

**WILDLIFE AND HABITAT ASSESSMENT REPORT
FOR
BETROZOFF JONES, LLC**

Site Location:

11818 and 11845 Red-Wood Road
Redmond, Washington 98052

Tax Parcel Numbers:

948250-0070 (11818) and 942850-0065 (11845)

Prepared for / Applicant:

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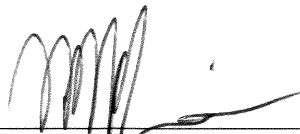
Betrozoff Family Trust (11818 Red-Wood Road)
Adam Jones (11845 Red-Wood Road)

Report Dated:

May 22, 2013



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Introduction and Summary

In order to address City of Redmond (City) code requirements, a fish and wildlife habitat analysis was conducted on two adjacent parcels, heretofore known as 'the site'. Two houses and several outbuildings cover the 8.04-acre site. With respect to vegetation, mature trees largely cover the site. Some cleared areas lie on its north end. The site is located on the edge of the City on a bluff overlooking the Sammamish River Valley. A county park, pasture and lots with varying densities of residential development surround the site. To conduct this analysis, 'species of concern' lists and other agency information was reviewed and the site was visited to evaluate if such species and their habitats were present. The vegetative coverage was also mapped and the wildlife habitat characteristics were rated. Much of the site appears to be designated by the City as part of a large wildlife habitat conservation area. However, species of concern were not observed during the visits and the site appears to lack habitat components that would indicate that such species use the site regularly or for reproduction.

Location, Site Description and Setting

Location, Legal Description and Project Description

The site is located in the Southwest $\frac{1}{4}$ of Section 26, Township 26 N, Range 5 East, WM. The site is 8.04 acres and is comprised of the 5.52 acre 'south parcel' (tax parcel number 948250-0070) which is owned by the Betrozoff Family Trust and the 3.54-acre 'north parcel' (tax parcel number 942850-0065) which is owned by Adam Jones. The south parcel has a single unoccupied house and three outbuildings and the north parcel has a single unoccupied house with four outbuildings. Both houses have driveways that connect them with Red-Wood Road, which borders the parcels to the east. A two-lane road, 154th Place NE, lies to the west of the south parcel (Fig. 1; Fig 4). Betrozoff Jones, LLC proposes to convert most of the site into a residential subdivision. This will require clearing most of the existing vegetation, demolishing and removing the two existing houses and outbuildings and re-grading much of the site. The steeper area on the west side of the south parcel will not be cleared and graded (Fig 5).

Site Description

The site occupies a bluff overlooking the Sammamish River Valley. The native vegetation is typical for such a place but the mature non-native vegetation and understory suggests that past residents have altered the site for decades. Part of the site is landscaped. The site straddles a mild ridge that slopes northward: it

therefore has north-, west- and east-facing aspects. Elevations range from 100 feet above sea level on the west end of the south parcel to 175 feet above sea level on the southeast corner of the south parcel. The site's geography and elevation and the plant assemblages on a more undisturbed parcel to the south suggest that a *North Pacific Maritime Mesic-Wet Douglas Fir Western Hemlock forest* would naturally occur on the site (DNR, 2008). A *PSME-TSHE/GASH/POMU*¹ vegetation community would probably cover the site as this was observed on the parcel to the south (Rocchio and Crawford 2008). Much of the understory is non-native: an extensive system of faucets covers the south parcel. Planted rhododendron varieties (*Rhododendron spp.*) are common on the south parcel: although native rhododendrons grow in western Washington they are not typical of the eastern Puget Sound Lowlands. In addition, there are grass-covered pathways throughout the site.

The site is largely covered in mature trees with the exception of a pasture on the north end, lawns surrounding the houses and an area in the southwest corner that appears to have been cleared of mature trees relatively recently. Many of the mature trees are Douglas Fir (*Pseudotsuga menziesii*) but other native trees grow throughout. These include Big Leaf Maple (*Acer macrophyllum*), Western Hemlock (*Tsuga heterophylla*), Western Red Cedar (*Thuja plicata*), Red Alder (*Alnus rubra*) and Bitter Cherry (*Prunus emarginata*). There is a small area on the northwest corner of the south parcel that is dominated by Black Cottonwood (*Populus tricharpa*) and Red Alder. The southwest portion of the south parcel is steeper and covered with shrubs and smaller, mainly native trees (Fig. 4).

Non-native trees also grow throughout the property. On the south parcel, these are mainly in the central part around the house. Non-native trees include Scotch Pine (*Pinus sylvestris*), Western White Pine, (*Pinus monticulata*), ash species (*Fraxinus spp.*), Silver Maple (*Acer saccharinum*), Red Oak (*Quercus rubra*), Japanese Maple (*Acer palmatum*), Blue Atlas Cedar (*Cedrus atlantica*), an unidentified beech (*Fagus spp.*), Laurel (*Prunus laurocerasus*), Norway Spruce (*Picea abies*), Redwood (*Sequoia giganteum*) and Colorado Blue Spruce (*Picea pungens*) (Wright, 2013).

Washington Forestry Consultants Incorporated produced a 'Preliminary Tree Evaluation' of the site (dated May 14, 2013). This evaluation noted that the site had 294 significant trees (trees of at least 6 inches DBH²) and 262 of them are considered healthy. Most of these trees are under the footprint of the proposed development and will be removed. Fifty trees will need to be planted to meet the minimum tree density required. Included in the significant trees to be removed are

¹ PSME-TSHE / GASH / POMU stands for Douglas Fir-Western Hemlock / Salal / Sword Fern plant community

² DBH- Diameter at Breast Height

25 healthy Landmark trees³. City code requires that 3 trees be planted for every healthy Landmark tree removed. The Preliminary Tree Evaluation suggests that 41 Western Red Cedar and 42 Douglas Fir be planted in gaps within the tree tracts. This document also gives guidance on protecting trees during the construction of the project (Wright 2013).

Certified Wetland Biologist Mark Rigos, P.E, assessed the site for the presence of wetlands in the Fall of 2012. Rigos (2012) concluded that two areas on the site exhibited some wetland characteristics but were not wetlands. The first area is the roadside drainage ditch along Red-Wood Road. This area is not a wetland because, per Redmond Code, ditches are not wetlands. See the Wetland Delineation Report for more information. This area had approximately 4 inches of standing water when Chris Holcomb, MES, visited the site on May 4 and 5, 2013. The other area is located on the northeast corner of the north parcel and is a depression in a grassy pasture. This second area however lacks the requisite soil characteristics to be considered a wetland. This second area had no standing water when Chris Holcomb visited it on May 4th and 5th, 2013.

Landscape Setting

The site lays at the north end the City of Redmond and relatively undisturbed areas in the region are narrow or isolated (Fig 1). The site occupies the north end of a narrow, roughly 25.5 acre patch of mature forest on private residential lots. Some lots have single houses on them while other lots in this patch are undeveloped. This provides a fairly large block of habitat for upland forest wildlife. Areas east of the parcel are dominated by residential development to varying densities. The Sammamish River Valley to the west has been heavily altered from its original state: the river itself is channelized; most of the land is devoted to agriculture or sports parks (e.g. Sixty Acres Park, west of the site). The City of Redmond's Map 64.2 Critical Wildlife Habitat: Willows / Rose Hill Neighborhood indicate that much of the site is considered 'critical wildlife habitat' (Fig. 3).

All of the surface water on the site ultimately drains to the Sammamish River. The site lies within Water Resource Inventory Area (WRIA) 8, which comprises the Cedar and Sammamish Rivers. According to the Washington Trout Stream Type Survey report, an intermittent/ perennial stream (Class IV) originates in the parcel directly north of the site. There are some mapped streams south and northeast of the site (Washington Trout, 2004, 2005).

³ 'Landmark tree' – a tree with a DBH of at least 30 inches

Methods

Redmond Municipal Code 21.64.020 A 1 (a) stipulates that species of concern are those listed on Washington Department of Fish and Wildlife (WDFW) sources and US Fish and Wildlife (USFWS) sources. Under the authority of the Endangered Species Act of 1973, 'Species of concern' can mean endangered, threatened, sensitive and candidate species as determined by the best available science. In order to determine whether or not any species of concern utilized the site, species range and habitat requirements were considered. In addition, the WDFW's Priority Habitats list (WDFW 2013) stipulates that the manner in which a species uses a site (breeding site or regular perch, for example) is relevant in considering a species presence in an area to be worthy of regulation. Some species of concern such as Grizzly Bears (*Ursus arctus*) would utilize the site's habitat, but the surrounding urban development is so extensive that their presence would be highly unlikely. City code (21.64.020 A 2 a) designates the Great Blue Heron (*Ardea herodias*) as a 'Species of Local Importance'. With these considerations, a list of species that would likely occupy the site was developed (Table 1). Table 1 was developed with the assumption that wet areas on or near the site did not have sufficient hydrology to allow for amphibian breeding and that the site did not have a forest structure conducive to use by Northern Spotted Owls or Marbled Murrelets.

Species	List	Criteria
Bald Eagle <i>Haliaeetus leucocephalis</i>	<u>State</u> ; sensitive <u>Federal</u> ; Species of Concern	Communal roosts Regular concentrations
Peregrine Falcon <i>Falco peregrinus</i>	<u>State</u> ; sensitive <u>Federal</u> ; species of concern	Regular perch Breeding areas
Great Blue Heron <i>Ardea herodias</i>	<u>State</u> ; none <u>Federal</u> ; none <u>City of Redmond</u> : Species of Local Importance	Breeding areas
Pileated Woodpecker <i>Dryocopus pileatus</i>	<u>State</u> ; Candidate <u>Federal</u> ; none	Breeding areas
Vaux's Swift <i>Chaetura vauxi</i>	<u>State</u> ; Candidate <u>Federal</u> ; none	Breeding areas Communal roosts
Townsend's Big Eared Bat <i>Corynorhinus townsendii</i>	<u>State</u> ; Candidate <u>Federal</u> ; Species of Concern	Any occurrence
Western Toad <i>Anaxyrus boreas</i>	<u>State</u> ; Candidate <u>Federal</u> ; Species of Concern	Any occurrence
Bat Roosting Concentrations	<u>State</u> ; none <u>Federal</u> ; none	Breeding area Roosting area

TABLE 1: PRIORITY SPECIES RELEVANT TO THE SITE

City code (Appendix 1, Critical Areas Reporting Requirements) stipulate that the WDFW Priority Habitats and Species (PHS) databases, DNR's Natural Heritage databases (DNR 2013¹) and DNR's list of Animals in Washington with rankings (DNR, 2013²) be searched for any listed species and habitats in the area. These sources were searched and the results are discussed in the 'Results' section.

Chris Holcomb, MES⁴, visited the site in May of 2013 to look for the species in Table 1 and to assess the site for habitat appropriate to them. Holcomb was at the site from 12:15pm to 17:00 on May 4th and from 05:30 to 16:00 on May 5th. He spent 3 hours walking up and down the sidewalk on Red-Wood Road looking for perching raptors on top of the large conifers. He also watched these trees from various vantage points within the site. On the morning of May 5th, Holcomb listened for calls by all bird species by walking within the interior of the site. At other times, Holcomb walked throughout the site looking for holes within trees that would suggest Pileated Woodpecker nesting and foraging activity. Areas beneath dense shrubbery were checked for Western Toads. Holcomb used binoculars to observe any large nests that he found and holes in buildings. Finally, he checked the eaves of all buildings, empty outbuildings and chimneys for bat nesting activity. Holcomb also filled out the City's 'Habitat Unit Assessment Form' (Fig 2) to assist city planners in evaluating the habitat quality (See the inserted PWS map and accompanying documentation in the Appendix).

Results

Agency Database Search

Agency database searches revealed priority habitats or species near the site but none within its borders. According to the WDFW PHS map (Dated May 8, 2013) (Appendix), wetlands are located as near as a quarter mile from the site. In addition, the Sammamish River to the west and one of its tributaries about ¼ mile north of the site has threatened and endangered fish species. An online search on May 11, 2013 for the site's township range and section in DNR's Natural Heritage Database revealed no results. This indicates that DNR does not consider any areas in T26N, R5E, and Section 26 to be priority habitats.

Wildlife and Habitat Field Observations

Presence of any of the species listed on Table 1 was not observed and habitat components for them were also not observed. Birds of prey or Great Blue Herons were not observed perching on any of the trees. The calls of any species listed in Table 1 were not heard on or near the site. No bats were found nesting in the

⁴ MES, Master of Environmental Studies. Holcomb's credentials are listed in Figure 7 of the Appendix

buildings or under their eaves. The house chimneys are well screened which would eliminate use of the chimneys by Townsend's Big Eared Bat or roosting colonies of other bat species. Bats were not in any of outbuildings that could be entered by Holcomb. A maple tree on the south parcel and northwest of the house had woodpecker holes but woodpeckers were not observed there. The holes are likely *not* that of a Pileated Woodpecker since they were only 2 inches in diameter. No woodpecker activity was observed at this tree. Pileated Woodpecker foraging was never heard in the area. Between this maple and the Betrozoff house lays a large Blue Atlas tree that has many sapsucker (*Sphyrapicus spp.*) foraging holes in it. The site only had a few snags. Holcomb found 4 large (18" diameter) nests in various trees throughout the site but these were likely crow nests and appeared to be unused at the time of observation.

Holcomb observed fauna that are common in residential areas. American Robin (*Turdus migratorius*) is especially common. European Starlings (*Sternus vulgaris*) are nesting in holes in the garage on the north parcel. Oregon Junco (*Junco hyemalis*), Black Capped Chickadee (*Parus atricapillus*), Spotted Towhee (*Pipilo maculatus*), Steller's Jay (*Cyanocitta stelleri*), Song Sparrow (*Melospiza melodia*), Varied Thrush (*Ixoreus naevius*), American Crow (*Corvus brachyrhynchos*), Bushtit (*Psaltriparus minimus*), Wilson's Warbler (*Wilsonia pusilla*) and Winter Wren (*Troglodytes troglodytes*) were observed by call or by sight on the site. Turkey vultures (*Cathartes aura*) and Red Tailed Hawks (*Buteo jamaicensis*) were observed soaring or gliding over the valley west of the site.

City code 21.64.020 (A) 1 (g) stipulates that areas that form links between habitat blocks would be worthy of protection. This is *not applicable* to this site since it lies at the northernmost tip of a forested area and is therefore not a link to other forest habitats (Fig 2). Cleared areas lie to the west and north and residential development lies to the east.

Special Habitats

The City lists five situations in which places could be classified as valuable wildlife habitat, regardless whether or not species of concern are present (21.64.020 A 2 a-e). City code 21.64.020(A) 2 (a) stipulates that areas that are already protected as Native Growth Protection Areas (NGPA) and critical areas and their buffers would qualify as 'Core Preservation Areas'. This is *not applicable* to this site as the site lacks stream corridors, wetlands or NGPAs. Holcomb filled out the City's 'Habitat Unit Assessment Form' (Fig. 2) and concluded that the site had a moderate score for habitat. The site was rated at 13 points out of a possible 27. According to this form, the site is comparatively small, has low community interspersion, lacks a presence of threatened or endangered species, and has some invasive species patches. Per 21.64.020 A 2 c, City officials will consider this form's results in order to decide if the site would be a 'Quality Habitat Area'. The City has created Map 64.2 'Critical Wildlife Habitat Map for Willows Rose Hill Neighborhood' (Fig 3) which includes the

site. Per 21.64.020 A 2 e (i), however, this map is a general guide and actual wildlife habitat areas are to be determined by a consultant who has conducted fieldwork.

Conclusion

Despite the site's inclusion on a general habitat protection map (Fig. 3), database searches and fieldwork results suggest that the site only has moderate habitat value. The agency database searches and a site visit revealed no presence of priority habitats or priority species that would likely use the site. Although these species may pass through the site on occasion, they do not use the site on a regular basis or for breeding which is a stipulation for many of the species on WDFW and USFWS lists. Usually, Western Toads breed communally in wetlands and ponds with very specific characteristics: these include permanently-standing water that is less than 1 meter of depth and interspersed with aquatic plants. The smaller wetlands just west of the site do not appear to be ideal toad breeding habitat. Additionally, the habitat links between these areas and the site are highly marginal. Roads, particularly busy roads, pose significant barriers to migrating amphibians. Red-Wood Road separates the site from a large habitat complex to the north and 154th Place NE and athletic fields separate the site from wetlands to the west. The site itself is not ideal amphibian habitat as much of it is devoid of native understory.

The site was scored at 13 out of a possible 27 points on the 'Habitat Unit Assessment Form' (Fig. 2). The City will consider this score when deciding if the site has 'Quality Habitat Areas'. The site has large trees but also has many lawn areas and introduced plants: it therefore offers moderate habitat value for all native animals. The site appears to be dominated by animals that are common in suburban residential environments. It is possible that dead trees and downed woody debris were actively removed throughout the site for decades. Few of the trees have broken tops or high, thick limbs that would serve as good perches for birds of prey or Great Blue Herons. These conditions have probably decreased the site's value to many native fauna.

While the proposed development will impact a large portion of the site, the 'Preliminary Tree Evaluation' by Washington Forestry Consultants establishes a plan to compensate for tree density and Landmark tree losses that would satisfy City of Redmond Code. The retention of large trees would be beneficial to various wildlife species. The steep west side of the south parcel is not slated to be developed as part of the project and this area will likely provide habitat for many species.


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Appendix



Print Form



**CITY OF REDMOND
HABITAT UNIT ASSESSMENT FORM**

HABITAT UNIT: Betrozoff - Jones Subdivision
LOCATION: 11818 & 11845 Red-Wood Rd. Redmond
TOTAL SCORE: 13 out of 27

Habitat Parameter	Scoring Criteria	Habitat Unit Score
Size	<ul style="list-style-type: none"> • >50 acres = 3 points • 10-50 acres = 2 points • 0-10 acres = 1 point 	1
Vegetation Community Types	<ul style="list-style-type: none"> • ≥ 4 types = 3 points • 2-3 types = 2 points • 1 type = 1 point • None = 0 points 	2
Community Interspersion	<ul style="list-style-type: none"> • High = 3 points • Medium = 2 points • Low = 1 point • None = 0 points 	1
Priority Species Presence	<ul style="list-style-type: none"> • Threatened & Endangered Species = 3 points • Candidate Species = 2 points • Monitor Species = 1 point • None = 0 points 	0
Priority Species Habitat Use	<ul style="list-style-type: none"> • Breeding = 3 points • Roosting = 2 points • Foraging = 1 point • None = 0 points 	0
Habitat Continuity	<ul style="list-style-type: none"> • Links protected habitats = 3 points • Links unprotected habitats = 2 points • Extends habitat corridor = 1 point • None = 0 points 	1
Forest Vegetation Layers	<ul style="list-style-type: none"> • 3 layers = 3 points • 2 layers = 2 points • 1 layers = 1 point • None = 0 points 	3
Forest Age	<ul style="list-style-type: none"> • Mature = 3 points • Pole = 2 points • Seedling/Shrub = 1 point • None = 0 points 	3
Invasive Species Presence	<ul style="list-style-type: none"> • 0-25% = 3 points • 26-50% = 2 points • 51-75% = 1 point • 75-100% = 0 points 	2

Page 1 of 2

Figure 2. Filled-out Habitat Unit Assessment Form (pg 1)

**CITY OF REDMOND
HABITAT UNIT ASSESSMENT FORM**

VEGETATION COMMUNITY TYPES:

- Mature Douglas Fir trees cover much of the site but with lawns and non-native understory.
- The central part of the Betrozoff parcel (South Parcel) has lawn, mature non-native trees & shrubs.
- West side of Betrozoff parcel (hillside) has a willow- Red Alder community, recently cleared area dom. by salal, invasive blackberry patches, native Douglas Fir forest and a Black Cottonwood- dom. area.
- North part of Jones Parcel (north parcel) was used as pasture in the past, currently dominated by Reed Canary Grass / Soft Rush / invasive blackberry species and scattered trees.

INVASIVE PLANTS:

- There are large patches of blackberry on the hillside on the southwest part of the site and the north part of the site.
- The field located at the north part of the site is dominated by Reed Canary Grass.
- Non- native grasses, including *Holcus linatus* dominate the orchard east of the Betrozoff house.
- Reed Canary grass is also present beneath the Black Cottonwoods on the southwest part of the site.

HABITAT FEATURES (snags, perches, downed logs, etc):

- There are few snags and none over 2 feet in diameter. The arborist report did note some larger trees that were in poor health.
- There are also very few downed logs. Most of the down logs are on the Jones parcel.
- The vast majority of tall conifers in the site are unfavorable perches for birds of prey: they lack broken tops and high, thick limbs. During his site visit, Chris Holcomb spent about 5 hours watching the tops of these trees from various vantage points both inside and outside of the site. No raptors were observed.

WILDLIFE OBSERVATIONS (direct or indirect):

- No priority species were observed. Observed wildlife included birds that are typical of suburban residential environments. These included American Robin, Black Capped Chickadee, Spotted Towhee, American Crow, Song Sparrow, European Starling, Oregon Junco, Varied Thrush, Winter Wren.
- A non-native maple, northwest of the Betrozoff house, has unoccupied woodpecker nesting holes; they are too small to be those of a Pileated Woodpecker.

THREATS TO HABITAT INTEGRITY:

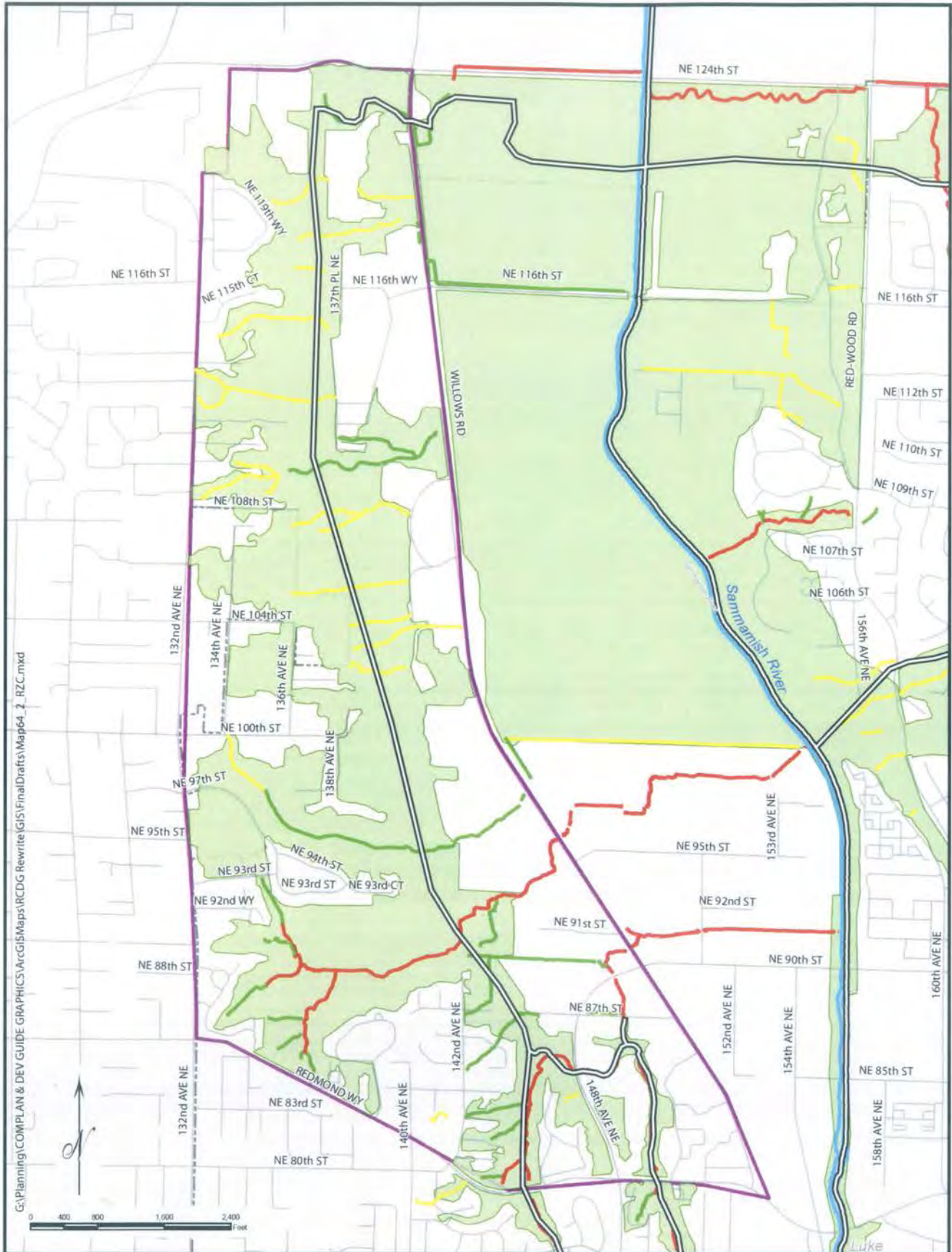
- The project will involve clearing and grading much of the site. The hillside on the southwest corner of the site will not be cleared. This will degrade wildlife habitat but mainly for species that are not priority species.

OTHER NOTES:

The arborist report has devised a plan for retaining 88 trees including 36 Landmark trees. Eighty-three trees will be planted to satisfy city of Redmond Tree Protection Ordinance.

The invasive blackberry and other non-native plants on the southwest corner of the site can be replaced with native vegetation.

Figure 2 (cont.)



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City of Redmond
Critical Areas Map
 Effective: April 16, 2011

- Legend:**
- Wildlife Corridors
 - Critical Wildlife Habitat
 - Willows/Rose Hill Neighborhood
 - Redmond City Limits
 - Streams Class 1
 - Class 2
 - Class 3
 - Class 4

Note:
 This map shall be used as a general guide. It represents approximate locations. Consult the Critical Areas Ordinance (CAO) for reporting requirements. In the event there is a conflict between the map and the critical or standards of the CAO, the criteria shall prevail.

Figure 4: Vegetative Coverage Map

Key

- Douglas Fir dominant
 - Non-Native Tree and Shrub Dominant
 - Native Deciduous Dominant
 - Low Lying Strata Dominant
 - Invasive Blackberry Patch
 - Building & Driveway Footprint
 - Site Parcels Boundary
 - Road Centerline
- Approximate Scale:
1 inch = 20 feet

Note: Building and driveway footprints are approximate.

Data Sources: King County I Map (2008) was used for 5" contours, parcel boundaries and road center lines.

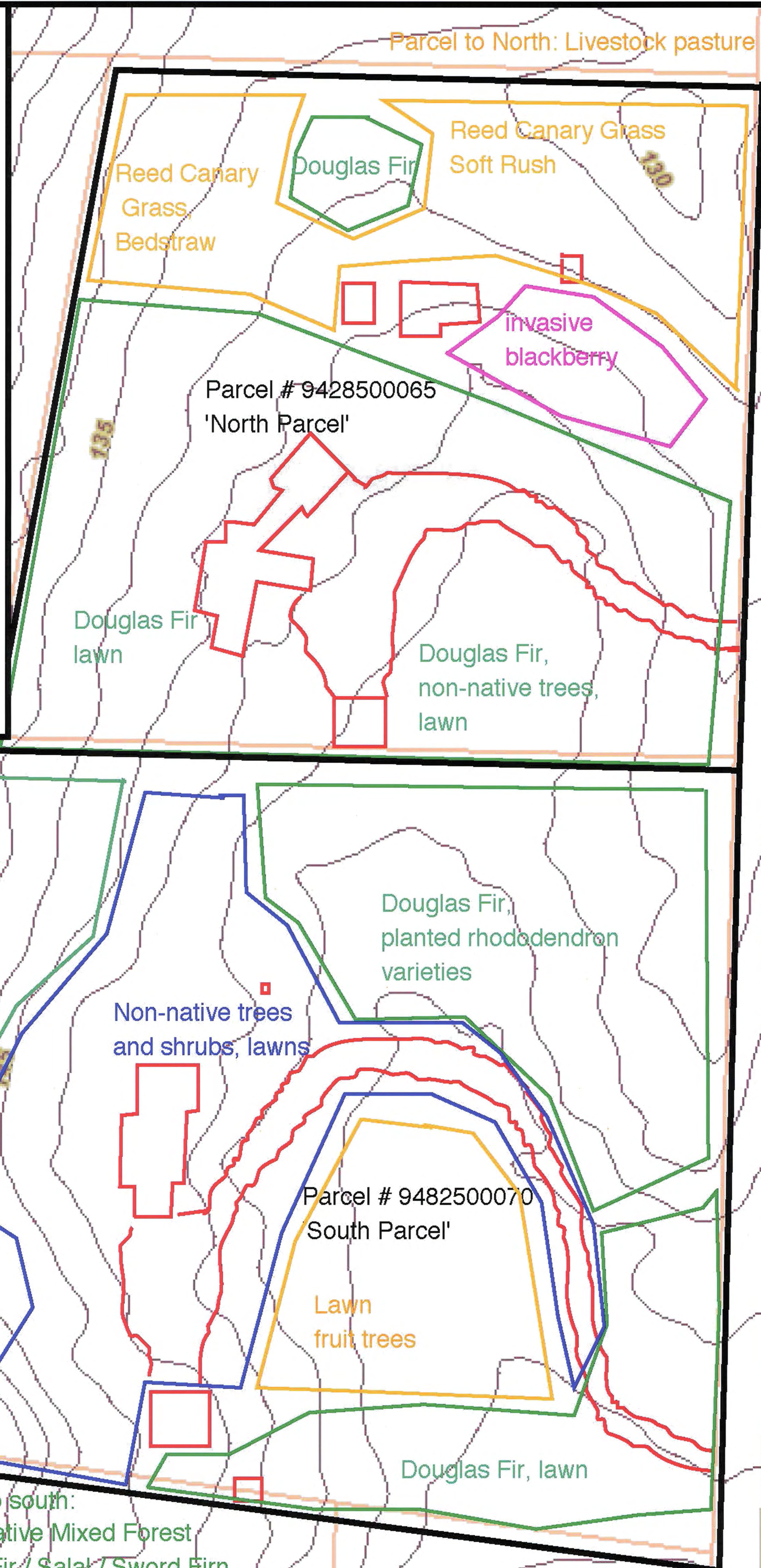


Figure 5: Map of Existing Trees, Existing Structures and Proposed Changes

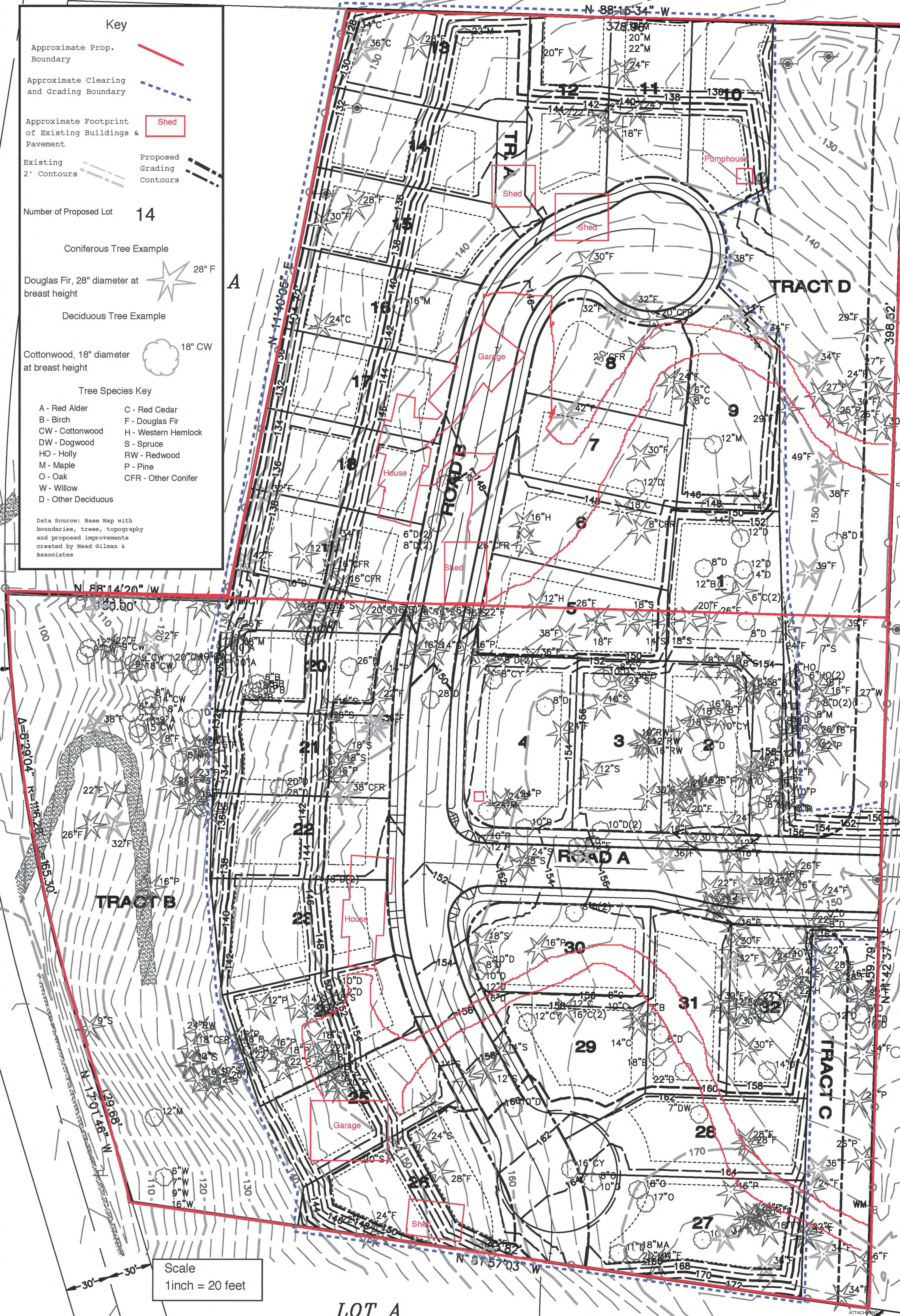
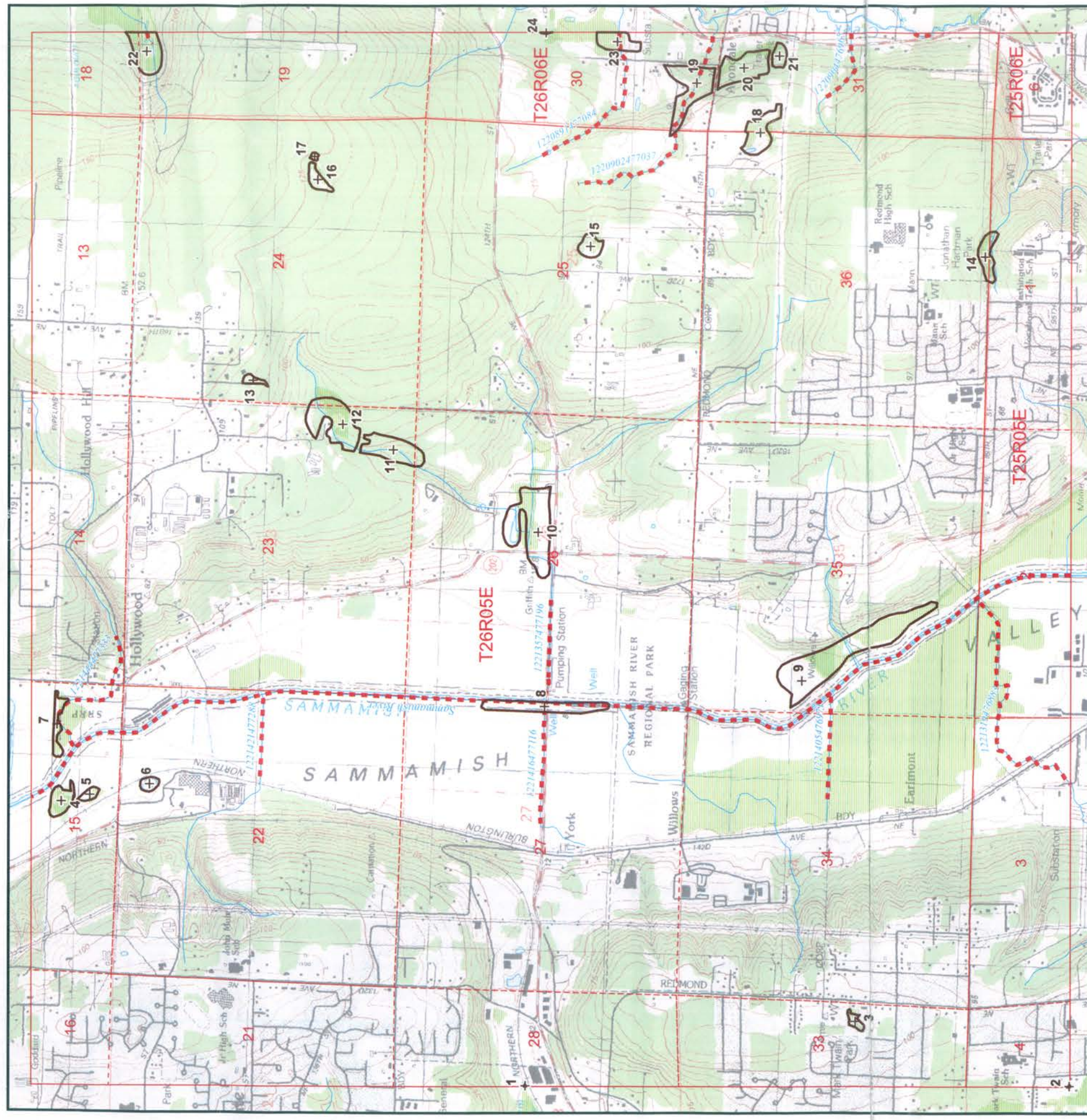


Figure 6

- WDFW Priority Habitat and Species Map
For T 26 R 05E Section 26, dated May 8, 2013
- WDFW Priority Habitats and Species Polygon Cross
Reference Report for T 26 R 05E Section 26, Dated
May 8, 2013 (6 pages)



Washington Department of Fish and Wildlife
HABITATS AND SPECIES MAP
 IN THE VICINITY OF T26R05E SECTION

Map Scale 1:24,000 - Production Date: May 08, 2013
 Coordinate System - State Plane South Zone 5626 (NAD83 HPGN)
 Map Designed by WDFW Information Technology Services GIS

PLEASE NOTE
 This map and the accompanying reports are not for general distribution. Washington State Law (RCW 42.56.430(2)) exempts Sensitive Fish and Wildlife information from public inspection and copying.

Washington Department of Fish and Wildlife (WDFW) considers sensitive species and habitat locations displayed on this map and accompanying reports to be confidential. WDFW is the exclusive owner of the Sensitive Fish and Wildlife Information and locations shall in all respects be treated as proprietary information in accordance with all procedures reasonably necessary to protect WDFW's proprietary rights therein.

DISCLAIMER
 This map and the accompanying reports only include information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of mapped wildlife and habitat features are generally within a quarter mile of the locations displayed on this map. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using maps more than six months old and information should not be used for future projects. For questions about how the information may apply to a specific project or site, contact the WDFW Regional Office for your region at: <http://wdfw.wa.gov/about/regions>

MAIN DATA SOURCES

Priority Habitats and Species polygon, Habitat point, Klickitat County Oak, Wildlife Survey Data Management polygon/point, Spotted Owls, Seal/Sea Lion Haulouts, 1:24K streams and fish presence data: Wa. Dept. of Fish and Wildlife. Seabird Colony data: US National Oceanic and Atmospheric Administration. Kelp Bed, Oak Stand, Eelgrass, Turf Algae and Township/Section data: Wa. Dept. of Natural Resources. Wetland data: US Fish and Wildlife Service, National Wetlands Inventory. 1:24K Quadrangle Image: US Geological Survey.

Map Legend

- | | | | |
|--|--|--|--|
| | Priority Habitats and Species (PHS) Polygon Borders | | Other Seabird Colonies |
| | Priority Wildlife Areas (WSDM) | | Other Seal/Sea Lion Haulouts |
| | Priority Wildlife Sites (WSDM) | | Spotted Owl Management Circles Established Territory |
| | Priority Habitat Sites | | Spotted Owl Management Circles Insufficient Evidence to Establish Territory |
| | Marbled Murrelet Occupancy Sites | | Marbled Murrelet Detection Sections (WDFWSTAT 1 through 4) |
| | Spotted Owl Sites - Status 1-3 | | Marbled Murrelet 1.5 Mile Buffers (Status 1 through 3) |
| | Spotted Owl Sites - Status 4 | | Other Symbols: Rivers and Streams |
| | Priority Seabird Colonies | | Section Lines |
| | Priority Seal/Sea Lion Haulouts | | Township Lines |
| | Priority Fish Presence | | National Wetlands Inventory |
| | National Wetlands Inventory | | Oak Stands |
| | Oak Stands | | Kelp Beds |
| | Kelp Beds | | Eelgrass |
| | Eelgrass | | Turf Algae |
| | Turf Algae | | |

Other Habitats/Species:

- Other Seabird Colonies
- Other Seal/Sea Lion Haulouts
- Spotted Owl Management Circles Established Territory
- Spotted Owl Management Circles Insufficient Evidence to Establish Territory
- Marbled Murrelet Detection Sections (WDFWSTAT 1 through 4)
- Marbled Murrelet 1.5 Mile Buffers (Status 1 through 3)

Other Symbols:

- Rivers and Streams
- Section Lines
- Township Lines



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
 PRIORITY HABITATS AND SPECIES POLYGON REPORT
 IN THE VICINITY OF T26R05E SECTION 26

Report Date: May 08, 2013

Information About Priority Habitats and Polygon Report

Priority Habitats and Species (PHS) polygons are labeled, on the map, with a unique number (PHS Poly#) and "+" symbol, roughly in the center of the polygon. This PHS Poly# refers to a list of polygon numbers and form numbers (Form#) contained in the PHS Polygon Cross Reference Report. The Form#'s refer to the PHS Polygon Report, listed below. This report details each species or habitat depicted as a polygon on the map.

Priority Habitats and Species Polygon Summary List

This report and the accompanying maps contain species and habitats that are considered to be priorities for conservation and management by Washington Department of Fish and Wildlife (WDFW). The most current Priority Habitat and Species List is available on our web site at <http://wdfw.wa.gov/conservation/phs/list>. YES or Y under the "Priority" column in the Summary List below indicates the species or habitat occurrence is on WDFW's Priority Habitats and Species List (PHS). The occurrence has been refined to match the priority area listed for the species or habitat on the PHS List (e.g., any occurrence, breeding areas, regular concentrations). NULL or Blank under the "Priority" column indicates the species or habitat occurrence is not on WDFW's PHS List.

Priority	State Status	PHS Code	Common Name	Species Use Criteria
YES		WET	WETLANDS	

PHS Polygon Report

Form#: 902526 **PHS Code:** WET **Scientific Name:**
Season: **Common Name:** WETLANDS
Species Use Criteria: **Accuracy:** ACCURATE WITHIN A QUARTER MILE
Priority: YES **State Status:** **Federal Status:**
Site Name: EVANS CREEK WETLANDS
General Description: A GROUP OF WETLANDS ASSOCIATED WITH THE EVANS CREEK DRAINAGE SYSTEM. THOSE ALONG THE DOWNSTREAM REACHES ARE COVERED LARGELY BY WILLOW/SPIRAEA. THOSE FURTHER UPS TREAM ALSO HAVE A MIXED FOREST COMPONENT. SEVERAL ALSO HAVE OPEN WATER.

Source Date: 05 90 **Source:** MULLER, TED; ET, AL; WDW; PERSONAL OBSERVATIONS.
Source Code: PROF **Synopsis:** SCOUTED OUT THIS AREA TO PLAN A FISHERY SURVEY. FREQUENT DRIVE-BYS.

Source Date: 05 93 **Source:** PHS MAP OVERLAY
Source Code: MAP **Synopsis:** MAP EDIT. REDEFINE WETLAND BOUNDARIES BASED ON NWI MAPPING.

Source Date: 09 96 **Source:** MULLER, TED WDFW
Source Code: PROF **Synopsis:** MAP EDIT. CORRECT CODE FOR POLYGONS.

Form#: 902534 **PHS Code:** WET **Scientific Name:**
Season: **Common Name:** WETLANDS
Species Use Criteria: **Accuracy:** ACCURATE WITHIN A QUARTER MILE
Priority: YES **State Status:** **Federal Status:**
Site Name: SAMMAMISH RIVER WESTLANDS.
General Description: WETLANDS DRAINING TO SAMMAMISH SLOUGH. THERE ARE A VARIETY OF COVER TYPES, HOWEV ER, THE MAJORITY ARE EMERGENT AND/OR SCRUB-SHRUB.

Source Date: 90 **Source:** OPPERMAN, SCHNEIDER, AND MULLER, WDW PERSONAL OBSERVATIONS
Source Code: PROF **Synopsis:** SITE VISITS IN THIS AREA OVER NUMEROUS YEARS.

Source Date: 12 90 **Source:** KING COUNTY SENSITIVE AREAS MAPS.
Source Code: GSMAP **Synopsis:** THESE MAPS USE USGS QUADS. AS A MAP BASE. MANY OF THESE HAVE BEEN FIELD VERIFIED BY COUNTY STAFF.

PHS Polygon Report

Form#: 902606 **PHS Code:** WET **Scientific Name:**
Season: **Common Name:** WETLANDS
Species Use Criteria: **Accuracy:** ACCURATE WITHIN A QUARTER MILE
Priority: YES **State Status:** **Federal Status:**
Site Name: BEAR CREEK WETLANDS
General Description: A VARIETY OF WETLAND HABITATS IN THE BEAR CREEK DRAINAGE BASIN. A NUMBER OF THESE ARE VERY LARGE COMPLEX WETLANDS WITH HIGH HABITAT VALUE.

Source Date: 90 **Source:** MULLER, TED, WDW; PERSONAL OBSERVATIONS.
Source Code: PROF **Synopsis:** NUMEROUS SITE VISITS TO VARIOUS PARTS OF THIS BASIN.

Form#: 902675 **PHS Code:** WET **Scientific Name:**
Season: **Common Name:** WETLANDS
Species Use Criteria: **Accuracy:** ACCURATE WITHIN A QUARTER MILE
Priority: YES **State Status:** **Federal Status:**
Site Name: LAKE WASHINGTON WETLANDS.
General Description: A VARIETY OF WETLAND TYPES ASSOCIATED EITHER DIRECTLY WITH THE LAKE, OR WITH THE SMALLER TRIBUTARY STREAMS. MOST OF THIS AREA IS HEAVILY DEVELOPED AS URBAN HOUSING AND/OR INDUSTRIAL. SOME OF THESE HAVE AN OPEN WATER COMPONENT.

Source Date: 91 **Source:** OPPERMAN, TONY; SCHNEIDER, PHIL; AND MULLER, TED; PERSONAL OBSERVATION
Source Code: PROF **Synopsis:** SITE VISITS IN THE COURSE OF SEPA REVIEW.

Source Date: 12 90 **Source:** KING COUNTY SENSITIVE AREAS MAPS.
Source Code: GSMAP **Synopsis:** USGS BASED MAP SYSTEM WITH NWI INFORMATION INCLUDED.

Codes Used In Priority Habitat and Species Polygon Report

Form#: Unique number that links the information in the reports to features on the map.

PHS Code: This contains a code that identifies the fish and wildlife species found in the area or the habitat that occurs there. The field Common Name contains the description of this code.

Scientific Name: Scientific name of the species.

Season: Season of species use. Use is indicated by the presence of a non-blank character in one or more positions or sub-strings of the field position.

Position 1: W = Winter use. Position 2: S = Spring use.

Position 3: U = Summer use. Position 4: F = Fall use.

Position 5: S = Severe winter use.

Common Name: Common name of the species or habitat.

Species Use Criteria: Criteria that identifies how the area is used by the indicated species. This field is not used if a habitat is described.

Accuracy: Mapping accuracy of the line delineation as determined by the mapper.

Priority: Species and habitats that are considered to be priorities for conservation and management by Washington Department of Fish and Wildlife (WDFW).

The most current Priority Habitat and Species List is available on our web site at <http://wdfw.wa.gov/conservation/phs/list>.

YES or Y = Indicates the species or habitat occurrence is on WDFW's Priority Habitats and Species List (PHS). The occurrence has been refined to match the priority area listed for the species or habitat on the PHS List (e.g., any occurrence, breeding areas, regular concentrations).

NULL or Blank = Indicates the species or habitat occurrence is not on WDFW's PHS List.

State Status: State listing status of species.

Federal Status: Federal listing status of species.

Site Name: Name assigned to the area based generally on a local place name.

General Description: Description about the area, including how it is used and why it is important.

Source Date: Date of source of information.

Source Code: Code identifying the source of information.

Source: Identifies and describes the source responsible for the information described on the form or drawn on the map. Single or multiple sources may be cited.

Synopsis: Brief narrative describing content of source of information.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
 PRIORITY FISH REPORT FROM THE WASHINGTON LAKES AND RIVERS INFORMATION SYSTEM (WLRIS) DATABASE
 IN THE VICINITY OF T26R05E SECTION 26

May 08, 2013

Information About The Fish Presence Report

The fish information in this report only includes information that Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. This information only documents the location of important fish resources to the best of our knowledge. It is not a complete inventory of the fish species in the state. The fish species listed below are considered to be priorities for conservation and management by Washington Department of Fish and Wildlife. The most current Priority Habitat and Species List is available on our web site at <http://wdfw.wa.gov/conservation/phs/list>. The occurrence has been refined to match the priority area listed for the species on the Priority Habitats and Species List (e.g. any occurrence, breeding areas, regular concentrations).

Streams with priority fish species from the WLRIS database are highlighted on the accompanying map. Due to the complexity of displaying linear features individual species that utilize each river reach are not distinguishable. If more species specific information is needed, users should request digital data or contact the WLRIS database manager. Call WDFW at (360) 902-2543 or e-mail phsproducts@dfw.wa.gov to find out how to request digital data or to get information about the database manager.

State status information is not available in the WLRIS database for these species. Please see WDFW Species of Concern List for current status. For a copy of this list, contact WDFW Endangered Species Section at (360) 902-2515, or it is available on our web site at <http://wdfw.wa.gov/conservation/endangered>.

Priority Fish Presence

Fish Code	Species Name	Stream Name	Stream LLID	Date Surveyed
COHO	Coho Salmon		1220774477336	05-06-27
COHO	Coho Salmon		1220904476965	05-06-27
COHO	Coho Salmon		1221319476883	05-06-27
COHO	Coho Salmon		1221357477196	05-06-27
COHO	Coho Salmon		1221405476971	05-06-27
COHO	Coho Salmon		1221421477288	05-06-27
CCT	Resident Cutthroat		1220774477336	04-12-07
CCT	Resident Cutthroat		1220891477084	04-12-07
CCT	Resident Cutthroat		1220902477037	04-12-07
CCT	Resident Cutthroat		1221357477196	04-12-07
CCT	Resident Cutthroat		1221416477116	04-12-07
CCT	Resident Cutthroat		1221444477333	04-12-07
COHO	Coho Salmon	Bear Creek	1221250476675	05-06-27
CHFA	Fall Chinook	Bear Creek	1221250476675	05-06-27
KOK	Kokanee Salmon	Bear Creek	1221250476675	04-12-16
CCT	Resident Cutthroat	Bear Creek	1221250476675	04-12-07
SOCK	Sockeye Salmon	Bear Creek	1221250476675	03-11-13
STWI	Winter Steelhead	Bear Creek	1221250476675	05-06-27
COHO	Coho Salmon	Sammamish River	1222590476462	05-06-27
DBT	Dolly Varden/Bull Trout	Sammamish River	1222590476462	05-01-10
CHFA	Fall Chinook	Sammamish River	1222590476462	05-06-27
KOK	Kokanee Salmon	Sammamish River	1222590476462	04-12-16
RBT	Rainbow Trout	Sammamish River	1222590476462	04-12-10
CCT	Resident Cutthroat	Sammamish River	1222590476462	04-12-07
SOCK	Sockeye Salmon	Sammamish River	1222590476462	03-11-13
STWI	Winter Steelhead	Sammamish River	1222590476462	05-06-27

Priority Fish Presence

<u>Fish Code</u>	<u>Species Name</u>	<u>Stream Name</u>	<u>Stream LLID</u>	<u>Date Surveyed</u>
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Codes Used In The Priority Fish Presence Report

Fish Code: WDFW unique code that identifies each fish species. The field **Species Name** contains the description of this code.

Species Name: Common name of each fish species.

Stream Name: Stream name based on the US Geological Survey, Geographic Names Information System database.

Stream LLID: Unique stream identifier (ID) generated from the node latitude and longitude located at a stream's mouth. This ID is to be construed only as an ID, and not necessarily as a reference to a stream's location.

Survey Date: Date the information was surveyed.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
PRIORITY HABITATS AND SPECIES POLYGON CROSS REFERENCE REPORT
IN THE VICINITY OF T26R05E SECTION 26

Report Date: May 08, 2013

Priority Habitats and Species (PHS) polygons are labeled, on the map, with a unique number (PHS Poly#) and "+" symbol, roughly in the center of the polygon. This PHS Poly# refers to a list of form numbers (Form#) contained in the PHS Polygon Cross Reference Report, listed below. The Form#'s refer to the attached Priority Habitats and Species Polygon Report. This report details each species or habitat depicted as a polygon on the map.

There will be some polygons, on the map, without PHS Poly# labels. These areas are "no data" or "donuts" created by surrounding polygons. These polygons indicate that the species or habitat information is unknown or the area was not mapped.

PHS Polygon Cross Reference Report

PHS Poly#	Form#
1	902675
2	902675
3	902534
4	902534
5	902534
6	902534
7	902534
8	902534
9	902534
10	902534
11	902526
12	902526
13	902526
14	902606
15	902606
16	902606
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21	902606
22	902606
23	902606
24	902606



State of Washington
Department of Fish and Wildlife

Mailing Address: 600 Capitol Way N, Olympia WA 98501-1091, (360) 902-2200, TDD (360) 902-2207
Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia WA

Date: *May 8, 2013*

Dear Habitats and Species Requester:

Enclosed are the habitats and species products you requested from the Washington Department of Fish and Wildlife (WDFW). This package may also contain documentation to help you understand and use these products.

These products only include information that WDFW maintains in a computer database. They are not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife, nor are they designed to provide you with guidance on interpreting this information and determining how to proceed in consideration of fish and wildlife. These products only document the location of important fish and wildlife resources to the best of our knowledge. It is important to note that habitats or species may occur on the ground in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority habitats or species.

Your project may require further field inspection or you may need to contact our field biologists or others in WDFW to assist you in interpreting and applying this information. Generally, for assistance on a specific project, you should contact the WDFW Habitat Program Manager for your county and ask for the area habitat biologist for your project area. Refer to the enclosed directory for those contacts. Contact information is also available on line at:
<http://wdfw.wa.gov/about/regions>.

Please note that map and data products are designed for users external to the forest practice permit process and as such, may not reflect all the information pertinent to forest practice review.

WDFW updates this information as additional data become available. Because fish and wildlife species are mobile and because habitats and species information changes, project reviews for fish and wildlife should not rest solely on mapped or digital information. Instead, they should also consider new information gathered from current field investigations. Remember, habitats and species information can only show that a species or habitat type is present, they cannot show that a species or habitat type is not present. These products should not be used for future projects. Please obtain updates rather than use outdated information.

Because of the high volume of requests for information that WDFW receives, we need to charge for these products to recover some of our costs. Enclosed is an invoice itemizing the costs for your request and instructions for submitting payment.

Please note that sensitive (e.g., "confidential") fish and wildlife location information may be included in this request. These species are vulnerable to disturbances and harassment. In order to protect the viability of these species we request that you not disseminate the information as to their whereabouts. Please refer to these species presence in general terms. For example: "A Peregrine Falcon is located within two miles of the project area".

WDFW's Releasing Sensitive Fish and Wildlife Information Policy – 5210 defines sensitive (e.g., "confidential") information. If your request required a Sensitive Fish and Wildlife Information Release Agreement and you or your organization has one on file, please refer to those documents for conditions regarding release of this information.

For more information on WDFW you may visit our web site <http://wdfw.wa.gov> or visit the Priority Habitats and Species site at <http://wdfw.wa.gov/conservation/phs>.

For information on the state's endangered, threatened, and sensitive plants as well as high quality wetland and terrestrial ecosystems, please contact the Washington Department of Natural Resources, Natural Heritage Program at PO Box 47014, Olympia Washington 98504-7014, by phone (360) 902-1667 or visit the web site at:

http://dnr.wa.gov/ResearchScience/Topics/NaturalHeritage/Pages/amp_nh.aspx

If you have any questions or problems with the information you received please call (360) 902-2543, fax (360) 902-2946 or e-mail phsproducts@dfw.wa.gov.

Sincerely,



Lori Guggenmos, PHS Data Release Manager
Priority Habitats and Species

Enclosures

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE REGIONAL CONTACTS

For assistance with Priority Habitats and Species information, contact the appropriate regional office, listed below.

County...	Contact...
Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	Eastern Office – Region 1 2315 North Discovery Place Spokane Valley, WA 99216-1566 Phone: (509) 892-1001 E-mail: TeamSpokane@dfw.wa.gov
Adams, Chelan, Douglas, Grant Okanogan	North Central Office – Region 2 1550 Alder Street NW Ephrata, WA 98823-9699 Phone: (509) 754-4624 E-mail: TeamEphrata@dfw.wa.gov
Benton, Franklin, Kittitas, Yakima	South Central Office – Region 3 1701 South 24 th Avenue Yakima, WA 98902-5720 Phone: (509) 575-2740 E-mail: TeamYakima@dfw.wa.gov
Island, King, San Juan, Skagit, Snohomish, Whatcom	North Puget Sound Office – Region 4 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 Phone: (206) 775-1311 E-mail: TeamMillCreek@dfw.wa.gov
Clark, Cowlitz, Klickitat, Lewis, Skamania, Wahiakum	Southwest Office – Region 5 2108 Grand Boulevard Vancouver, WA 98661 Phone: (360) 696-6211 E-mail: TeamVancouver@dfw.wa.gov
Clallam, Grays Harbor, Jefferson, Kitsap, Mason, Pacific, Pierce, Thurston	Coastal Office – Region 6 48 Deveonshire Road Montesano, WA 98563-9618 Phone: (360) 249-4628 E-mail: TeamMontesano@dfw.wa.gov

Figure 7: Author's Qualifications

Chris Holcomb has worked as a wildlife biologist in Washington for two years on inventories of birds, amphibians, small mammals and salmon. He currently volunteers with Oregon Spotted Frog (*Rana Pretiosa*) reintroduction and monitoring at Joint Base Lewis McChord. He has worked as a wetland consultant in Washington for 2 years and is on King County's list of Preferred Wetland Consultants. He has a Master of Environmental Studies degree from Evergreen State. For his thesis, he analyzed how the local abundance of Red Legged Frogs (*Rana aurora*) is affected by surrounding habitat connectivity.

