (LUC 20.50.014) are sometimes impacted by PSE vegetation management activities. For the purpose of this memo, best available science for wetlands and aquatic resources is applied to tree removal activities within critical areas. PSE's tree related impacts to critical areas are primarily related to the maintenance of linear corridors throughout the City. As a result, on-site mitigation is often installed in isolated and potentially degraded edge habitats. These sites provide a small number of trees or understory plants that do not maximize the potential ecological benefit that could be provided by a larger consolidated site where diverse habitat can be established. PSE's mitigation activities would be more successful and provide greater ecological benefit to the environment if multiple impact areas could be consolidated into a larger off-site location. In doing so, PSE can incorporate a greater diversity of tree and understory species in the mitigation design, provide buffers or connect areas with significant core habitat, provide habitat enhancement in larger patches, and more effectively monitor and maintain to ensure the mitigation is successful.

In order to meet the clearance requirements for safety and reliability PSE performs regular maintenance along the existing corridors including; targeted mowing, pruning, and removing vegetation. PSE corridors also provide equipment access to maintain the electrical system. PSE does not maintain the corridors for invasive removal or habitat improvement as the corridors main purpose is not intended to provide wildlife habitat or protection of critical areas. As a result, PSE's corridors should not be considered as a wildlife habitat linkages, and providing mitigation within or adjacent the existing PSE corridors does not provide a solution to habitat connectivity concerns in the urban environment. Only when corridors run through City or PSE-owned or controlled property that contains wetlands, streams, and or buffers, would consolidated on-site mitigation provide benefits to the wildlife habitat in the area.

## 3.3 Proposed Framework for Mitigation Activities

When on-site mitigation opportunities are not feasible due to access constraints, or will likely not result in a successful ecological outcome, PSE proposes to plant replacement trees and understory in off-site locations within the same drainage basin as the impact. PSE has been working with the Parks Department on mitigation activities in the City parks, including Lewis Creek Park. PSE proposes to use PSE and City-owned properties as off-site mitigation locations to the extent feasible. Table 1 provides a list of PSE electrical utility assets by drainage basin within the City of Bellevue. PSE is proposing that mitigation for tree removal be consolidated at off-site mitigation locations within the same drainage basins as the impact area. Three Mitigation Zones are proposed as depicted in Attachment 1: Mitigation Zones. Tree clearing within critical areas and buffers along transmission and distribution lines within each Zone will be mitigated for a selected mitigation site(s) within the same Zone.

Table 1. PSE's electrical utility assets in the City of Bellevue's drainage basins.

Geographic Area 1	Substation	115kV Line ID	
Lake Sammamish Drainage Basin			
North – mapped city boundary	Bridle Trails (BTR)	Lakeside (LAK)-Lochleven (LOC)	
South – I-90	Phantom Lake (PHA)	Lakeside (LAK)-Phantom Lake (PHA)	
East – Lake Sammamish	College (COL)	Lakeside (LAK)-Ardmore (ARD)	
West − 140 <sup>th</sup> Ave/145 <sup>TH</sup>	Lake Hills (LHL)	Sammamish (SAM)-Ardmore (ARD)	
	MidLakes (MLK)	SAM-North Bellevue (NOB)	
Geographic Area 2	Substation	115kV Line ID	
Mercer Slough Drainage Basin			
North – mapped city boundary	Northrup (NRU)	SAM-Lochleven (LOC)	
South – I-90	Clyde Hill (CLY)	Sammamish (SAM)-North Bellevue (NOB)	
East − 140 <sup>th</sup> Ave/145 <sup>TH</sup>	Factoria (FAC)	Shuffleton (SHU)-Lakeside (LAK)	
West - Lake Washington	North Bellevue (NOB)	Talbot (TAL)-Lakeside (LAK)	
	MidLakes (MLK)	Lakeside (LAK)-Mercer Island (MER)	
	Center (CEN)	Lakeside (LAK)-Phantom Lake (PHA)	
	South Bellevue (SBE)	Sammamish (SAM)-Lakeside 1 & 2 (LAK)	
	Lochleven (LOC)	Lakeside (LAK)-Ardmore (ARD)	
	Lakeside (LAK)	Lakeside (LAK)-Goodes Corner (GOO)	
		Lakeside (LAK)-North Bellevue (NOB)	
Geographic Area 3	Substation	115kV Line ID	
Coal Creek Drainage Basin			
North – I-90	Eastgate (EGT)	Shuffleton (SHU)-Lakeside (LAK)	
South – mapped city boundary	Somerset (SOM)	Talbot (TAL)-Lakeside 1 & 2 (LAK 1 & 2)	
East – mapped city boundary		Lakeside (LAK)-Goodes Corner (GOO)	
West – Lake Washington			

As described above, on-site mitigation will still occur if the impact is located in or adjacent to the City or PSE-owned properties that contain critical areas. Preference of on-site and off-site mitigation will be determined by working closely with the City reviewers on a case-by-case basis. PSE will submit proposed mitigation plans and obtain the City's approval prior to performing any mitigation activities.

## 3.4 Best Management Practices for Tree Removal Activities

Under the current Vegetation Management Plan, hazard tree identification is performed by qualified arborists that work for PSE. Tree removal is especially important where pruning alone cannot achieve safe clearances from a power line, further pruning will compromise the health of a tree, and where a tree's proximity to a line threatens property or public safety and/or is not in compliance with state or federal clearance standards. The following best management practices (BMPs) will be implemented when trees are proposed to be removed.

- 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 and stumps will be left in place.
- 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 feasible, a "safe area"
  within the buffer shall be used for staging and refueling.

- Any trees that are bigger than 12-inch diameter at breast height (DBH) will be snagged as long as they will not pose a safety hazard to infrastructure or pedestrians. A qualified arborist will determine which trees can be snagged for wildlife habitat.
- Where allowed by the underlying property owner, downed trees will be left on-site to limit disturbance in removing the tree from a critical area or buffer and provide for additional onsite habitat.

## 3.5 Best Management Practices for Off-site Mitigation

The following BMPs will be implemented as appropriate to ensure the mitigation activity will not affect resources or critical areas in the off-site mitigation locations:

- All rock and debris 2-inch and larger shall be removed from off-site mitigation areas
- Invasive removal
  - Within the off-site mitigation areas, remove above and below ground parts of invasive plants, including root crowns, as feasible.
  - Brush cut or brush hog Himalayan blackberry canes and cut flush to the ground. No stubs shall remain.
  - Brush cut or brush hog reed canarygrass to the ground.
  - o Dispose of invasive vegetation off-site unless otherwise directed.
- Avoid damage to native vegetation if present within the off-site mitigation area.
- Soil amendment
  - Soils shall be amended by incorporating up to 3 inches of compost if suitable.
  - Incorporation shall be by tilling compost into the top 10 inches of soil
- Weed fabric installation
  - Cut fabric to specifications leaving 10 to 15 feet on all sides as a buffer to deter invasive species encroachment
  - Place fabric and eco-stakes at 3-foot intervals on borders, seams and middle of fabric. Secure fabric with U-shaped stakes placed between eco-stakes at approximately 18-inch intervals.
  - Cut a square U-shape in each plant installation location and fold fabric under itself
- Plant installation
  - o All planting shall occur between October 15 and March 1.
  - Each plant must be secured to break apart roots
  - Plant installation will be inspected, and if 5 percent or more of plants are not installed properly, the entire site will require a replanting
  - Mulch rings will extend beyond the root zone of each installed plant in a tidy circle.
- Long-term maintenance and monitoring
  - As currently implemented under the 2015 Programmatic Vegetation Monitoring Plan, maintenance and monitoring will occur in the three years following implementation of the mitigation activity, and will follow King County protocols.

## 4.0 Gas Line Maintenance and Inspection Work

In addition to vegetation management for overhead distribution and transmission line clearance, vegetation clearing may be required for underground gas line safety inspections and maintenance on gas vaults and valves. Generally, this activity is limited to clearing overgrown groundcover and brush that may be blocking access to the facilities. Clearing of mature trees is not a typical activity since trees are not allowed within gas line corridors. These facilities may be located within critical areas or critical area buffers, triggering city permitting requirements. Therefore, PSE is requesting this work be included as part of the approved Programmatic Vegetation Management Plan.

Gas line safety inspections are generally performed using laser leak detection tools in three year cycles. Vegetation clearing is not required to perform the initial inspection. Following gas line inspection, if further work is required, vegetation clearing in the location of concern will likely be necessary. Maintenance of vaults and valves occurs on an annual basis. The need for additional vegetation clearing for the operation and maintenance of gas facilities may be required on a case-by-case basis, but is infrequent.

Inspections and maintenance activities generally do not trigger critical area mitigation as the primary activities involve minimal groundcover or brush clearing. In such cases where mitigation is necessary, mitigation requirements and location will be determined on a case-by-case basis, but will follow the same protocols as outlined for the overhead electrical distribution and transmission line mitigation.

# 4.2 Best Management Practices for Maintenance and Inspection Work

The primary vegetation clearing activities during gas line safety inspections and maintenance include mowing and clearing of ground cover and shrubs. When vegetation clearing is required, PSE will follow applicable BMPs as described in the City of Bellevue Clearing and Grading Standards document (City of Bellevue 2017).

## 5.0 References

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## **Attachment 1: Mitigation Zones**

