

Appendix G

Request to Update Former LU 18-151725 GW Greenway Review Approval

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October 2024

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1 REQUEST AND BACKGROUND

This Appendix G to the Harborton Reliability Project land use review narrative for LU 24-041109 CU EN GW is a request to revise conditions of approval of LU 18-151725 GW for the Harborton Restoration (Resource Enhancement) Project. This appendix provides an update demonstrating that the removal of Sub-Area 1 does not affect the LU 18-151725 GW approval and is in compliance with Title 33.

Approval of the Type II Greenway land use review LU 18-151725 GW included restoration in Sub-Area 1. The Harborton Restoration (Resource Enhancement) Project was modified in scope after the LU 18-151725 GW land use decision. Sub-Area 1 was dropped from the restoration project site boundary and, therefore not constructed and the elements associated with Sub-Area 1 are no longer applicable.

Construction of Sub-Areas 2, 3, and 4 per the LU 18-151725 GW approval commenced in May 2020 and earthwork began in June 2020. Earthwork was complete in mid-October 2020 and PGE completed plantings in February 2021.

2 SUB-AREA 1 DESCRIPTION

Sub-Area 1 consists of 8.01 acres southeast of the Harborton Substation within a new tax parcel created through lot line adjustments (tax lot 2N1W34 -101). Sub-Area 1 is relic floodplain habitat that was partially filled in association with construction of the BPA transmission towers, development of the Harborton Substation, and a rail siding track that previously serviced the Property. An unnamed stream that originates in the Portland West Hills flows from southwest to northeast across Sub-Area 1 to its confluence with the Willamette River. Floodplain habitat and connectivity between the stream and the Willamette River have been reduced due to fill placement, including an elevated service road constructed parallel to the river that contains a non-functioning culvert, which impounds the stream during most of the year.

The proposed restoration design for Sub-Area 1 included the following elements that were dropped from the restoration project after LU 18-151725 GW was approved:

- **Culvert replacement**—replacement of the partially collapsed culvert under the BPA service road with a 6-foot wide, open-bottom, arch-style culvert in compliance with ODFW fish passage design criteria. This action would have restored fish access to the approximately 1,000 linear feet of stream so it could function as seasonally available off-channel refugia habitat for juvenile salmonids and be available as seasonal habitat for other fish species.
- **Stream channel modification**—Minor excavation within the channel proximate to the new culvert and along the southeastern bank of the tributary to change the stream gradient to enhance channel function and improve off-channel habitat quality.
- **Installation of channel stabilization features**—Up and downstream of the culvert to further prevent erosion and to protect the function and longevity of the new culvert.
- **Wetland grading**—Grading down portions of a fragmented wetland by approximately 1 foot to remove reed canarygrass and to hydrologically connect the depressional features to enhance wetland habitat function.
- **Vegetation** to enhance and expand existing stream, riparian, and wetland habitats, and to aid in the control of invasive species.

The proposed restoration work in Sub Area 1 was abandoned as part of the habitat restoration proposal due to restrictions the Portland Harbor Natural Resource Damage Assessment Trustee Council wanted to place on that area, which would have prevented PGE from accessing the area to maintain the existing transmission towers located there. Because access for maintenance is a necessity for PGE, Sub-Area 1

was removed from the restoration site boundary and the reduced restoration project boundary moved forward for Trustee and state/federal permitting agency approvals.

3 33.730.140 REQUESTS FOR CHANGES TO CONDITIONS OF APPROVAL

A. Generally. Requests for changes to conditions of approval are processed using the current procedure assigned to the land use review and the current approval criteria for the original land use review, unless this Title specifies another procedure or set of approval criteria. See also Section 33.700.110, Prior Conditions of Land Use Approvals.

B. Zone changes before 1981. In the case of zone change requests filed before January 1, 1981, the Type II procedure applies.

C. Reviews no longer required. In the case of land use reviews that are no longer required by this Title, the most comparable review and procedure applies. For example, for variance requests, the procedures for adjustments apply. See also Section 33.700.110, Prior Conditions of Land Use Approvals.

D. Tree preservation. Where the only requested change is to tree preservation plans or conditions that have not expired

4 33.440.030 – 33.440.340 GREENWAY OVERLAY ZONE

The following is the original applicant responses for LU 18-151725 GW with notes provided in red font to highlight updates associated with the removal of Sub-area 1. For all figure and appendix references please refer to the original land use submittal.

33.440.030 Greenway Overlay Zones

A. Purpose. The purpose of the greenway overlay zones is to implement the land use pattern identified in the Willamette Greenway Plan and the water quality requirements of Metro Code 3.07.340.B (Title 3). There are five greenway overlay zones, each with its own focus and purpose. The purpose of each of the overlay zones is stated below.

1. River Natural. The River Natural zone protects, conserves, and enhances land of scenic quality or of significant importance as wildlife habitat.

...

3. River General. The River General zone allows for uses and development which are consistent with the base zoning, which allow for public use and enjoyment of the waterfront, and which enhance the river's natural and scenic qualities.

...

5. River Water Quality. The River Water Quality zone is designed to protect the functional values of water quality resources by limiting or mitigating the impact of development in the setback.

B. Where these regulations apply. The regulations of this chapter apply to all land and fills and structures in water within the Willamette Greenway Plan boundary designated on the Official Zoning Maps with River Natural, River Recreational, River General, River Industrial, or River Water Quality overlay zones except that the area within the interior of Ross and Hardtack Islands which is presently subject to the Ross Island Management Plan will not be subject to the regulations of this chapter during such time as the Ross Island Management Plan remains in effect. In addition, the public trail standards of Section 33.440.240 below apply to all lands designated on the Willamette Greenway Plan with the recreational trail symbol but which are outside of the greenway zones. However, the regulations of this chapter do not apply within the South Waterfront subdistrict of the Central City plan district. Sites in the South Waterfront subdistrict are instead subject to Section 33.510.253, Greenway Overlay Zone in South Waterfront Subdistrict.

C. Removal or remediation of hazardous substances. For projects limited to the removal or remediation of hazardous substances conducted under ORS 465.200 through 465.510 and 465.900, the regulations of this chapter apply only to the portion of the site located within the boundaries of the removal or remedial action areas, as delineated by the Department of Environmental Quality.

Response: The Harborton Property is comprised of two parcels (Tax Lots 2N1W34-100 and 2N1W34-300) within three Greenway Overlay Zones – River Natural, River General, and River Water Quality.

- Tax Lot 2N1W34-100 is zoned OSnq (Open Space [OS], River Natural [n], and River Water Quality[q]).
- Tax Lot 2N1W34-300 is zoned IHgq (Heavy Industrial [IH], River General [g], and River Water Quality[q]).

Restoration activities are proposed on both tax lots. These activities further the purpose of the River Natural overlay and River Water Quality overlay zones and are consistent with the River General overlay. The proposed uses and activities are appropriate for the purposes of the overlay zones. No recreational trails have been identified on the Property in the Willamette Greenway Plan. The Project does not include the removal or remediation of hazardous substances.

33.440.050 Relationship to State and Federal Reviews

In addition to any City requirements, all development within or riverward of the greenway setback, including fills, must be approved by the Oregon Division of State Lands and the U.S. Army Corp of Engineers.

Response: Concurrent with City review, the Project is being reviewed by the U.S. Army Corps of Engineers (Corps 2015) for compliance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA); the National Marine Fisheries Service (NMFS) for compliance with Section 7 of the Endangered Species Act (ESA); the State Historic Preservation Office (SHPO) for compliance with the National Historic Preservation Act (NHPA); and the Oregon Department of State Lands (DSL) for compliance with the Oregon Removal-Fill Law. The Project will also be reviewed by the Oregon Department of Environmental Quality (DEQ) for the beneficial re-use of soil that will be excavated and re-used to restore upland habitat at the site.

33.440.100 Use-Related Restrictions

A. Generally. In most cases, the greenway zones do not restrict primary uses that are allowed in the base zones by right, with limitations, or as a conditional use. Exceptions to this are in the River Recreational, River Industrial, and River Water Quality zones. The restrictions on uses are stated in Subsection B. below. The location of development for an allowed use is regulated by the development standards below. Any changes to the land associated with the use are subject to greenway review unless exempted. See 33.440.310 and 33.440.320 below.

B. Use restrictions.

...

3. River Natural and River General zones. There are no special use restrictions in the River Natural and River General zones.

4. River Water Quality zone. In the River Water Quality zone, use restrictions apply only within the greenway setback. Primary uses that are river-dependent or river-related are allowed and do not need to comply with Section 33.440.345, Supplemental Application Requirements or the approval criteria of Subsection 33.440.350.G. Primary uses that are not river-dependent or river-related may

be allowed if they are approved through greenway review. Existing uses that change to a non-river-dependent or non-river-related use are subject to greenway review.

Response: The proposed restoration activities are within the River Natural, River General and River Water Quality zones. The greenway setback in the River Water Quality zone is shown on Sheet 4 in Appendix C. The proposed restoration is river-related and elements of the proposed restoration project will occur within the greenway setback.

33.440.200 Application of the Development Standards

Any changes to land or development within the greenway zones, including rights-of-way, are subject to the development standards of this chapter.

Response: The proposed restoration activities are within the greenway zones and are thus subject to the development standards of this chapter. **Removal of Sub-Area 1 does not change this response.**

33.440.210 Development in the Greenway Setback

B. The setback areas.

...

2. River Water Quality overlay zone. The greenway setback in the River Water Quality zone extends from the top of the bank to a point 50 feet landward of the top of the bank for sites with less than 25 percent slope, or to a point 200 feet landward for sites with 25 percent or greater slope. See Figure 440-2 and Table 440-1.

3. Wetlands in the River Water Quality overlay zone. The greenway setback is 50 feet around the delineated edge of the wetland in addition to the setback from the top of the bank.

C. Development regulations.

1. Development landward of the greenway setback. Development, exterior alterations, excavations, and fills landward of the greenway setback are not required to be river-dependent or river-related and are subject to greenway review, unless exempt under Section 33.440.320, Exemptions.

2. Development within the greenway setback. Development, exterior alterations, excavations, fills, and associated tree removal within the greenway setback that are river-dependent or river-related may be allowed if approved through greenway review, unless exempt under Section 33.440.320, Exemptions. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate in the greenway setback.

3. Development riverward of the greenway setback. Development, exterior alterations, excavations, fills, and associated tree removal riverward of the greenway setback that are river-dependent or river-related may be allowed if approved through greenway review, unless exempt under Section 33.440.320, Exemptions. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate riverward of the greenway setback.

Response: The Property is within the River Water Quality zone and has less than 25 percent slope. The greenway setback, which is shown on Sheet 4 in Appendix C extends from the top of the bank to a point 50 feet landward of the top of the bank. The greenway setback is also shown 50 feet around the delineated edge of the wetland in addition to the setback from the top of the bank. The restoration activities are

proposed within the greenway setback as well as landward and riverward. Greenway review is required. The approval criteria are addressed below. **Removal of Sub-Area 1 does not change this response.**

33.440.220 Floor Area Ratios

The maximum floor area ratio (FAR) is 2 to 1 for the first 200 feet inland measured from the ordinary high water line, except in any of the following situations:

- A. The site is already subject to a more restrictive FAR;*
- B. The site is located in the Central City plan district, where the plan district FAR limits apply; or*
- C. The use is an industrial use in an IH or IG base zone.*

Response: Floor Area is the total area of the portion of a building that is above ground. No buildings are proposed under this action. **Removal of Sub-Area 1 does not change this response.**

33.440.230 Landscaping

A. Required landscaping. Landscaping must be provided to conserve or re-establish vegetative cover within or riverward of the greenway setback. The landscaping must comply with the standards specified below. This is in addition to any landscape requirements of other chapters of this Title. The greenway landscape requirements may be included in any overall percentage-of-site landscape requirements of the base zone. Landscaping is not required where it would significantly interfere with a river-dependent or river-related use or development, or where the Fire Marshal finds that it would pose a safety hazard.

B. Landscaping standards. Required greenway landscaping must comply with the standards stated below.

- 1. A minimum of one tree for every 20 feet of river frontage.*
- 2. A minimum of one shrub for every two feet of river frontage. However, if the greenway trail is proposed to be wider than 12 feet, the shrub calculations will be based on a minimum of one shrub per 25 square feet of area within and riverward of the greenway setback that is not paved or reveted. Areas of high human use which provide public access to the river, such as a beach, are exempt from the shrub calculations.*
- 3. Remaining areas which are not paved or reveted surfaces must have living ground cover.*
- 4. All trees and shrubs are to be planted generally within and riverward of the greenway setback.*
- 5. The standards are for calculation purposes only, and do not require or imply linear planting. Grouping of trees and shrubs is encouraged, particularly on the riverbank.*

C. Native plants. All landscaping must comply with the native plant requirement of the Willamette Greenway Plan.

D. Exception for sites with an existing nonconforming use, allowed use, limited use, or conditional use. The regulations of this subsection apply to sites with an existing nonconforming use, an allowed use, a limited use, or a conditional use. When alterations are made to a site that does not meet the standards of this section, and the alterations are over the threshold of Paragraph D.1, below, the site must be brought into conformance with the development standards listed in Subsections A, B, and C, above. The value of the alterations is based on the entire project, not individual building permits. The cost of the upgrades required by this chapter may be counted toward the cost of upgrades required by Subsection 33.258.070.D. However, the upgrades required by this chapter must be completed first.

- 1. Thresholds triggering compliance. The standards of Subsections A, B, and C must be met when the value of the proposed alterations on the site, as determined by BDS, is more than \$155,900. Alterations and improvements stated in 33.258.070.D.2.a do not count toward the threshold.*

2. *Area of required improvements. Except as provided in 33.258.070.D.2.c(2), Exception for Sites With Ground Leases, required improvements must be made to the entire site.*

3. *Timing and cost of required improvements. The timing and cost of the required improvements is specified in 33.258.070.D.2.d. However, where 33.258.070.D.2.d refers to the standards listed in Subparagraph 33.258.070.D.2.b, the standards of Subsections A, B, and C, above, are also included.*

Response: This section applies to landscaping within or riverward of the greenway setback. The Property has approximately 3,400 feet of river frontage. One tree for every 20 feet of river frontage is 170 trees. One shrub for every two feet of river frontage is 1,700 shrubs. As shown on Sheet 34 in Appendix C, native trees and shrubs in excess of the requirements of this section will be planted within the greenway setback. The proposed Project is in compliance with this standard. **Sub-Area 1 has approximately 600 feet of river frontage. The removal of Sub-Area 1 would reduce the total requirement by 30 trees (one tree for every 20 feet of river frontage) and 300 shrubs (one shrub for every two feet), and no trees or shrubs would be planted on Sub-Area 1. The proposed plantings on Sub-Areas 2, 3, and 4 would still exceed the minimum tree and shrub requirements of this section. Therefore, with the removal of Sub-Area 1, the Proposed Project is still in compliance with this standard.**

33.440.240 Public Recreational Trails

B. Public recreational trail requirements. All sites with a public recreational trail symbol shown on the Official Zoning Maps must comply with the requirements of Chapter 33.272, Public Recreational Trails, provide and install the official Greenway Trail signs as required by the Parks Bureau, and meet the trail design guidelines contained in the Willamette Greenway Plan.

Response: This standard applies to “sites” with a public recreational trail symbol shown on the Official Zoning Maps. A site is the contiguous ownership. There are no proposed trails are shown on PGE’s site. Therefore, this standard is not applicable. There is a “recreational trail” indicated on the zoning map adjacent to the NW St Helens Road right-of-way. However, it is not on the Property. It is located on the other side of both the railroad tracks and NW Marina Road from the Property. A similar alignment is shown in the Willamette Greenway Plan. Metro’s 2014 Regional Trails and Greenways publication identifies a trail in the rail corridor as part of the “Helvetia Trail”. The Helvetia Trail is described as following a railroad corridor from Banks, across the Tualatin Mountains to the Willamette River, passing through North Plains and Helvetia (17 miles). The report lists the Helvetia Trail as a “proposed trail” rather than an “existing” or “planned” trail. Metro notes that local governments and community advocates have proposed several future trails that are currently a conceptual part of the regional trails and greenways system. Before final decisions are made about on-the-ground trail alignments and designated uses, each trail will be master planned through a comprehensive process with many opportunities for public involvement. However, in no case is there any indication that the trail was intended to located on, or adjacent to, the Property. **Removal of Sub-Area 1 does not change this response.**

33.440.250 Public Viewpoints

Response: There are no public viewpoints shown on the Property. Therefore, this standard is not applicable. **Removal of Sub-Area 1 does not change this response.**

33.440.260 View Corridors

Response: There is no public view corridor on the Property. Therefore, this standard is not applicable.

Removal of Sub-Area 1 does not change this response.

33.440.270 Nonconforming Uses and Development

Nonconforming uses and development in the greenway zones are subject to the regulations and reviews of Chapter 33.258, Nonconforming Situations. The additional regulations stated below apply to development within or riverward of the greenway setback that is not river-dependent or river-related.

A. The development may continue.

B. The development may be changed to an allowed river-dependent or river-related development by right.

C. The development may be changed to another nonconforming development if within a building. If it is outdoors, it may not be changed to another nonconforming development.

D. The development may be expanded, but not within or riverward of the greenway setback.

Response: The standards above apply to development within or riverward of the greenway setback that is not river-dependent or river-related. **Removal of Sub-Area 1 does not change this response.**

33.440.300 Purpose

Greenway review ensures that all proposed changes to a site are consistent with the Willamette Greenway Plan, the Willamette Greenway design guidelines and, where applicable, the water quality element of Title 3 of Metro's Urban Growth Management Functional Plan. The purpose of greenway review is to ensure that:

- Development will not have a detrimental impact on the use and functioning of the river and abutting lands;*
- Development will conserve, enhance and maintain the scenic qualities and natural habitat of lands along the river;*
- Development will conserve the water surface of the river by limiting structures and fills riverward of the greenway setback;*
- Practicable alternative development options are considered, including outside the River Water Quality zone setback; and*
- Mitigation and enhancement activities are considered for development within the River Water Quality zone.*

Response: The proposed improvements further the purposes of the Greenway review. The proposed restoration project will improve the natural resource functions and values and enhance the scenic qualities along the river. The proposed natural resource enhancement within the River Water Quality zone better meet the purpose than does the "no build" alternative. **With the removal of Sub-Area 1, no disturbance or restoration is proposed within the 8.01-acre tract. The proposed natural resource enhancements within the River Water Quality zone in Sub-Areas 2, 3, and 4 will still meet the purpose to improve the natural resource functions and values and enhance scenic qualities.**

33.440.310 When Greenway Review Applies

Unless exempted in 33.440.320 below, the following items are subject to greenway review:

A. New development;

B. Exterior alterations to development, including the removal of trees and shrubs and the application of herbicides;

- C. A change of use or development within or riverward of the greenway setback, where the use or development is no longer river-dependent or river-related;
- D. Changes to the land and structures in the water, including excavations and fills, bridges, and docks;
- E. The dedication or extension of rights-of-way and any new development or improvements in rights-of-way when within the River Natural zone or within or riverward of the greenway setback;
- F. Non river-dependent or river-related primary uses in the River Industrial Zone; and
- G. Non river-dependent or river-related primary uses in the River Water Quality Zone.

Response: The proposed activities include the exterior alteration to development, therefore Greenway review is required. **Removal of Sub-Area 1 does not change this response.**

33.440.320 Exemptions from Greenway Review

Greenway review is not required for any of the situations listed below. The situations listed below are still subject to the Greenway development standards. When no development is proposed, removal of trees allowed under the exemptions below are subject to the tree permit requirements of Title 11, Trees. Exempt situations are:

Response: The proposed activities are not exempt from Greenway review. **Removal of Sub-Area 1 does not change this response.**

33.440.330 Procedures

All development that does not require a Greenway Goal Exception is processed through the Type II procedure. All development that requires a Greenway Goal Exception is processed through a Type III procedure, and must be approved by City Council. See Section 33.440.360, Greenway Goal Exception and Chapter 33.850, Statewide Planning Goal Exceptions.

Response: The proposed activities do not require a Greenway Goal Exception and are therefore subject to the Type II procedure. **Removal of Sub-Area 1 does not change this response.**

33.440.340 Notice to State Parks and Recreation Division.

BDS will forward a copy of all applications for greenway review to the Parks and Recreation Division of the Oregon Department of Transportation. The applications will be sent certified mail-return receipt requested. The notice of decision on all greenway reviews will also be forwarded to the Parks and Recreation Division.

Response: The applicant understands that BDS will forward a copy of the application to the departments noted above. **Removal of Sub-Area 1 does not change this response.**

33.440.345 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, Application Requirements, the information below is required for Greenway review applications.

- A. Supplemental site plans. One copy of each plan must be at a scale of at least one inch to 100 feet.
 1. An existing conditions site plan, showing the following:
 - a. Topography shown by contour lines at two foot vertical contours in areas of slope less than 10 percent and at five foot vertical contours in areas of slope ten percent or greater;

- b. The top of bank and the setback area;*
 - c. Distribution outline of shrubs and ground covers with a list of most abundant species;*
 - d. Trees identified by species, including the location of the drip line;*
 - e. Streams, wetlands, other water bodies, and drainage patterns, using arrows to indicate the direction of major drainage flow;*
 - f. Existing improvements such as structures, buildings, utility lines, fences, paved areas, roads, culverts, and bridges;*
 - g. Areas of known soil or groundwater contamination, areas of uncontained hazardous materials, and underground storage tanks; and*
 - h. Stormwater management facilities.*
- 2. A development proposal site plan including:*
- a. A grading plan showing proposed alteration of the ground at two foot vertical contours in areas of slopes less than 10 percent and at five foot vertical contours in areas of slopes ten percent or greater;*
 - b. Proposed improvements such as structures, buildings, utility lines, fences, paved areas, roads, culverts, bridges; stormwater facilities; and*
 - c. Areas where existing topography and vegetation will be left undisturbed.*
- 3. A construction management site plan including:*
- a. Areas that will be disturbed, including equipment maneuvering areas;*
 - b. Location of site access and egress;*
 - c. Equipment and material staging and stockpile areas;*
 - d. Erosion control measures; and*
 - e. Tree protection measures for trees to be preserved that meet the requirements of Title 11, Chapter 11.60, Technical Specifications.*

B. River Quality overlay zone. The following information is required for Greenway review applications for development, exterior alterations, excavations, and fills in the River Water Quality overlay zone setback:

- 1. A mitigation or remediation plan including:*
 - a. Detailed plans or drawings describing any proposed mitigation or remediation activities;*
 - b. Distribution outline, species composition, and percent of ground covered with ground cover plants, shrubs, and trees to be seeded or planted;*
 - c. Stormwater management features, including retention, infiltration, detention, discharges, and outfalls;*
 - d. Water bodies to be created, including depth; and*
 - e. Planting specifications consistent with Section 33.248.090, Mitigation and Restoration Plantings.*
- 2. Narrative. The following written narratives are required:*
 - a. Impact evaluation. An impact evaluation is required to determine compliance with the approval criteria and to evaluate development alternatives for a particular development. The alternatives must be evaluated on the basis of their impact on the functional values of the water quality resource area. The impact evaluation is based on the functional values identified in the Purpose Statement, Section 33.440.010. An impact evaluation includes:*
 - (1) Identification, by characteristics and quantity, of the functional values found on the site;*
 - (2) Evaluation of alternative locations including outside the River Water Quality overlay zone setback, design modification, or alternative methods of development to determine which options reduce the significant detrimental impacts on the functional values of the site; and*

(3) Determination of the alternative that best meets the applicable approval criteria and identification of significant detrimental impacts that are unavoidable.

b. Construction management plan. Identify measures that will be taken during construction or remediation to protect the remaining functional values at and near the construction site and a description of how undisturbed areas will be protected. For example, describe the timing of construction, how construction equipment will be controlled, and describe how trees will be protected in conformance with Chapter 11.60, Technical Specifications, and erosion controlled in conformance with Title 10, Erosion and Sediment Control Regulations.

c. Mitigation or remediation plan. The purpose of a mitigation or remediation plan is to counteract unavoidable significant detrimental impacts that result from the chosen development alternative as identified in the impact evaluation. A mitigation or remediation plan includes:

(1) A description and analysis of how significant detrimental impacts will be avoided, minimized, or mitigated, as follows:

- Significant detrimental impacts must be avoided where practicable;*
- Where avoiding significant detrimental impacts is not practicable, the impact must be minimized, and the impacts mitigated. The mitigation must meet the following:*
 - Where avoiding significant detrimental impacts is not practicable, the impact must be minimize– Where avoiding significant detrimental impacts is not practicable, the impact must be minimized, and the impacts mitigate*

(2) Functional values to be restored, created, or enhanced on the mitigation or remediation site

(3) Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;

(4) Construction timetables;

(5) Operations and maintenance practices;

(6) Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings.

Response: An existing conditions site plan showing the required information is included as Sheets 3 and 4 in Appendix C. A development proposal site plan for each of the sub-areas is part of the Plan Sheet set in Appendix C. Construction management site plans and erosion control information are included in Appendix C and Construction Management Measures are outlined in Section 3 of the application. In addition, a Contaminated Media Management Plan has been prepared by an Oregon Registered Professional Engineer. The CMMP is located in Appendix D. It provides a detailed description of the erosion and sediment control BMPs, and inspection and monitoring of BMPs.

The narrative addressing the approval criteria below identifies potential impacts and development alternatives. The proposed project is intended to have a positive impact on natural resources. In general the “no build” alternative would result in the existing conditions on the Property continuing in perpetuity.

PGE considered five alternatives for addressing its NRDA liability—a no build alternative and four build alternatives. Under Alternative 1 (the No Build Alternative), PGE would offset its liability by purchasing credits from a third party, as available. No earthwork would occur at the site; however, the natural areas at the Harborton site would remain in a degraded state, with very limited habitat accessibility for juvenile salmonids. The Property is identified as a high-value restoration opportunity in the City of Portland’s (City

or COP) 2009 River Plan North Reach Recommended Draft 1 and by the Trustee Council as part of the Trustees' Ecological Restoration Portfolio.² The project is an important aspect of achieving improved off-channel aquatic habitat availability in the Portland harbor, which is a limiting factor for juvenile salmon that migrate through the area. By not moving forward with aquatic habitat restoration at the Property, one of the very few opportunities for rectifying historical aquatic habitat losses in the harbor would be unrealized, which would diminish efforts to improve the viability for several sensitive fish species in the Willamette River. For this reason, the No Build Alternative does not meet the intended project purpose and need.

Two build alternatives were considered. Alternative 2 (Initial Design) provided a maximum area of off-channel fish habitat but would substantially reduce red-legged frog habitat: It would result in >0.5 acre of wetland acreage reduction and could compromise the integrity of buried utilities onsite. A subsequent impact reduction alternative (Alternative 3) was developed that would provide slightly less off-channel fish habitat but would avoid potential impacts to buried utilities, expand red-legged frog habitat, and would increase the area of existing wetland acreage by 0.4 acres (17.7 acres to 18.1 acres). The preferred alternative (Alternative 4) is a modification of Alternative 3 that limits the use of slope stability stone along the Sub-Area 3 valley wall, thereby increasing created wetland acreage by 0.64 acres (17.7 acres to 18.34 acres).

The build alternatives are preferable to the no build alternative, as the Property is owned by PGE, is not proposed for further development, and offers an excellent opportunity to restore off-channel aquatic habitat in the Portland Harbor. PGE has no alternative property in ownership that offers comparable restoration opportunity in the Portland Harbor Study Area.

Restoration at the Harborton property will also result in a cluster of existing and proposed restoration sites in proximity. Alder Creek, completed in 2015, and Miller Creek, ~~proposed for 2017~~ which began in July 2024 and is expected to be completed by the end of 2024³, are across the Multnomah Channel and immediately adjacent to the Harborton property, respectively. Completion of all three projects will provide approximately 160 acres of restored habitat in a critical location for both aquatic and terrestrial species. These three sites will create a connectivity corridor between Forest Park, the Willamette River, and Sauvie Island. **Removal of Sub-Area 1 would not change the project's ability to achieve improved off-channel aquatic habitat availability in Sub-Areas 2, 3, and 4 for migrating juvenile salmon.**

Greenway Review Approval Criteria (PCC 33.440.350)

This Section details Project applicability and response to the Greenway Approval Criteria. For each criterion, the text of the criterion is presented in *italics*, followed by the response in normal text.

Approval Criterion A

The Willamette Greenway design guidelines must be met for all greenway reviews.

¹ City of Portland (COP). 2009. River Plan North Reach, Recommended Draft 2009, Volume 3A: Natural Resources Inventory: Riparian Corridors and Wildlife Habitat.

² Trustee Council. 2012. Ecological Restoration Portfolio. April 2012. From: http://www.fws.gov/filedownloads/ftp_OFWO/PortlandHarborNRDAWebSupport/Documents/Restoration_Portfolio.pdf. Accessed May 22, 2012

³ Updated timeframe based on City's land use records: <https://www.portland.gov/bes/improvements/construction/miller-creek-fish-passage-improvement-project>. Accessed October 20, 2024.

Response: Please see Section 4.5.2, below, for compliance with this criterion. **Removal of Sub-Area 1 does not change this response.**

Approval Criterion B

River frontage lots in the River Industrial zone. *In the River Industrial zone, uses that are not river-dependent or river-related may locate on river frontage lots when the Property is found to be unsuitable for river-dependent or river-related uses. Considerations include such constraints as the size or dimensions of the Property, distance or isolation from other river-dependent or river-related uses, and inadequate river access for river-dependent uses.*

Response: This criterion does not apply to the Project because it is not in the River Industrial overlay zone. The zoning for the Property and tax lots involved are River General, River Natural, and River Water Quality. Specifically, the zoning codes are IHgq and OSnq (Appendix B). **Removal of Sub-Area 1 does not change this response.**

Approval Criterion C

Development within the River Natural zone. *The applicant must show that the proposed development, excavation, or fill within the River Natural zone will not have significant detrimental environmental impacts on the wildlife, wildlife habitat, and scenic qualities of the lands zoned River Natural. The criteria applies to the construction and long-range impacts of the proposal, and to any proposed mitigation measures. Excavations and fills are prohibited except in conjunction with approved development or for the purpose of wildlife habitat enhancement, riverbank enhancement, or mitigating significant riverbank erosion.*

Response: Only the restoration activities will occur within the River Natural zone. Construction and operation of the proposed Project will modify habitat for listed salmonids by creating off-channel habitat, restoring two cold-water tributaries, and improving stream, wetland, riparian, and upland habitats. The proposed modifications will result in net beneficial effects for listed salmonids, their critical habitat, and other resident aquatic, terrestrial, and avian species. Construction-related impacts include impacts associated with **soil excavation for culvert installation**, excavation and regrading of off-channel habitats, and site re-vegetation and maintenance activities. Effects associated with such impacts include potential direct and indirect effects resulting from habitat alteration; visual and auditory/vibratory disturbances; increased risk of erosion, turbidity, and sedimentation; potential risk from accidental contaminant spills; and potential risk of exposure resulting from residual contaminants exposed in the post-restoration cut surface

The individual and combined effects of all actions permitted for this project are not expected to permanently impair currently properly functioning habitats, appreciably reduce the functioning of already impaired habitats, or retard the long-term progress of impaired habitats toward proper function. The anticipated outcome of the proposed action is long-term progress toward proper function by recreating off-channel salmonid habitat in the Portland Harbor, where the lack of such habitat has been identified as a limiting factor in species recovery.

The purpose of the Project is to enhance and restore wildlife habitat, providing long-term beneficial impacts, particularly for anadromous fish, red-legged frogs, birds, and terrestrial animals. Excavation and fill necessary to complete the Project will temporarily disturb wildlife, wildlife habitat, and scenic qualities of the Property, but will not result in significant detrimental impacts. Construction of the restored and

enhanced habitats will be managed by PGE to ensure that the habitats are constructed as designed and that impacts to existing fish and wetland habitats, as well as other sensitive resources, will be avoided or minimized, where possible. Measures that will be taken throughout construction to protect sensitive resource areas at the Property are listed above in Section 3.6.

The Monitoring and Adaptive Management Plan (MAMP) found in Appendix H, has been developed to help ensure the Project's goals are being achieved. As discussed above in Section 3.7, The Trustees developed the M&S Framework (Trustee Council 2014) to aid Pls in designing site-specific monitoring and stewardship plans for NRDA restoration projects. As part of the guidance, the Trustees presented a model detailing the monitoring phases that will be required of Pls. Under the model, restoration site monitoring is divided into four phases: Baseline Monitoring, Implementation Monitoring, Effectiveness Monitoring, and Long-Term Stewardship, which are described by the Trustees as follows:

- Baseline Monitoring occurs before project work commences at the site to document pre-restoration conditions.
- Implementation Monitoring occurs during and following project construction to document that the restoration elements were installed/constructed as proposed.
- Effectiveness Monitoring takes place during an initial performance period of 10 years following construction/implementation or as needed until performance standards are met.
- Long-term Stewardship Monitoring begins after the 10-year effectiveness monitoring period and entails less intense monitoring to ensure restoration goals are stable and habitat functionality persists.

Removal of Sub-Area 1 does not change this response, as Sub-Area 1 is not in the River Natural Zone.

Approval Criterion D

Development on land within 50 feet of the River Natural zone. *The applicant must show that the proposed development or fill on land within 50 feet of the River Natural zone will not have a significant detrimental environmental impact on the land in the River Natural zone.*

Response: Excavation of material and restoration of upland, wetland, and stream habitats will occur within the River Natural Zone and within 50 feet of the River Natural Zone, but is not expected to result in a significant detrimental environmental impact on the land in this zone. Tax lot 100 is zoned River Natural. This taxlot corresponds to Sub-area 4. A portion of Sub-area 3 is abutting and within 50' of the River Natural zone. The area of land within 50 feet of the River Natural zone that will be disturbed by clearing and grading activities is shown on Sheets 4, 6, and 7 in Appendix C. Erosion and sediment controls will be installed prior to, during, and after clearing and grading activities as shown on Sheets 5, 8, and 9 in Appendix C. After clearing and grading, the areas disturbed by construction activities will be revegetated with native plants suitable to the habitat and monitored long-term for success, resulting in improved habitat and environmental conditions on the Property. **Removal of Sub-Area 1 does not change this response, as Sub-Area 1 is not in the River Natural Zone.**

Approval Criterion E

Development within the greenway setback. *The applicant must show that the proposed development or fill within the greenway setback will not have a significant detrimental environmental impact on Rank I*

and II wildlife habitat areas on the riverbank. Habitat rankings are found in the Lower Willamette River Wildlife Habitat Inventory.

Response: In the River Water Quality overlay zone, the Greenway Setback is 50 feet to 200 feet from the top of bank, depending on the slope landward of top of bank. The location of the Greenway Setback on the Property is shown on Sheet 4 in Appendix C. Excavation of material and restoration of upland, wetland, and stream habitats is proposed to occur within the Greenway Setback. As shown on Sheet 35B in Appendix C, portions of the Property have been designated as Rank I and Rank II wildlife habitat areas. The remainder of the site is a mix of lower quality habitats. The existing substation is a Rank V habitat with little or no habitat value. As described previously, the purpose of the Project is to enhance and restore wildlife habitat, providing long-term beneficial impacts, particularly for anadromous fish, red-legged frogs, birds, and terrestrial animals. The proposed modifications will result in net beneficial effects for listed salmonids, their critical habitat, and other resident aquatic, terrestrial, and avian species by re-introducing a diversity of ecological processes to the site while maintaining and enhancing existing beneficial habitat. The main component is re-establishing frequent channel connectivity to low-lying areas at the site. Benefits of creating a fish-accessible channel include increased biomass exchanges and a significant increase in juvenile salmonid use of site resources. Therefore, the project will have no significant detrimental environmental impact on Rank I and II wildlife habitat areas. **The west half of Sub-Area 1 is in Rank III wildlife habitat. The east half of Sub-Area 1 is not designated as wildlife habitat. Removal of Sub-Area 1 from the project will have no impact on the Rank I and II wildlife habitat areas.**

Approval Criterion F

Development riverward of the greenway setback. The applicant must show that the proposed development or fill riverward of the greenway setback will comply with all of the following criteria:

1. The proposal will not result in the significant loss of biological productivity in the river;
2. The riverbank will be protected from wave and wake damage;
3. The proposal will not:
 - a. Restrict boat access to adjacent properties;
 - b. Interfere with the commercial navigational use of the river, including transiting, turning, passing, and berthing movements;
 - c. Interfere with fishing use of the river;
 - d. Significantly add to recreational boating congestion; and
4. The request will not significantly interfere with beaches that are open to the public.

Response: In the River Water Quality overlay zone the Greenway Setback is 50 feet to 200 feet from the top of bank, depending on the slope landward of top of bank. The location of the Greenway Setback on the Property is shown on Sheet 4 in Appendix C. Only restoration activities are proposed riverward of the Greenway Setback.

Point 1: With any excavation project, the potential exists for erosion of soils, which can contribute to increased local turbidity of area waterways. Turbidity, in volume and/or duration, has the potential to directly and indirectly affect fish and other aquatic species. In volume, turbidity can damage gill structures, resulting in injury and an increased risk of mortality. Construction-related erosion and turbidity impacts are temporary and possible throughout all phases of the project, though impacts are more likely during the IWW work period of the construction year (currently

slated 2018). Potential vectors of erosion and turbidity include precipitation-induced stormwater runoff from the site, wind blow of exposed soils, in-water excavation, shoreline grading, equipment movement on the site, and loading/hauling of excavated material.

It is anticipated that excavation and fill may temporarily impact the aquatic macroinvertebrate community in the river for a short distance downstream of the Property. Loss of aquatic macroinvertebrates has potential to impact fish and aquatic arthropods, as macroinvertebrates comprise a portion of these trophic guilds' prey and forage base. The loss to biological productivity is not considered significant, as the area is comparatively small in the context of the lower Willamette River subbasin, is temporary in nature, and the Property does not represent particularly productive habitat to begin with (BP 1986). Finally, the proposed Project will contribute to the long-term improvement in the health of the aquatic biotic community. In conjunction with other remediation projects in the lower Willamette River, this Project will improve the sediment and water quality of the river, and therefore, the species that rely upon these aquatic resources.

To minimize risks associated with erosion and turbidity, PGE has developed an ESCP to comply with DEQ criteria for coverage under a NPDES 1200-C construction stormwater permit. The ESCP was developed using the guidelines of Portland City Code Title 10 Erosion and Sediment Control Regulations (City of Portland 2016) and supplemental guidance provided by NOAA Fisheries. These measures were developed by a certified Contractor Erosion and Spill Control Lead, in conformance with the requirements of the DEQ's NPDES program. The ESCP was provided with the NPDES 1200-C application.

Project phases that may include activities resulting in erosion and turbidity direct effects include Site Preparation, Pre-Construction, Construction, Restoration, and Monitoring and Maintenance.

Point 2: The proposed Project will alter a small amount of the existing riverbank where the new tributary in Sub-Areas 3 and 4 ~~and existing tributary in Sub-Area 1~~ discharge to the Willamette River. The specific areas of riverbank that will be disturbed by clearing and grading activities is shown on Sheets 12 and Sheets 14 - 28 in Appendix C. Erosion and sediment controls will be installed prior to, during, and after clearing and grading activities at the riverbank. After clearing and grading, the area of riverbank disturbed by construction activities will be revegetated with native plants suitable to the habitat and monitored for success, therefore, protecting the riverbank from wave and wake damage by the vegetation.

Point 3a: The Project will not restrict boat access to adjacent properties, as there is no current boat access available.

Point 3b: The Project will not interfere with commercial navigational use of the river because no work is proposed in the river.

Point 3c: The Project will not interfere with fishing use of the river. No work in the Willamette River is proposed. The Willamette River will be available for fishing when construction is occurring.

Point 3d: The Project will not add to recreational boating congestion. No work in the Willamette River is proposed.

Point 4: The Project will not interfere with beaches open to the public, as there are no public beaches present at the Property.

Removal of Sub-Area 1 does not change this response as no activities occurred riverward of the Greenway Setback in any part of Sub-Area 1.

Approval Criterion G

If the proposal includes development, exterior alterations, excavations, or fills in the River Water Quality overlay zone setback the approval criteria below must be met. River-dependent development, exterior alterations, excavations, and fills in the River Water Quality zone are exempt from the approval criteria of this subsection.

1. *Streets, right-of-way dedications, driveways, walkways, outfalls, and utilities. For streets, right-of-way dedications, driveways, walkways, outfalls, and utilities, the applicant's impact evaluation must demonstrate that all of the following are met:*
 - a. *Proposed development or right-of-way (ROW) locations, designs, and construction methods have the least significant detrimental impact to the functional values of the water quality resource area than other practicable and significantly different alternatives including alternatives outside the River Water Quality overlay zone setback;*
 - b. *The location, design, and construction method of any outfall or utility proposed within a River Water Quality overlay zone has the least significant detrimental impact to the functional values of the water quality resource area than other practicable alternatives including alternatives outside the River Water Quality overlay zone setback;*
 - c. *Water bodies are crossed only when there are no practicable alternatives with fewer significant detrimental impacts. Where a water body is crossed, the location, design, and construction method of that crossing has the least significant detrimental impact to the functioning of the water body and considering practicable alternatives;*
 - d. *There will be no significant detrimental impact on functional values in areas designated to be left undisturbed within the River Water Quality overlay zone setback;*
 - e. *All significant detrimental impacts on functional values that cannot be avoided will be mitigated by meeting the requirements of Subsection 33.440.350.H; and*
 - f. *The mitigation plan ensures that the proposed development will not contribute to a cumulative loss of functional values over time.*
2. *Public safety facilities. For public safety facilities, the applicant's impact evaluation must demonstrate that all of the following are met:*

...
4. *Resource enhancement projects. In the River Water Quality overlay zone setback, resource enhancement projects will be approved if the applicant's impact evaluation demonstrates that all of the following are met:*
 - a. *There will be no significant detrimental impact on functional values;*
 - b. *There will be a significant improvement of at least one functional value; and*
 - c. *The project is generally consistent with the recommendations of any applicable City-adopted watershed restoration plans.*

5. *Other development, excavations, and fills in the River Water Quality overlay zone setback. Where development, exterior alterations, excavation, or fill is proposed in the River Water Quality overlay zone setback, the applicant's impact evaluation must demonstrate that all of the following are met:*
- a. *Proposed development minimizes the loss of functional values, consistent with allowing those uses generally permitted or allowed in the greenway overlay zone without a land use review;*
 - b. *Proposed development locations, designs, and construction methods are less detrimental to the functional values of the water quality resource area than other practicable and significantly different alternatives including alternatives outside the River Water Quality overlay zone setback;*
 - c. *There will be no significant detrimental impact on functional values in areas designated to be left undisturbed;*
 - d. *Areas disturbed during construction that do not contain permanent development will be restored with native vegetation appropriate to the Property conditions and found in the Portland Plant List;*
 - e. *All significant detrimental impacts on functional values will be offset through mitigation;*
 - f. *The mitigation plan meets the requirements of Subsection 33.440.350.H;*
 - g. *The mitigation plan ensures that the proposed development will not contribute to a cumulative loss of functional values over time; and*
 - h. *Where significant restoration or enhancement opportunities have been identified in City-adopted watershed restoration plans or where previous restoration projects have taken place, the proposed development will not preclude those restoration or enhancement opportunities or damage existing restoration projects.*

Response: The Property is within the River Water Quality zone and has less than 25 percent slope. The greenway setback, which is shown on Sheet 4 in Appendix C, extends from the top of the bank to a point 50 feet landward of the top of the bank. The greenway setback is also shown 50 feet around the delineated edge of the wetland in addition to the setback from the top of the bank. Only restoration activities are proposed within the River Water Quality overlay zone setback.

~~An existing culvert will be replaced. Currently, fish access to the southern tributary is impeded by the partially collapsed culvert under the BPA service road. As previously described, the culvert is a partial passage barrier to upstream fish access. Additionally, during river stage events in excess of bankfull discharge, the culvert may serve to strand fish that make it upstream past the culvert. To correct these issues, the culvert will be removed and replaced with an appropriately sized, fish passable culvert. Design is anticipated to consist of a 6-foot wide, open-bottom, arch-style culvert that will be engineered in compliance with ODFW fish passage design criteria to ensure proper hydraulic and fish passage characteristics.~~

Point 3a: Damages to a natural resource are evaluated by identifying the ecological functions or “services” the resource provides, determining the baseline level of the services provided by the injured resource, and quantifying the assessed reduction in service levels resulting from pollution and other impacts identified through the NRDA process. The Trustees are employing Habitat Equivalency Analysis (HEA) tools as the method by which to quantify resource diminishment. HEA was developed by NOAA Fisheries (2012) specifically for NRDA.

Within the context of the Trustees' assessment of damages from industrial activities in the Portland Harbor, loss of juvenile salmonid rearing habitat has been identified as a natural resource damage (Trustee Council 2010). All juvenile salmonids in the Willamette River system must pass through the Harbor during outmigration. Historically, juvenile salmonids used the lower Willamette River for substantial feeding and growth prior to movement into the Columbia River, its estuary, and the sea (Trustee Council 2010). Physical and chemical degradation of this river reach has compromised its ability to support juvenile salmonids. Juvenile salmonids are believed to now pass rapidly through the Harbor for lack of suitable off-channel habitat (Trustee Council 2010). Consequently, Willamette River smolts entering the Columbia River estuary and the Pacific Ocean are believed to be less fit compared to their pre-development, antecedent runs.

Loss of associated off-channel habitats such as large off-channel lakes, alcoves, lagoons, and the access to the historic floodplain have further diminished the capacity of this river reach for nurturing endemic salmonids and other native fish populations (Trustee Council 2010). Salmon habitat modeling for the Willamette River Subbasin Plan, conducted by the Northwest Power and Conservation Council (NWPPCC), identifies the lack of off-channel habitat in the lower Willamette River as a limiting factor for salmonid recovery (NWPPCC 2004), including recovery of salmonids listed under the ESA. The Subbasin Plan identifies Portland Harbor off-channel habitat as the second highest restoration priority to achieve the goals of salmonid recovery, including recovery of ESA-listed stocks. These factors point toward restoring the quality and types of habitats historically used by juvenile salmonids as a means of recovering those species protected under the ESA and improving conditions for all aquatic species found in this reach.

PGE proposes to restore tributary and off-channel habitats at its Harborton Substation property in the lower Willamette River watershed to offset potential liability under the Portland Harbor NRDA action undertaken by the Trustees. The 74-acre Harborton Substation property is identified as a high-value restoration opportunity in the City's 2009 River Plan North Reach Recommended Draft (COP 2009) and by the Trustee Council, as part of its Ecological Restoration Portfolio (Trustee Council 2012). PGE proposes to restore and enhance approximately 62 acres of the property.

The proposed Project has been designed to improve the long-term functional values found within the Property through habitat creation and enhancement and will not result in a significant detrimental impact on functional values. Construction and operation of the proposed habitat restoration project will modify habitat for listed salmonids by creating and improving off-channel tributary and floodplain habitat and enhancing wetland and riparian habitats. The proposed modifications will result in net beneficial effects for listed salmonids, their critical habitat, and other resident aquatic, terrestrial, and avian species. Construction-related impacts include impacts associated with clearing and grubbing, excavation of off-channel habitats, ~~installation of a fish-passable culvert on the southern tributary,~~ creation of a new outlet connection to the Willamette River for the northern tributary, regrading and realignment of both tributaries, site revegetation, and maintenance and monitoring activities. Effects associated with such impacts include potential direct and indirect effects resulting from habitat alteration and modification; visual and auditory (noise) disturbances; temporary degradation of suitable habitat resulting from potential localized increases in turbidity, sedimentation, and contaminant spills; and potential risk of exposure to residual contaminants exposed in the post-restoration cut surface.

Point 3b: Once constructed, the Project will provide or enhance habitat elements to support native fish, terrestrial species, amphibian species, avian species, and native vegetation. Habitat elements designed to specifically benefit ESA-listed salmonids include removal of fish passage barriers and realignment of two cold-water tributaries to provide additional low-elevation off-channel habitat, shallow water, edge habitats, high flow refugia, vegetated shoreline, and channel complexity resulting from topographic contouring and installation of large woody debris and other habitat elements. These elements have been identified by the Trustees as factors limiting the health and recovery of juvenile Chinook in the lower Willamette River recovery domain (Trustee Council 2010). The restoration activities proposed for the site will benefit native fish within the lower Willamette River system, including the salmon and steelhead populations that are expected to use the site at varying stages of their life cycles. The project will improve critical habitat designated for four listed anadromous salmon species in the Willamette/Lower Columbia Recovery Domain and is consistent with the primary constituent elements (PCE) required by coho salmon, for which critical habitat has been proposed, but not adopted by final rule.

The project has been designed primarily to provide habitat for native fish species occurring in the Willamette River and Multnomah Channel systems, including federally threatened and endangered fish species. The project will also benefit a variety of aquatic, terrestrial, and avian species occurring in the vicinity, such as northern red-legged frog (*Rana aurora auroa*), Pacific lamprey (*Lampetra tridentata*), white sturgeon (*Acipenser transmontanus*), American mink (*Neovison vison*), osprey (*Pandion haliaetus*), and bald eagle (*Haliaeetus leucocephalus*), in addition to providing improved habitat for breeding birds, benthic macroinvertebrates, and variety of small mammals.

Point 3c: The Harborton Property is identified as a high-value restoration opportunity in the City's 2009 River Plan North Reach Recommended Draft (COP 2009) and by the Trustees Expert Panel, as part of the Trustee's Ecological Restoration Portfolio (Trustee Council 2012). Portland's Watershed Management Plan (BES 2006) identifies several watershed health goals in four broad categories. These goals were established in the Integrated Framework for Watershed Health (December 2005).

Hydrology: Move toward normative⁴ stream flow conditions to protect and improve watershed and stream health, channel functions, and public health and safety.

Physical Habitat: Protect, enhance, and restore aquatic and terrestrial habitat conditions and support key ecological functions and improved productivity, diversity, capacity, and distribution of native fish and wildlife populations and biological communities.

Water Quality: Protect and improve surface water and groundwater quality to protect public health and support native fish and wildlife populations and biological communities.

⁴ "Normative flow has the magnitude, frequency, duration and timing essential to support salmonids and/or other native species and resources and the formation and maintenance of aquatic habitat. In response to the programmatic mandates in Chapter 1, Table 1.1, the City has adopted standards to manage the quantity and quality of surface water runoff generated by new development (Chapter 17.38.025 of the Portland Municipal Code). These standards manage runoff generated from storm events up to the 25-year storm, depending on the location and watershed of the development.

Biological Communities: Protect, enhance, manage and restore native aquatic and terrestrial species and biological communities to improve and maintain biodiversity in Portland’s watersheds.”

The proposed Project is consistent with actions identified to achieve these goals by removing and controlling invasive and non-native plants and revegetating the Property with native species, creating and enhancing aquatic and terrestrial habitats, and removing barriers to fish passage/access to cold water tributaries, ~~and removing a failed culvert~~, thereby returning hydrology to more normative condition and quality.

Point 5a: The proposed Project has been designed to improve the long-term functional values found within the Property through habitat creation and enhancement and will not result in a significant detrimental impact on functional values. Construction and operation of the proposed habitat restoration project will modify habitat for listed salmonids by creating and improving off-channel tributary and floodplain habitat and enhancing wetland and riparian habitats. The proposed modifications will result in net beneficial effects for listed salmonids, their critical habitat, and other resident aquatic, terrestrial, and avian species. Construction-related impacts include impacts associated with clearing and grubbing, excavation of off-channel habitats, ~~installation of a fish-passable culvert on the southern tributary~~, creation of a new outlet connection to the Willamette River for the northern tributary, regrading and realignment of both tributaries, site re-vegetation, and maintenance and monitoring activities. Effects associated with such impacts include potential direct and indirect effects resulting from habitat alteration and modification; visual and auditory (noise) disturbances; temporary degradation of suitable habitat resulting from potential localized increases in turbidity, sedimentation, and contaminant spills; and potential risk of exposure to residual contaminants exposed in the post-restoration cut surface.

See detailed discussion above under Point 3a.

Point 5b: The proposed Project was developed over period of 6 years in consultation with the State and Federal representatives on the Trustees’ Natural Resource Committee. Multiple design iterations were evaluated to balance competing ecological resources. The proposed Project represents the least detrimental design for the site which meets the restoration goals of the Trustees’ NRDA program for the lower Willamette River and represents a substantial improvement in the functional value of habitat and water quality within the resource area.

Point 5c: Impact to functional values across the entire Property are discussed above in Point 3a.

Functional values in undisturbed areas will be enhanced through removal and control of invasive, non-native plants, and habitat enhancement. Three planting zones were demarcated at the Property based on proposed post-construction Property elevations and predicted hydrological conditions: Wetland Zone (10-16 feet CPD), Riparian Zone (16-30 feet CPD), and Upland Zone (>30 feet CPD). The Wetland and Riparian Zones were further broken down by proposed restoration treatment into Creation and Enhancement Areas. Areas proposed for creation will be entirely unvegetated following construction; thus, the planting plan proposes closer spacing such that a dense layer of vegetation forms quickly to minimize colonization by non-native species. Grading in enhancement areas will be left undisturbed. These areas contain preexisting vegetation, so

spacing in these areas will be variable; supplemental shrub and tree plantings will be distributed throughout the existing vegetation as practicable with the goal of increasing shrub layer density such that existing high cover of reed canarygrass is shaded out over time. See Sheets 33 - 35 in Appendix C for a depiction of planting areas throughout the Property. Table 2 in Section 3.4 contains a list of species for each planting zone that can stabilize soils, provide native wetland, riparian, and upland habitat, and aid in the control of invasive species. Native plants include those found in the Portland Plant List.

Point 5d: No permanent development is proposed within the setback. All disturbed areas will be restored with native vegetation appropriate to the habitat type. The successful installation of native vegetation will require site preparation, seeding, planting, and ongoing non-native species control. The planting plan is described above in Section 3.4. Control of non-native plant species will consist of active removal during site preparation, followed by active suppression and displacement by native plants during and after the 10-year performance monitoring period.

Three planting zones were demarcated on the Property based on proposed post-construction elevations and predicted hydrological conditions: Wetland Zone (10-16 feet CPD), Riparian Zone (16-30 feet CPD), and Upland Zone (>30 feet CPD). The Wetland and Riparian Zones were further broken down by proposed restoration treatment into Creation and Enhancement Areas. Areas proposed for creation will be entirely unvegetated following construction; thus, the planting plan proposes closer spacing such that a dense layer of vegetation forms quickly to minimize colonization by non-native species. Enhancement areas contain preexisting vegetation, so spacing in these areas will be variable; supplemental shrub and tree plantings will be distributed throughout the existing vegetation as practicable with the goal of increasing shrub layer density such that existing high cover of reed canarygrass is shaded out over time. See Sheets 33 to 35 in Appendix C for a depiction of planting areas throughout the Property. Table 2 in Section 3.4 contains a list of species for each planting zone that can stabilize soils, provide native wetland, riparian, and upland habitat, and aid in the control of invasive species. Native plants include those found in the Portland Plant List.

Point 5e: The proposed Project will not result in significant detrimental impacts on functional values. Construction and operation of the proposed project will modify habitat for listed salmonids by creating off-channel habitat, restoring two cold-water tributaries, and improving stream, wetland, riparian, and upland habitats. The proposed modifications will result in net beneficial effects for listed salmonids, their critical habitat, and other resident aquatic, terrestrial, and avian species. Construction-related impacts include impacts associated with ~~soil excavation for culvert installation~~, excavation and regrading of off-channel habitats, and site re-vegetation and maintenance activities. Effects associated with such impacts include potential direct and indirect effects resulting from habitat alteration; visual and auditory/vibratory disturbances; increased risk of erosion, turbidity, and sedimentation; potential risk from accidental contaminant spills; and potential risk of exposure resulting from residual contaminants exposed in the post-restoration cut surface.

Although no significant detrimental effects on functional values is anticipated, effects from clearing and grading activities will be mitigated by removal and control of invasive, non-native plants, revegetation of disturbed areas with native plants, and preservation, enhancement, and

creation of wetlands, streams, and upland habitats. The restoration work plan is described in detail above in Section 3.

Point 5f: See Section 4.1.7 below.

Point 5g: See Section 4.1.7 below.

Point 5h: The Harborton Property is identified as a high-value restoration opportunity in the City's 2009 River Plan North Reach Recommended Draft (COP 2009) and by the Trustees Expert Panel, as part of the Trustee's Ecological Restoration Portfolio (Trustee Council 2012). The proposed Project is consistent with actions identified to achieve Portland's watershed goals by removing and controlling invasive and non-native plants and revegetating the Property with native species, and creating and enhancing aquatic and terrestrial habitats.

Removal of Sub-Area 1 from the project will not affect the restoration activities proposed within Sub-Areas 2 and 3 in the River Water Quality overlay zone setback. Restoration activities in the other three Sub-Areas will improve the long-term functional values on the Property and have net beneficial effects for listed salmonids, their critical habitat, and other resident aquatic, terrestrial, and avian species. There will be no construction of restoration activities in Sub-Area 1; therefore, there will be no construction-related impacts in Sub-Area 1.

Approval Criterion H

Mitigation or remediation plans. Where a mitigation or remediation plan is required by the approval criteria of this chapter, the applicant's mitigation or remediation plan must demonstrate that the following are met:

1. Except when the purpose of the mitigation could be better provided elsewhere, mitigation will occur:
 - a. On site and as close as practicable to the area of disturbance;
 - b. Within the same watershed as the proposed use or development; and
 - c. Within the Portland city limits.
2. The applicant owns the mitigation or remediation site; possesses a legal instrument that is approved by the City (such as an easement or deed restriction) sufficient to carry out and ensure the success of the mitigation or remediation plan; or can demonstrate legal authority to acquire property through eminent domain;
3. The mitigation or remediation plan contains a construction timetable and a minimum 1 year monitoring and maintenance plan that demonstrates compliance with Subsection 33.248.090.E and includes the following elements:
 - a. Identification of the responsible party or parties that will carry out the mitigation or remediation plan;
 - b. Identification of clear and objective performance benchmarks that will be used to judge the mitigation or remediation plan success; and
 - c. A contingency plan that indicates the actions to be taken in the event that performance benchmarks are not met.

Response: The purpose of the Project is to restore and improve seasonally available off-channel aquatic and riparian habitat for fish and wildlife. Specifically, in association with the Portland Harbor NRDA

process, the proposed restoration is intended to restore and enhance habitat for species that were potentially injured by historical damages to the Portland Harbor. As a result of past and continued impacts to the Willamette River in the Portland Harbor, this Project is needed to address the lack of available off-channel, fish-accessible aquatic habitat within the Portland Harbor, thereby directly addressing one of the primary limiting factors for fish recovery within the Portland Harbor. The proposed Project provides long-term benefit to human and ecological health. Identified short-term impacts to site habitat will recover over time and the Project is considered a beneficial enhancement to current habitat conditions.

The proposed restoration work plan is described in detail above in Section 3 and depicted in the Plan Sheets in Appendix C. This section describes the elements that will be restored, by sub-area; construction timing and sequencing, and avoidance and minimization measures. Performance objectives and standards of success have been established for the Project. Performance standards developed for the restoration project have been guided by the Trustee Council's monitoring and long-term stewardship expectations, requirements, and mechanisms for obtaining full restoration value at NRDA restoration sites in the Portland Harbor. These standards, as well as the approach to long-term monitoring of the success of the Project are described in detail in Appendix H. **Removal of Sub-Area 1 does not change this response.**

Compliance with the Willamette Greenway Plan Design Guidelines

This Section details Project applicability and response to the Willamette Greenway Plan Design Guideline requirements (BP 1987). For each issue, the text of the issue is presented in italics, followed by the response in normal text.

The Willamette Greenway design guidelines are to be applied as follows:

Issue A. Relationship of Structures to the Greenway Setback Area

- 1. Structure Design. The Greenway Setback area should be complemented and enhanced by designing, detailing, coloring, and siting structures and their entrances to support the pedestrian circulation system, including both the Greenway Trail and access connections.*
- 2. Structure Alignment. Where surrounding development follows an established block pattern, alignment with the block pattern should be considered in structure placement. Structure alignment should also take into account potential view corridors from existing public rights-of-way or acknowledged viewpoints. The pedestrian access system should be designed to take advantage of these alignments.*

Response: Issue A applies to all but river-dependent and river-related industrial use applications for Greenway Approval, when the Greenway Trail is shown adjacent to the river on the property in the Willamette Greenway Plan. There is no Greenway Trail shown adjacent to the river on the Harborton site and no public pedestrian access will be permitted within the Greenway Setback. There is no established block pattern that establishes view corridors and are no buildings proposed within the Greenway Setback.

Removal of Sub-Area 1 does not change this response.

Issue B. Public Access

- 1. Public Access. New developments should integrate public access opportunities to and along the river into the design of the project. This includes the Greenway Trail, formal viewpoints, access connections to the Greenway Trail, and internal site pedestrian circulation.*
- 2. Separation and Screening. The pedestrian circulation system, including Greenway trail, viewpoints, and trail access connections, should be designed to ensure adequate separation and screening from parking,*

loading, circulation routes, external storage areas, trash dumpsters, exterior vents, mechanical devices, and other similar equipment.

3. *Signage.* Access connections should be clearly marked.

4. *Access to Water's Edge.* Where site topography and conservation and enhancement of natural riverbank and riparian habitat allow, safe pedestrian access to the water's edge is encouraged as part of the project.

Response: Issue B applies to all but river-dependent and river-related industrial use applications for Greenway Approval, when the Greenway Trail is shown on the property in the Willamette Greenway Plan. This project does not involve any alteration to the alignment of the existing Greenway Trail and no proposed trails are shown on the Property. In order to protect the natural resource restoration project, no public pedestrian access will be permitted on the Property. Therefore, this guideline is not applicable. There is a "recreational trail" indicated on the zoning map adjacent to the NW St Helens Road right-of-way. It is located on the other side of both the railroad tracks and NW Marina Road from the Property. A similar alignment is shown in the Willamette Greenway Plan. Metro's 2014 Regional Trails and Greenways publication identifies a trail in the rail corridor as part of the "Helvetia Trail". The Helvetia Trail is described as following a railroad corridor from Banks, across the Tualatin Mountains to the Willamette River, passing through North Plains and Helvetia along the way (17 miles). The report lists the Helvetia Trail as a "proposed trail" rather than an "existing" or "planned" trail. Metro notes that local governments and community advocates have proposed several future trails that are currently a conceptual part of the regional trails and greenways system. Before final decisions are made about on-the-ground trail alignments and designated uses, each trail will be master planned through a comprehensive process with many opportunities for public involvement. However, in no case is there any indication that the trail was intended to be located on, or adjacent to, the subject property. **Removal of Sub-Area 1 does not change this response.**

Issue C: Natural Riverbank and Riparian Habitat

Response: Issue C, which applies to all applications for Greenway Approval where the riverbank is in a natural state, or has significant riparian habitat, as determined by the wildlife habitat inventory, applies to the proposed Project. See responses to 1 and 2 below.

1. Natural Riverbanks. The natural riverbank along the Willamette River should be conserved and enhanced to the maximum extent practicable. Modification of the riverbank should only be considered when necessary to prevent significant bank erosion and the loss of private property, or when necessary for the functioning of a river-dependent or river-related use.

Response: The proposed Project includes disturbance and modification of a small amount of the natural riverbank along the Willamette River in Sub-Areas ~~s-1 and~~ 3 where the ~~south and~~ north tributary streams discharge to the Willamette River so fish can access the streams during all periods when flow is present in the stream. Vegetation and soil would be cleared at the confluence of the North Tributary and Willamette River to create a new outlet. During construction of the new channel outlets, structures will be installed to reduce erosion of exposed soils. Erosion control measures are shown on Sheets 5 to 9 in Appendix C. After clearing and grading, the riverbank will be revegetated with native vegetation. Erosion control structures will remain in place until native vegetation becomes established. The restoration design plan for the North Tributary is described in detail in Section 3.3 and shown on Sheets 14 - 23 of Appendix C. ~~The restoration design plan for the South Tributary is described in detail in Section 3.1 and shown on~~

Sheets 27—30 of Appendix C. With the removal of Sub-Area 1, no disturbance of the natural riverbank will occur in Sub-Area 1. Bank disturbance occurred in Sub-Area 3, as described.

2. Riparian Habitat. Rank I riparian habitat areas, as identified in the wildlife habitat inventory, should be conserved and enhanced with a riparian landscape treatment. Other riparian habitat should be conserved and enhanced through riparian landscape treatments to the maximum extent practical. Conservation however does not mean absolute preservation. Some discretion as to what vegetation should remain and what can be removed and replaced should be permitted. Riparian habitat treatments should include a variety of species of plants of varying heights that provide different food and shelter opportunities throughout the year.

Response: A portion of the Property is Rank 1 riparian habitat (BP 1986). The Project will alter the existing vegetation and habitats during clearing and grading activities, but the purpose of the Project is to restore and improve seasonally available off-channel aquatic and riparian habitat for fish and wildlife. Specifically, the proposed restoration is intended to restore and enhance habitat for species that were potentially injured by historical damages to the Portland Harbor. Enhancements to riparian habitat primarily include removal and control of invasive, non-native plants, and revegetation with native plants. More detail is provided above in Section 3.4 and shown in Appendices C and D. Wetland and stream restoration success will be gauged by tracking a variety of performance standards relating to the successful establishment of wetland and stream conditions. Performance standards, monitoring methods, and adaptive management are described in detail in Appendix H. In the event that monitoring data demonstrate that the Property is failing to meet performance standards, PGE or their designated consultant will review monitoring data and adjust maintenance activities as necessary to meet the objectives of this plan. **The west half of Sub-Area 1 is in Rank III riparian wildlife habitat. The east half of Sub-Area 1 is not designated as wildlife habitat. Removal of Sub-Area 1 from the project will have no impact on the Rank I riparian wildlife habitat areas.**

Issue D: Riverbank Stabilization Treatments

Riverbank Enhancement. Riverbank stabilization treatments should enhance the appearance of the riverbank, promote public access to the river, and incorporate the use of vegetation where practical. Areas used for river-dependent and river-related industrial uses are exempted from providing public access.

Response: As described above under Issue C, the proposed Project includes disturbance and modification of a small amount of the natural riverbank along the Willamette River in Sub-Areas ~~1 and~~ 3 where the ~~south and~~ north tributary streams discharges to the Willamette River so fish can access the streams during all periods when flow is present in the stream. During construction of the new channel outlets, structures will be installed to reduce erosion of exposed soils. Native vegetation will be used for long-term stabilization of the riverbank in Sub-Areas ~~1,~~ 2, and 3, thereby enhancing the appearance of the riverbank.

Issue E: Landscape Treatments

Response: Issue E, which applies to all applications for Greenway Approval which are subject to the landscape requirements of the Greenway chapter of Title 33 Planning and Zoning of the Portland Municipal Code, is applicable to the proposed Project. See responses 1- 3 below. **Removal of Sub-Area 1 does not change this response.**

1. *Landscape Treatments.* The landscape treatment should create an environment which recognizes both human and wildlife use. Areas where limited human activity is expected should consider more informal riparian treatments. Areas of intense human use could consider a more formal landscape treatment. The top of bank may be considered a transition area between a riparian treatment on the riverbank and a more formal treatment of the upland.

Response: The Project will alter the existing vegetation and habitats, but the purpose of the Project is to restore and improve seasonally available off-channel aquatic and riparian habitat for fish and wildlife. Landscape treatments will enhance wildlife use through the removal and control of invasive vegetation, planting of native vegetation, and the creation and enhancement of stream, riparian, wetland, and upland habitat.

All disturbed areas will be restored with native vegetation appropriate to the site conditions and elevations. The successful installation of native vegetation will require site preparation, seeding, planting, and ongoing non-native species control. The planting plan is outlined in Section 3.4. See Appendix C, Sheets 33 - 35, for a depiction of planting areas throughout the Property. Table 2 in Section 3.4.2 contains a list of species for each planting zone that can stabilize soils, provide native wetland, riparian, and upland habitat, and aid in the control of invasive species. Native plants include those found in the Portland Plant List. **No restoration or planting will occur in Sub-Area 1. Removal of Sub-Area 1 will not change the planting areas or species in Sub-Areas 2, 3, or 4.**

2. *Grouping of Trees and Shrubs.* In areas of more intense human use, trees and shrubs can be grouped. The grouping of trees and shrubs allows for open areas for human use, and has the secondary value of increasing the value of the vegetation for wildlife.

Response: Human use of the Property is low. The planting plan is outlined in Section 3.4. See Appendix C, Sheets 33 - 35, for a depiction of planting areas throughout the Property. Table 2 in Section 3.4.2 contains a list of species for each planting zone that can stabilize soils, provide native wetland, riparian, and upland habitat, and aid in the control of invasive species. Native plants include those found in the Portland Plant List. **No restoration or planting will occur in Sub-Area 1. Removal of Sub-Area 1 will not change the planting areas or species in Sub-Areas 2, 3, or 4.**

3. *Transition.* The landscape treatment should provide an adequate transition between upland and riparian areas and with the landscape treatments of adjacent properties.

Response: The proposed restoration design and planting plan has taken into account the variety of habitats being created and enhanced across the Property. The planting plan is outlined in Section 3.4. See Appendix C, Sheets 33 - 35, for a depiction of planting areas throughout the Property. Table 2 in Section 3.4.2 contains a list of species for each planting zone that can stabilize soils, provide native wetland, riparian, and upland habitat, and aid in the control of invasive species. Native plants include those found in the Portland Plant List. **No restoration or planting will occur in Sub-Area 1. Removal of Sub-Area 1 will not change the planting areas or species in Sub-Areas 2, 3, or 4.**

Issue F. Alignment of Greenway Trail: This issue “applies to all applications for Greenway Approval with the Greenway trail shown on the property in the Willamette Greenway Plan.” These guidelines provide direction for the proper alignment of the Greenway trail, including special consideration for existing habitat protection and physical features in the area of the proposed alignment.

Response: This project does not involve any alteration to the alignment of the existing Greenway Trail and no proposed trails are shown on the Property in the Willamette Greenway Plan. Therefore, this guideline is not applicable. **Removal of Sub-Area 1 does not change this response.**

Issue G. Viewpoints: *This issue “applies to all applications for Greenway Approval with a public viewpoint shown on the property in the Willamette Greenway Plan and for all applications proposing to locate a viewpoint on the property.” These guidelines provide direction about the features and design of viewpoints, as required at specific locations;*

Response: There are no public viewpoints on the Property and the Project does not propose to locate one on the Property. Therefore, this guideline is not applicable. **Removal of Sub-Area 1 does not change this response.**

Issue H. View Corridors: *This issue “applies to all applications for Greenway Approval with a view corridor shown on the property in the Willamette Greenway Plan.” These guidelines provide guidance in protecting view corridors to the river and adjacent neighborhoods.*

Response: There is no public view corridor on the Property. Therefore, this guideline is not applicable. **Removal of Sub-Area 1 does not change this response.**

5 CONCLUSION

This updated narrative demonstrates that the removal of Sub-Area 1 does not affect the findings of LU 18-151725 GW as approved and that the project was constructed in compliance with Title 33.