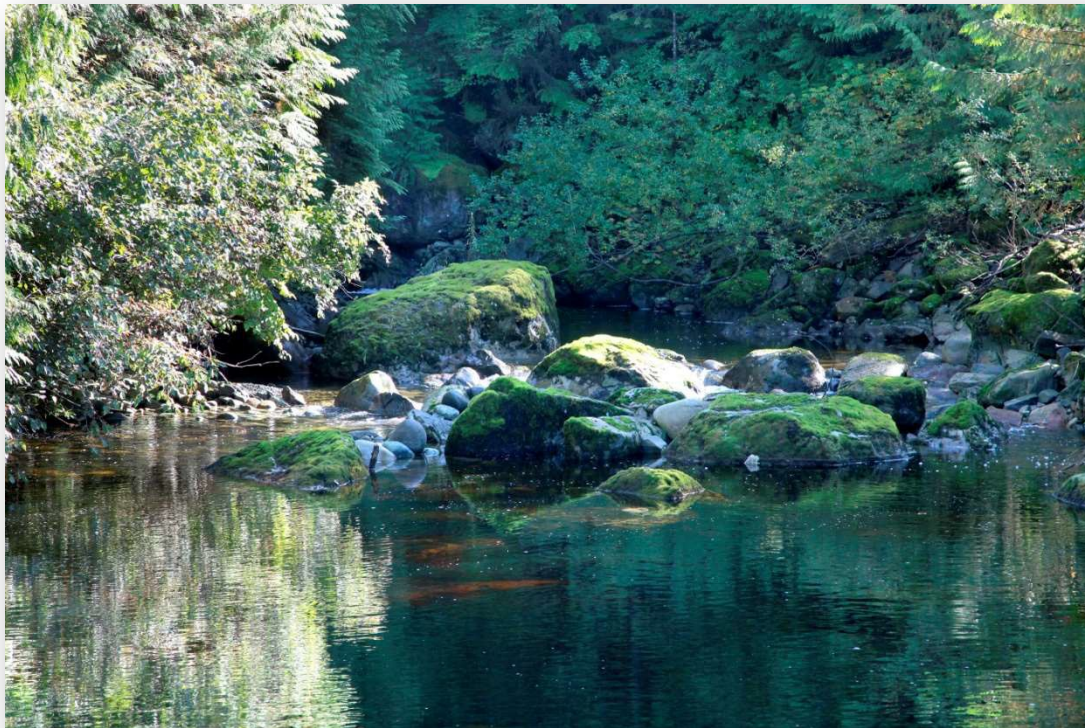


Youngs Creek Hydroelectric Project FERC No. 10359



WILDLIFE HABITAT MITIGATION PLAN License Article 403

2023 ANNUAL REPORT

Prepared By:



Everett, WA

December 2023

Final – This document has been prepared for Snohomish PUD. It has been peer-reviewed by Snohomish PUD for accuracy and formatting based on information known at the time of its preparation and with that understanding is considered complete by Snohomish PUD. The document may be cited as:

Public Utility District No. 1 of Snohomish County (Snohomish PUD). 2023. Wildlife Habitat Mitigation Plan (License Article 403) 2023 Annual Report for the Youngs Creek Hydroelectric Project (FERC No. 10359). December 2023.

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LIST OF ACRONYMS AND ABBREVIATIONS

CAPA	Critical Area Protection Area
FERC	Federal Energy Regulatory Commission
Project	Youngs Creek Hydroelectric Project, FERC No. 10359
ROW	right-of-way
Snohomish PUD	Public Utility District No. 1 of Snohomish County
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife
WHMP	Wildlife Habitat Mitigation Plan

1. INTRODUCTION

A license was issued by the Federal Energy Regulatory Commission (FERC) on May 5, 1992, for the Youngs Creek Hydroelectric Project (Project) located south of Sultan, Washington. As part of the Order Issuing License, Article 403 directed that a final wildlife habitat mitigation plan be prepared. In 2011, Public Utility District No. 1 of Snohomish County (Snohomish PUD), current owner and operator of the Project, filed for an amendment to the 1992 Wildlife Habitat Mitigation Plan (WHMP). The amendment was approved by the FERC on September 8, 2011.¹

The WHMP identifies the elements of habitat protection, revegetation, and enhancement of Project lands and addresses ongoing monitoring and reporting. Snohomish PUD is to provide a written report to the FERC every five years,² and a written summary report to the Washington Department of Fish and Wildlife (WDFW) and the U.S. Fish and Wildlife Service (USFWS) annually. This WHMP Annual Report details activities that were conducted from December 2022 through November 2023. WDFW and USFWS are being provided a copy of the draft report for a 30-day review and comment period (Appendix A).

¹ (136 FERC ¶ 62,206)

² The next 5-year report will be filed with FERC by December 31, 2027.

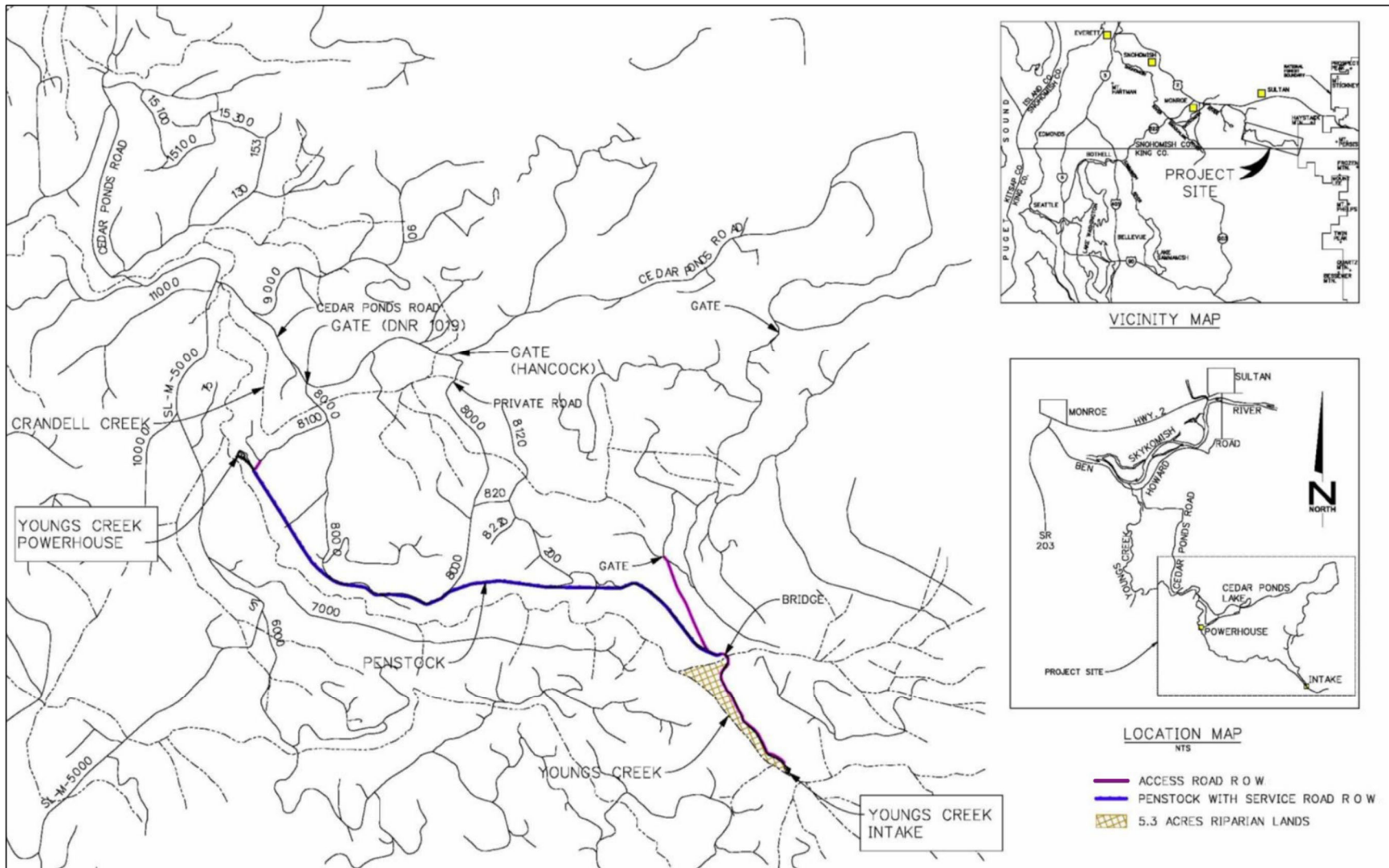


Figure 1. Map identifying penstock and access road rights-of-way.

2. VEGETATION MANAGEMENT AND MONITORING

As specified in the WHMP Section 3.0 (g) and (h), all mitigation areas were monitored during 2023 to ensure the objectives of the WHMP are being met. Monitoring of Project lands consisted of periodic checks on vegetative conditions and documentation or treatment of occurrences of noxious or invasive species. Revegetated and reseeded areas will continue to be monitored annually for the duration of the License. Coverage of shrubs and grasses will also be visually evaluated on an annual basis. If surveys indicate that coverage by bare ground is estimated to be more than 20 percent, reseeded areas will occur with the appropriate erosion control seed mix, as noted in the WHMP. Noxious weeds will be controlled during the growing season, as necessary. Monitoring of riparian and upland forest mitigation areas will consist of periodic checks of overstory vegetation.

2.1. Penstock Right of Way Revegetation

Following completion of Project construction activities, the penstock right-of-way (ROW) (Figure 1) was seeded in the fall of 2011 and reseeded, where necessary, in the spring of 2012. Vegetation continues to meet coverage requirements and no construction activities occurred during 2023 that precipitated the need to re-seed any portion of the ROW.

2.1.1. Line of Sight Reduction/Establishment of Hiding Cover

Growth of native vegetation will continue to be allowed along the penstock ROW to the extent practical without impeding visual monitoring of pipeline integrity. Trees will be allowed to grow in the outer 10 feet on either side of the ROW. To date, native shrubs have begun to re-establish in only a few locations along the ROW margins.

2.1.2. Noxious Weed Management

Pursuant to WHMP Section 3.0(a), a Noxious Weed Management Plan was developed for the Project in 2013. Accordingly, noxious and invasive weed control was performed over eleven days during the 2023 growing season to comply with applicable noxious weed regulations. The primary weeds controlled were Bull and Canada thistle, Oxeye Daisy, Scotch broom, and Butterfly bush. Methods of control consisted of manual removal of Scotch broom and Butterfly bush, and use of a non-selective, post-emergent Organic Materials Review Institute (ORMI) listed herbicide for all other weeds.

Monitoring of weed populations on Project lands was conducted by Snohomish PUD biologists with locations of weed infestations noted and treatment measures implemented. Spatial information was partitioned into three forms of symbology: points (discrete locations along the ROW and spur roads), intermittent lines (weeds commonly intermixed with native ROW vegetation), and polygons (weeds intermixed with native vegetation confined to specific areas beyond the ROW boundary) (Figures 2 and 3). Road and penstock ROWs were patrolled multiple times during the growing season to identify areas where weed control was required.

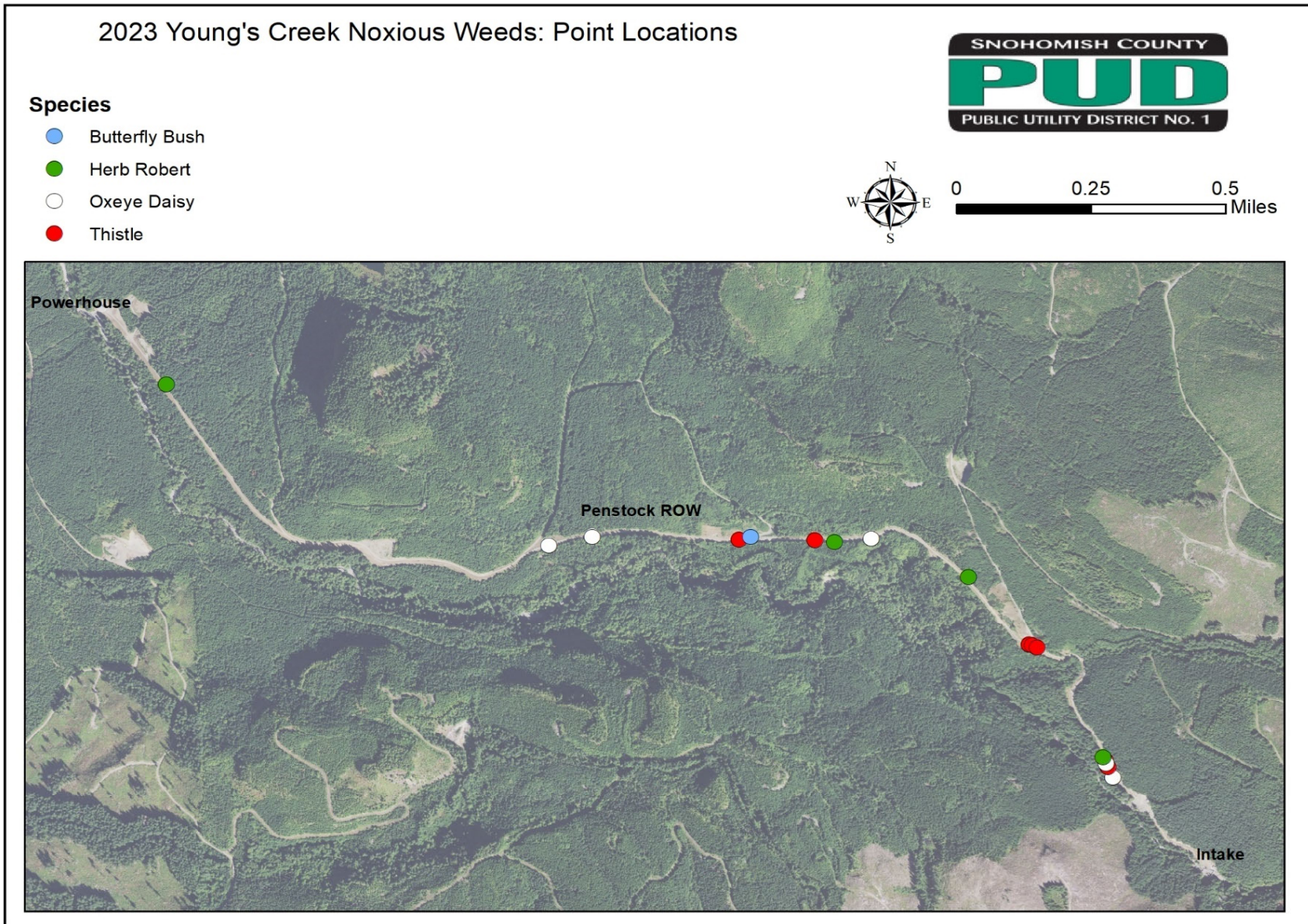


Figure 2. Map identifying discrete noxious weed locations.

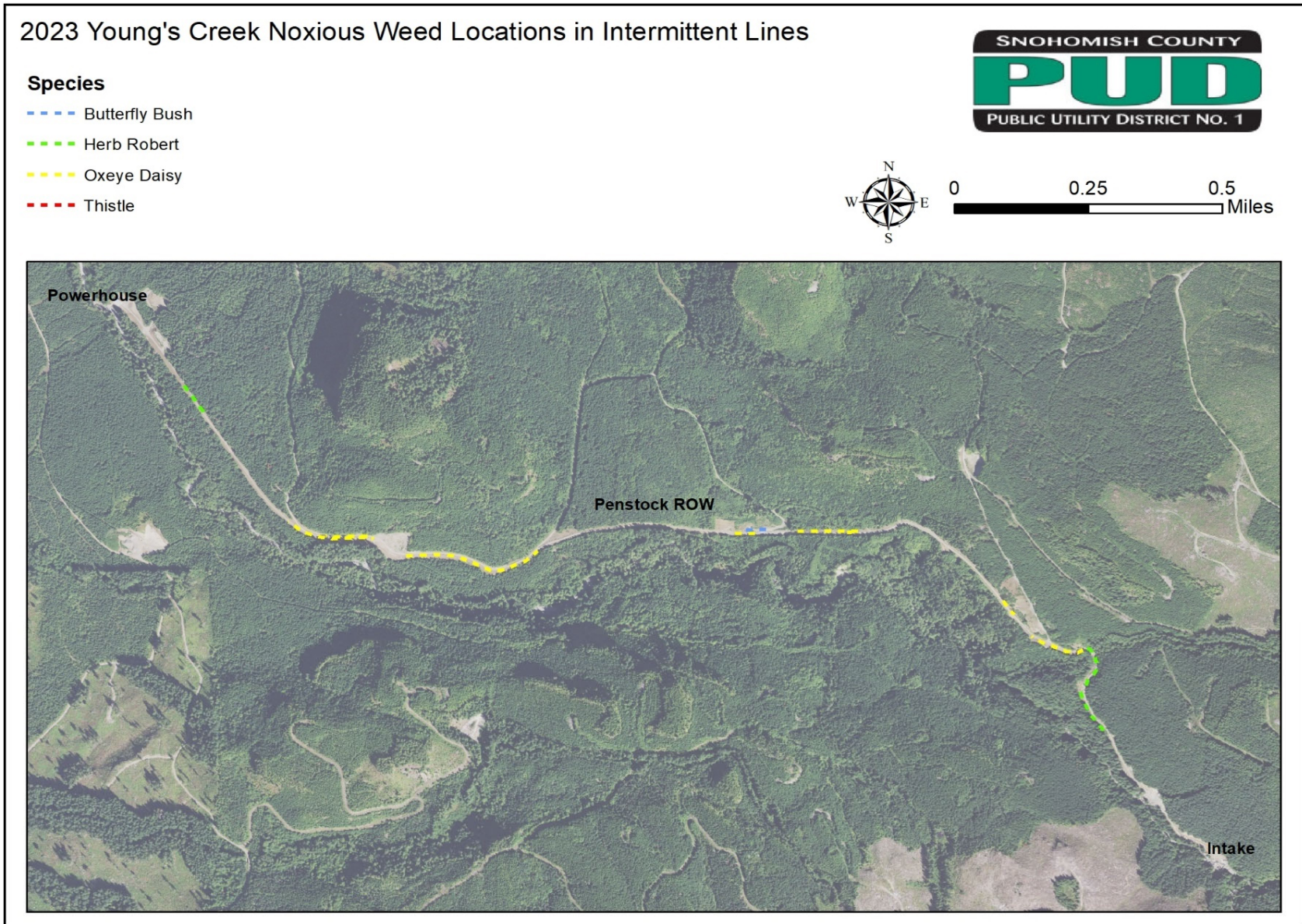


Figure 3. Map identifying noxious weed infestations in intermittent lines and polygons.

2.2 Access Road ROW Revegetation

The rights-of-way along the Project access roads (Figure 1) have been revegetated with the grass/forb mix noted in the WHMP.

3. GATES

As required under WHMP Section 3.0(c), gates restricting access to the powerhouse and intake areas have been installed several years ago (Figure 1). Access is provided to Snohomish PUD personnel and contractors for activities tied to normal Project maintenance. Access is also provided to adjacent landowners for professional silvicultural and forest management activities. No new activities regarding gates were necessary in 2023.

4. AVIAN NESTING AND PERCHING HABITAT

4.1. Nest Boxes

Prior to and following the nesting season, nest boxes were maintained by removing any debris and/or old nesting material from within the cavity of the boxes. Since the female gathers nesting materials in preparation for egg-laying, boxes are not provided with any supplemental nesting materials in advance of the nesting season. Nests were checked by the Snohomish PUD biologist as required by the WHMP schedule.

During the 2023 nesting season, tree swallows nested in three of the pole-mounted nest boxes and began nest construction in one additional box (Figure 4). To avoid excessive disturbance, eggs and chicks discovered in the nests were not moved during the counting process; as a result, numbers of eggs or fledglings are only estimates. Monitoring associated with other nest box programs suggests that the installation of additional boxes should not be considered until a threshold of 50 to 80 percent successful usage is attained (Bellrose & Holm, 1994). No additional box installations are planned at this point.

In 2018, three owl boxes were placed in the 5.3-acre forested mitigation parcel. Target species were Northern saw-whet (*Aegolius acadicus*) and western screech (*Megascops kennicottii*) owls. Each box was placed between 10 and 15 feet above the ground on dominant trees within the densest areas of the forest. In 2023, the owl boxes had no observed use (Appendix A).



Figure 4. Map showing locations of nest boxes and perch poles; colored circles represent the year the box used.

4.2. Raptor Perch Poles

Seven raptor perch poles were erected on the penstock ROW in late 2011, based on field consultation between WDFW and Snohomish PUD biologists. Perch poles were monitored concurrent with monitoring of nest boxes. During site visits in 2023, the immediate vicinity of each perch pole was inspected for signs of raptor use, including whitewash or owl pellets. No use of the perch poles was identified in 2023.

5. MITIGATION LANDS

As required under WHMP Section 3.0(e), 5.3 acres of mitigation lands were put into Critical Area Protection Area (CAPA) status in fall 2009 (Figure 1).³ Visual observations of the overstory were conducted concurrent with nest box and raptor perch pole checks. The site consists of mature second growth forest, approximately 80 years old, on a steep hillside above Youngs Creek. Tree diameter ranges between approximately 15 and 27 inches. Snags and coarse woody debris are present within the site. Understory exists primarily as sword fern and local patches of Devil's club. At this point, habitat is of good quality with natural conditions allowing for development into mature forests.

6. LITERATURE CITED

Bellrose, F.C. and D.J. Holm (eds.) 1994. Ecology and Management of the Wood Duck. Stackpole Books, Mechanicsburg, PA. 588p.

³ The 5.3 acres are recorded as CAPA under Snohomish County number 200910160192. The Snohomish County Assessor's property tax parcel/account number is 27083300100200 for this land.

APPENDIX A

Consultation Documentation

Presler, Dawn

From: Schutt, Mike
Sent: Thursday, December 21, 2023 9:23 AM
To: Brock Applegate (brock.applegate@dfw.wa.gov); jeffrey_garnett@fws.gov
Subject: Draft 2023 Youngs Creek Hydroelectric Project WHMP Report for review
Attachments: 2023 YC WHMP AnnRpt DRAFT.pdf

Hi Brock and Jeff,

Hope all is well with you. Attached for your review is the Wildlife Habitat Mitigation Plan Draft Annual Report for the Youngs Creek Project. The report includes a summary of activities and data collected during 2023. Please review and provide comments by January 12, 2024. I will respond to any comments and finalize the draft report after that date.

Thanks, and happy holidays

Mike Schutt

Sr. Environmental Coordinator – Wildlife

Generation – Natural Resources

Snohomish County PUD

Office) 425-783-1712

Cell) 425-210-5816

He/Him

Presler, Dawn

From: Garnett, Jeffrey A <jeffrey_garnett@fws.gov>
Sent: Thursday, January 4, 2024 8:05 AM
To: Schutt, Mike; Applegate, Brock A (DFW)
Subject: RE: [External Sender] RE: [EXTERNAL] Draft 2023 Youngs Creek Hydroelectric Project WHMP Report for review

So long as there's a document to refer back to check the monitoring schedule (which there appears to be), I am OK with just a summary in the text.

Jeff

Jeffrey Garnett
U.S. Fish and Wildlife Service | Lacey, WA
jeffrey_garnett@fws.gov
360-701-6838
(he/him/his)

From: Schutt, Mike <MSSchutt@snopud.com>
Sent: Thursday, January 4, 2024 7:58 AM
To: Garnett, Jeffrey A <jeffrey_garnett@fws.gov>; Applegate, Brock A (DFW) <brock.applegate@dfw.wa.gov>
Subject: RE: [External Sender] RE: [EXTERNAL] Draft 2023 Youngs Creek Hydroelectric Project WHMP Report for review

Hi Jeff,

Yes, the "Consultation Documentation" refers to correspondence between all of us as it relates to this report (your comments, my responses, etc.). This year, I removed the old Appendix A (nest box monitoring schedule) because it seems unnecessary, but missed that reference in the text.

Maybe each of you could let me know if you'd like to keep the monitoring table in there, or if having the summary in the text (Section 4.1 para 3) is sufficient?

thanks

Mike Schutt
Sr. Environmental Coordinator – Wildlife
Generation – Natural Resources
Snohomish County PUD
Office) [425-783-1712](tel:425-783-1712)
Cell) [425-210-5816](tel:425-210-5816)
He/Him

From: Garnett, Jeffrey A <jeffrey_garnett@fws.gov>
Sent: Tuesday, January 2, 2024 12:59 PM
To: Schutt, Mike <MSSchutt@snopud.com>; Applegate, Brock A (DFW) <brock.applegate@dfw.wa.gov>
Subject: [External Sender] RE: [EXTERNAL] Draft 2023 Youngs Creek Hydroelectric Project WHMP Report for review

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Hey, Mike.

After review, my only comment is that Section 4.1 references the WHMP schedule as Appendix A; Appendix A, however, is reserved for "Consultation Documentation." Am I correct in assuming that "Consultation Documentation" refers to comments related to this report? Thanks, and Happy New Year!

Jeff

Jeffrey Garnett

U.S. Fish and Wildlife Service | Lacey, WA

jeffrey_garnett@fws.gov

360-701-6838

(he/him/his)

From: Schutt, Mike <MSSchutt@snopud.com>

Sent: Thursday, December 21, 2023 9:23 AM

To: Applegate, Brock A (DFW) <brock.applegate@dfw.wa.gov>; Garnett, Jeffrey A <jeffrey_garnett@fws.gov>

Subject: [EXTERNAL] Draft 2023 Youngs Creek Hydroelectric Project WHMP Report for review

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Thanks, and happy holidays

Mike Schutt

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