

# Appendix C

## Wildlife Habitat Plan





## PACIFIC HABITAT SERVICES, INC

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To: Ben Hedstrom, Senior Regional Planner  
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RE: Wildlife Conservation Plan – Oxbow Regional Park, Clackamas County, OR

**PHS Project Number: 7783**

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### INTRODUCTION

Pacific Habitat Services, Inc. (PHS) conducted a natural resources assessment for a proposed installation of new water distribution alignment and upgrade to the Oxbow Regional Park Welcome Center water system in Oxbow Regional Park, located near the lower Sandy River in Gresham. The proposed project is located within mixed forested and cleared habitat, with most work occurring below preexisting roads in cleared, unforested areas or in areas that will not require tree removal. The proposed enhancement is entirely within an area designated by Multnomah County as a Significant Environmental Concern –wildlife habitat (SEC-h).

The proposed development includes installing a new well, a pumping facility (~120 square feet (SF)) with ample storage and water treatment, a backup generator and water storage at the existing pump house, replacement of approximately 8,325 linear feet (LF) of water distribution pipe (Figures 5A-5G), along with associated valves, air valves, and hydrants.

The proposed siting and system alignment minimizes impacts to trees and other natural resources by siting development in existing cleared areas, trenching in paved and graveled areas, and horizontal drilling beneath paved or vegetated areas to reduce vegetation disturbance. The proposed project meets all of the approval criteria §39.5860 (C)(3) development in an SEC-h area (see Natural Resource Assessment). Therefore, a Wildlife Conservation Plan is required for enhancement to stream and wildlife habitat resources.

## **SITE DESCRIPTION**

The proposed project area is located adjacent to a large multi-layered native forest and includes pockets of trees. Canopy vegetation in the adjacent forest is dominated by Douglas fir with smaller amounts of big leaf maple (*Acer macrophyllum*) and western red cedar. The shrub understory is dominated by vine maple, salal, and Oregon grape (*Mahonia nervosa*) with smaller amounts of red huckleberry (*Vaccinium parvifolium*), beaked hazelnut (*Corylus cornuta*), tall Oregon grape (*Mahonia aquifolium*), snowberry (*Symphoricarpos albus*), and baldhip rose (*Rosa gymnocarpa*). Groundcover is dominated by sword fern. Non-forested or “cleared area” vegetation is dominated by native and non-native grasses. Photographs of the areas mentioned are included in Appendix B of the Natural Resource Assessment.

The topography of the site is generally heterogenous, with slopes on either side of the Sandy River floodplain. Within the area of proposed development, grade is generally flat as it falls within previously existing road. Elevation on site ranges from approximately 60- to 395-feet.

Nuisance plants observed onsite include reed canarygrass (*Phalaris arundinacea*), Scotch broom (*Cytisus scoparius*), bull thistle (*Cirsium vulgare*) and Canada thistle (*Cirsium arvense*) within the unforested “cleared” area. Within the forested area, nuisance plants observed were limited to Robert geranium (*Geranium robertianum*). These nuisance plants are regularly controlled within the park and were minimal within the forested and unforested areas.

## **PROJECT IMPACTS AND SITE ENHANCEMENT**

The entire project site is located within the SEC-h and partially within SEC-water resource (wr) and SEC-scenic waterway (sw) overlays. The proposed development meets all the development approval criteria of MCC §39.5860 (B)(2). As a result, the applicant proposes a Wildlife Conservation Plan associated with MCC §39.5860; (C)(3).

The proposed development plan will not result in the removal of trees with forested areas, the two trees removed are standalone trees within areas that qualify as un-forested “cleared”. Removal and replacement of the current water distribution alignment and associated infrastructure will result in approximately 8,325 LF of disturbance within existing road. An approximately 120’ section of waterline will be installed via open trenching, approximately 60’ of which will require removal of shrubs and groundcover. This area will result in approximately 600 SF of vegetation disturbance, not including removal of trees. Following installation, the area will be revegetated using native shrubs and seed application.

## **CONSERVATION AND PLANTING PLAN**

Removal and replacement of the alignment near streams and drainages will not have any impact on stream riparian areas. Disturbance will only occur as open trenching within the existing road, where streams and drainages cross via culvert. Culverts will not be disturbed during open trenching. No revegetation or enhancement of stream riparian areas will be required.

No forested areas will be cleared, as the two trees to be removed fall within non-forested “cleared” areas. Since they are not within forested areas, no mitigation for these trees is required. Measures to reduce impacts to adjacent forested areas include protective fencing of resources near work areas and routing of alignment away from resources as needed. To protect nearby stream resources, temporary sediment protection shall be installed along the boundary of the work area. An erosion and sediment control plan shall be prepared in compliance with the Grading and Erosion Control standards described in MCC §39.6200 through MCC §39.6235

The area to be disturbed for open trench installation of approximately 120 LF of alignment includes removal of approximately 600 SF of shrubs and groundcover. Although this does not qualify as “clearing” of area, as no trees will be removed, the disturbed area will be revegetated using species that currently exist within the area, including Oregon grape (*Mahonia nervosa*) and sword fern (*Polystichum munitum*). All shrubs will be container plants at least 12” in height and planted clusters no greater than four, with each cluster being planted 4-5’ on-center. All plants will be mulched after planting. If plants are not available, appropriate substitutions of native plants for the specific habitat conditions can be made. Groundcover seed will be applied at a rate of 1 lb./acre. Monitoring will not be required. Planting native shrubs and groundcover will improve food and cover for insect and animal life, as well as allow for an understory to develop as overall diversity increases. Flood storage and water quality will also be improved by planting shrubs and groundcover as their roots stabilize soils and will absorb nutrients and retain water during the dry season.