



memorandum

date September 5, 2023
to Winterbrook Planning
cc Project file
from Sarah Hartung, Senior Ecologist, ESA
subject Bull Run Water Filtration Project – wildlife habitat topics

Introduction

At the request of Winterbrook Planning, ESA prepared this memorandum to respond to additional testimony related to potential impacts to wildlife habitat due to the Portland Water Bureau's (PWB) Bull Run Water Filtration Project (Project). The Project is explained in detail in other reports and documents. This memo responds to testimony related to potential changes to edge habitat near a farm pond and general habitat impact comments.

Discussion

Farm Pond and Proposed Tree Removal

Several comments submitted after the hearing raised general concerns about tree removal and habitat impacts. Public testimony also identified concerns over the proposed removal of trees along a farm pond just west of Lusted Road and the potential for changes to occur to existing edge habitat: Exhibit I.21, 2nd photo with pond and caption indicating that the photo depicted important edge habitat.

ESA had previously addressed the pond in question and summarized the proposed impacts which include the removal of trees near the pond and in the vicinity. Trees in this area vary in size from very small (1 inch in diameter at breast height or dbh), to mature trees (~ 20 to 24 inches dbh). Approximately half of the trees proposed for removal west of Lusted Road are young Oregon ash trees or saplings (1 to 3 inches dbh) growing along a two-track dirt road. The remaining trees are mostly medium-sized ash trees (< 12 inches dbh) with a few larger canopy trees. Proposed tree removal within this area is depicted in the attached and updated Pipeline Project Tree Plan that is part of the Multnomah County Erosion and Sediment Control Permit plan set subject to a separate land use approval.

Edges are found along the interface between two habitat types such as forest and grassland. Habitat edges can have positive or negative influences on wildlife species depending on the perspective. For example, red-tailed

hawks, scrub jays and elk are species that benefit from edges because they use both wooded areas and open fields as part of their life cycles. Whereas the northern flying squirrel, which depends on relatively large tracts of mature woods, would not benefit from a forest/grassland edge because edges expose their preferred habitat to predators and other species that can out-compete them for resources. The edge along a wooded area and farm field is depicted with the green arrows in Figure 1.

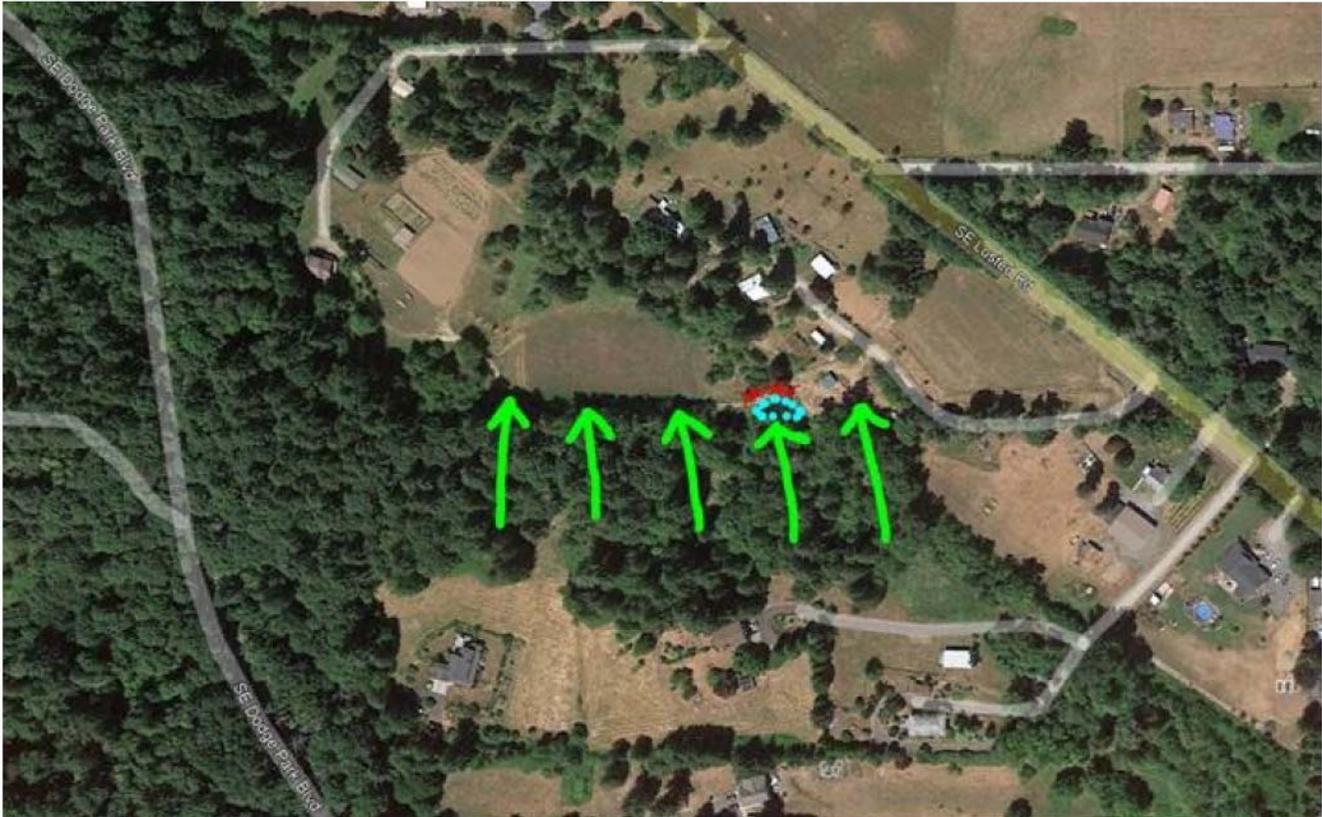


Photo 1. Green arrows identify “edge habitat” that will remain intact as part of the proposed project. Tree removal along the pond (outlined in aqua) is anticipated to have little to no impact on the character of the larger landscape, which is a mosaic of wooded areas, hedgerows, and fields.

The removal of saplings/trees would not change the edge habitat that is present along the private access. The larger trees along the south side of the property and pond will be protected.

As discussed in detail in my August 4, 2023 memorandum, Exhibit I.96, the proposed planting of native trees and shrubs at the filtration site will compensate for the removal of woody vegetation along the pipeline alignment. It remains my professional opinion that when considering the habitat benefit of the proposed mitigation plan, no adverse impacts to wildlife habitat would result from the removal of up to 29 trees west of Lusted Road and the mosaic character of the rural/agricultural landscape would persist.

Construction Impacts

Public testimony identified concerns related to wildlife habitat impacts during construction (Ian and Lauren Courter, Exhibit I.55 and Citizens for Peaceful Rural Living Video, Exhibit I.7. Construction impacts on wildlife and wildlife habitat would be avoided or minimized for the following reasons: 1) the construction footprint avoids several habitat areas including the large forested hillslope along SE Dodge Park Road where tunneling is proposed; 2) construction would be temporary 3) many wildlife species that use nearby wooded and open areas are anticipated to either habituate to construction activity after an initial period of acclimation or translocate to other nearby wooded and open fields; and 4) the planned filtration site would be revegetated following ground disturbance. Species that are expected to habituate to temporary increases in human presence include song sparrow, spotted towhee, red-tailed hawk, coyote, raccoon, and deer. The great blue heron is an example of a relatively common species observed foraging at the edge of the small farm pond during an August 2023 site visit that is expected to move to other nearby parcels for foraging or perching during construction. The great blue heron can hunt in a variety of habitats including upland fields, pastures, wet meadows, floodplains, all of which are abundant in the project vicinity.

The development layout of the filtration facility site and the careful alignment of the pipelines ensures that there will not be a permanent loss of significant wildlife habitat as a result of construction, even when considering the length of the construction period. Wildlife species are expected to continue using the protected habitat areas at the edges of the filtration site as a movement corridor (nocturnal and/or dawn and dusk), as well as stop-over habitat for birds. Native shrub/tree plantings identified in the mitigation plan would improve habitat along the margins of Johnson Creek headwaters and along the top of the hillslope on the east side of the filtration site. The open space areas near the southeast portion of the planned filtration facility will also provide open meadow habitat and improve wildlife habitat for songbirds, raptors, mammals and invertebrates (e.g., pollinators) that was not present in that area when the site was in agricultural use

Attachment A: Tree Plan

