Wheeler Ridge: Northern Spotted Owl Surveys

FINAL Report

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Submitted to: Wheeler Ridge, LLC
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4597 Stemilt Hill Rd
Wenatchee, WA 98801
Contract: Wheeler Ridge: Northern Spotted Owl Surveys
Project #1806

PREPARED BY:

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1.0 INTRODUCTION AND OBJECTIVE

Wheeler Ridge, LLC, has proposed orchard development on private land within the Wheeler Ridge area of the Stemilt Basin, approximately 6 miles south of Wenatchee, Washington (Figure 1). The proposed development is located along the eastern edge of the range of the northern spotted owl (*Strix occidentalis caurina*) (Figure 2), in the vicinity of two historical northern spotted owl activity centers and potentially suitable spotted owl habitat.

In the summer of 2018, Washington Conservation Science Institute identified suitable habitat and conducted a series of calling surveys for northern spotted owls in the Wheeler Ridge project area. This survey program was initiated as part of the requirements set forth under Washington State Environmental Policy Act (SEPA) and the Endangered Species Act (ESA), to avoid incidental take.

1.1 Background

The proposed development site is located within Section 17 (T21N R20E). This report summarizes the results of the Activity Center Assessment and subsequent surveys. Historical spotted owl data provided by Washington Department of Fish and Wildlife indicated a single owl (unknown status) was located approximately 0.9 miles west of the proposed project area in 1996, and a single resident owl was located approximately 1.8 miles to the south in 1998. Aerial imagery indicates the latter location has been heavily harvested since then. Additional surveys were conducted throughout the Mission Ridge Road and Squilchuck State Park area for the Mission Ridge Road Construction Project in 2005 and 2006 and no spotted owls were detected (US Forest Service pers. comm.).

2.0 METHODS and RESULTS

The Wheeler Ridge spotted owl activity center assessment and survey protocol followed U.S. Fish and Wildlife Service guidelines (USFWS 2012).

Activity Center Assessment

Activity Center #1224: Resident, territorial single, 1998

The perimeter of the 1.8 mile radius home range circle for this activity center is just adjacent to the proposed project site. Aerial imagery indicates the stand that includes habitat within 0.25 mile of Activity Center #1224 has been removed so this site was not visited.

Activity Center #1189: Single – unknown status, 1996

The 1.8 mile radius home range circle for this activity center overlaps part of the proposed project area. We conducted a daytime search of spotted owl habitat within 0.5 miles of Activity Center #1189. The search effort consisted of walking through potential habitat and spot calling. No spotted owls were detected.

Station Surveys

We used a combination of spotted owl suitable habitat mapped by Davis et al. (2012), stand data collected for the Wheeler Ridge project (Schellhass 2015), aerial imagery and field validation to identify potential suitable spotted owl habitat within and adjacent to the project site. Vegetation in the project area is dominated by even-aged ponderosa pine and mixed conifer stands that lack canopy cover or old forest structure. Most of the vegetation would not be classified as nesting, roosting and foraging spotted owl habitat, although patches of suitable habitat may be found in the vicinity of the project site. Subsequent field validation indicated vegetation removal within the project site would not impact suitable spotted owl habitat. As a result, we initiated Disturbance Only Surveys. We identified areas with potential suitable habitat within ¼ mile of the project site (Figure 3). Habitat on the east side of the project site was of lower quality but was

included in the survey to ensure thorough coverage. Habitat to the west of the project site, toward Activity Center #1189, was of higher quality. We located five survey calling stations across the project area. Calling stations covered an area of approximately 560 acres (assuming approximate calling distance of ¼ mile). Six surveys were conducted within the nesting period March 1 – August 31 (Table 1). Surveys were spaced out over the nesting period, with three visits before June 30 (one per month), and the remaining three visits after June 30. No spotted owls were detected.

Other owl species detected included northern pygmy owls (*Glaucidium gnoma*), great-horned owl (*Bubo virginianus*), and flammulated owls (*Psiloscops fammeolus*). Other wildlife heard during the surveys included common nighthawk (*Chordeiles minor*), wild turkey (*Meleagris gallopavo*), elk (*Cervus elaphus*) and coyote (*Canis latrans*).

3.0 LITERATURE CITED

Schellhass, R. 2015. Report prepared for Wheeler Ridge, LLC. Forest Stewardship Management Plan. 65 pp.

US Fish and Wildlife Service. 2012. Northern spotted owl survey protocol (January 2012).

TABLES AND FIGURES

Table 1. Northern spotted owl survey results for Wheeler Ridge Project Site.

Visit Number	Date	Complete Survey	Spotted Owls Detected?
1	26 April 2018	Yes	No
2	31 May 2018	Yes	No
3	11 June 2018	Yes	No
4	19 July 2018	Yes	No
5	26 July 2018	Yes	No
6	3 August 2018	Yes	No

Figure 1. Location of Wheeler Ridge Proposed Project Area relative to range of northern spotted owl in Washington.

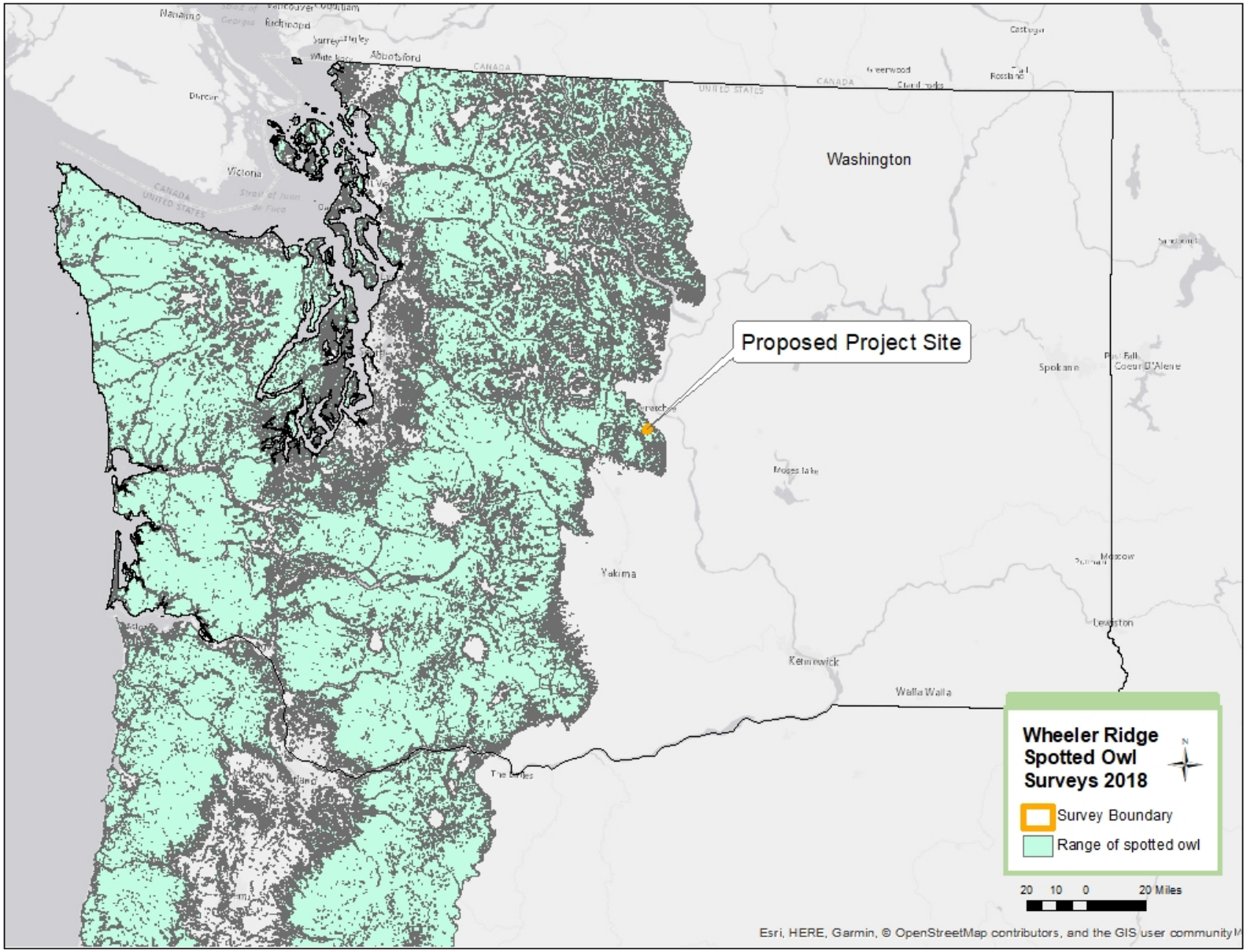


Figure 2. Location of Wheeler Ridge Proposed Project Area and spotted owl survey route and stations.

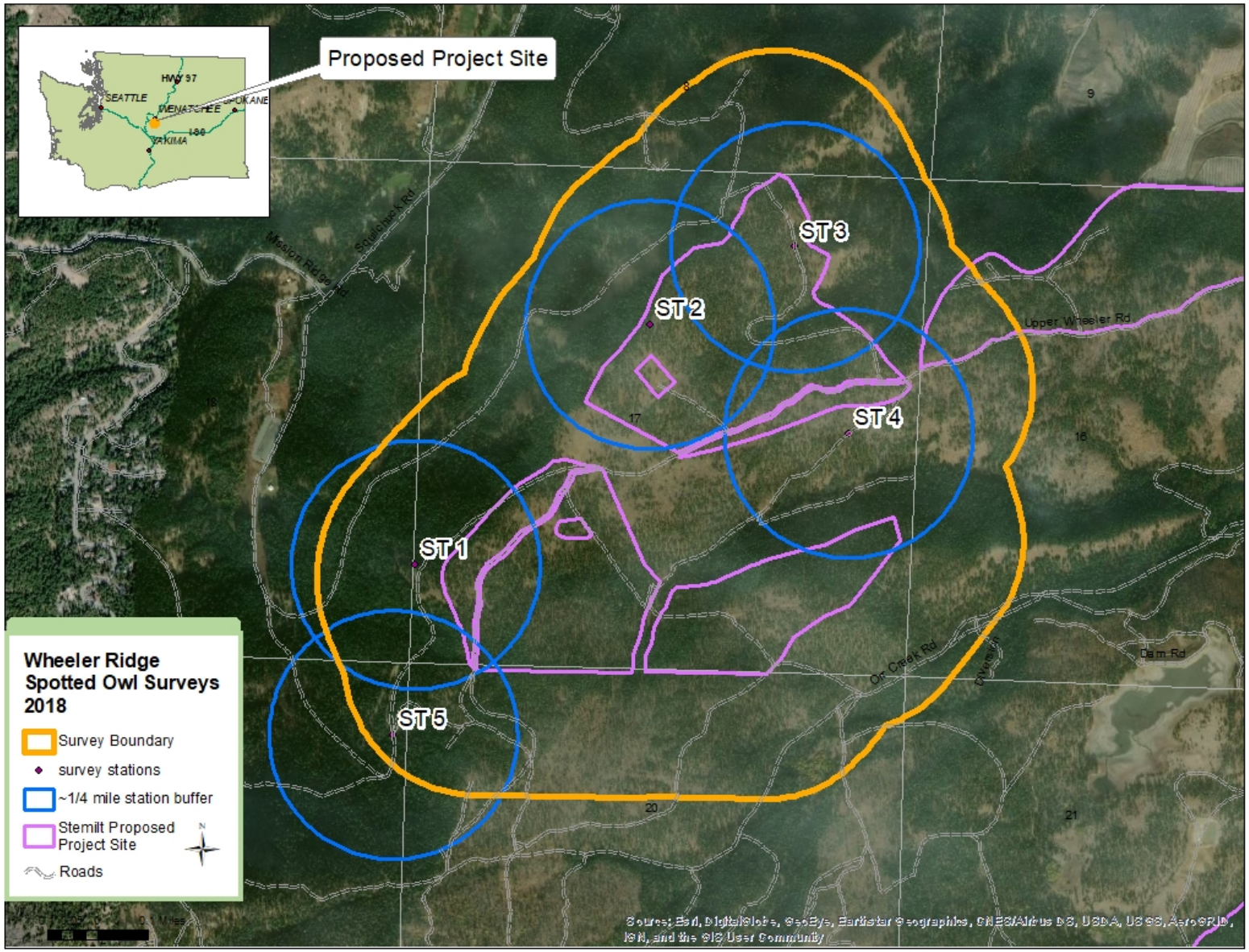
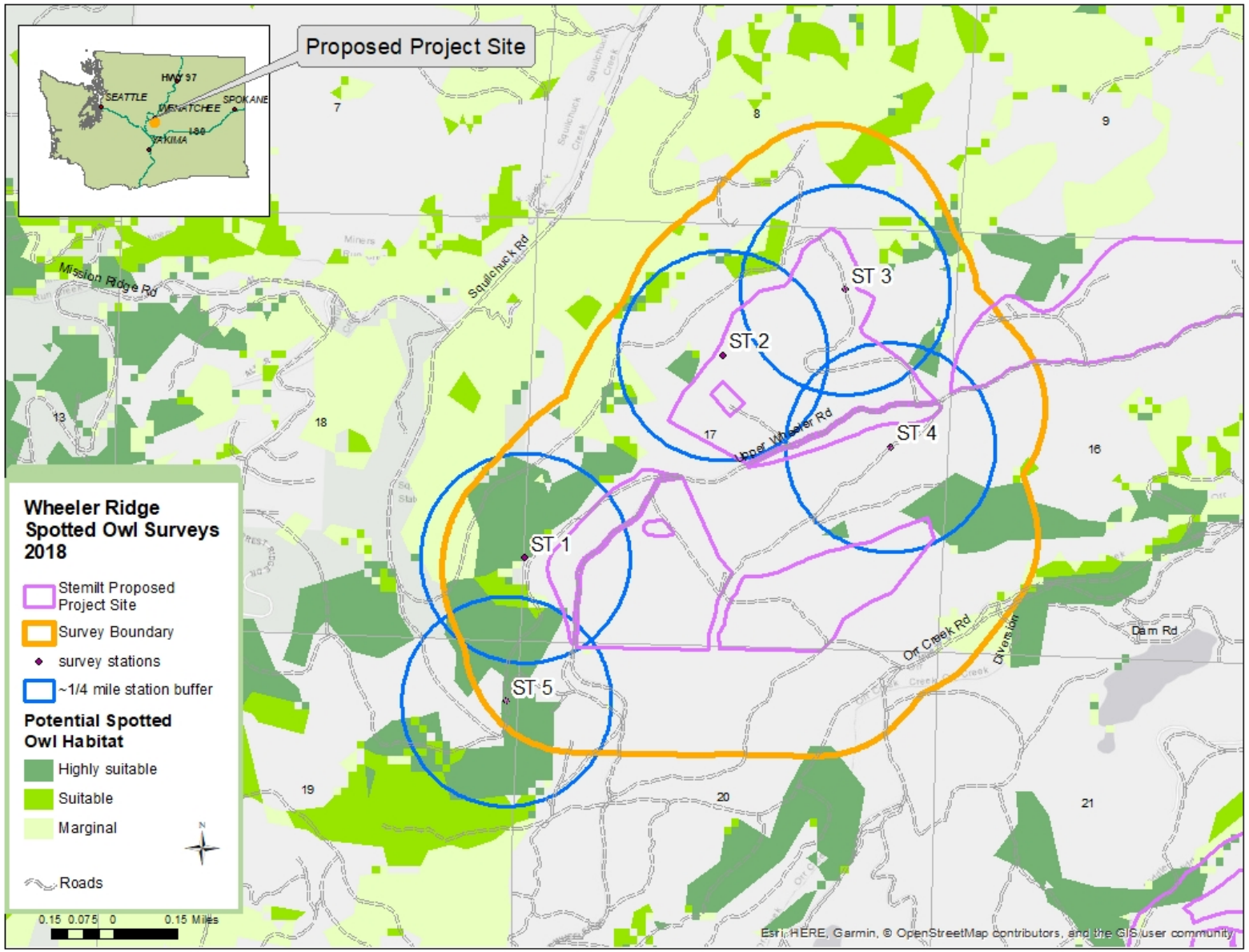


Figure 3. Potential northern spotted owl habitat relative to the Wheeler Ridge Proposed Project Area and spotted owl survey route and stations.



APPENDIX A. Data forms for Wheeler Ridge spotted owl survey visits.

Appendix 6: Template Field Data Collection Form
SITE VISIT FORM

SITE ID NUMBER: WR 1 SITE NAME Wheeler Ridge STATE: WA

VISIT #: 1 OUTING #: 1 YEAR: 2018 OUTING DATE: 4/26/18

LANDOWNER: Stemilt PHYSIOGRAPHIC PROVINCE

COMPLETE VISIT: (Y/N) OBSERVERS: A Lyons

TYPE OF SURVEY: ACS (SC) CC FO RV AV OPP

ACS=Activity Center Search **SC**=Station Calling **CC**= Continuous Calling **FO**=Follow Up Outing **RV**=Reproductive Visit **AV**=Additional Visit **OPP**=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)
T R Sec 1/4 1/16 WEATHER: clear, calm, warm

OWLS DETECTED: (Y/N)

Station	Start	End	SPP	Obs Type[1]	Sex	Bearing/ Distance	T / R / Sec	1/4	1/16	UTM East	UTM North
1	1117	1127	None								
2	1219	1229	None								
3	1253	1303	Turkey A								
4	1330	1340	None								
5	1454	1504	None								

Turkey across draw

[1]**ObsType** = V=Visual A=Audio S=Sign

Clear skies
Calm
Upper 50's

Setting up 16 calling stations
Still snow on woods
rode bike
a bit muddy
glad sun is out

Appendix 6: Template Field Data Collection Form
SITE VISIT FORM

SITE ID NUMBER: WR 1 SITE NAME Wheeler Ridge STATE: USA

VISIT #: 2 OUTING #: 1 YEAR: 2018 OUTING DATE: 31 May 2018

LANDOWNER: State PHYSIOGRAPHIC PROVINCE _____

COMPLETE VISIT: (Y/N) Y OBSERVERS: A. Lyons

TYPE OF SURVEY: ACS (SC) CC FO RV AV OPP

ACS=Activity Center Search **SC**=Station Calling **CC**= Continuous Calling **FO**=Follow Up Outing **RV**=Reproductive Visit
AV=Additional Visit **OPP**=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)
T_____R_____Sec_____1/4_____1/16_____ WEATHER: Cloudy, slightly breezy cold 40-50°

OWLS DETECTED: (Y/N) _____

Station	Start	End	SPP	Obs Type[1]	Sex	Bearing/ Distance	T / R / Sec	1/4	1/16	UTM East	UTM North
3	1915	1926	Ø								
4	2120	2130	Ø								
2	1942	1953	Ø								
1	2015	2025	Ø								
5	2031	2041	Ø								

had to go back → turkey hunters

dogs down below

more dogs + airplanes

[1]**ObsType** = V=Visual A=Audio S=Sign

Appendix 6: Template Field Data Collection Form
SITE VISIT FORM

SITE ID NUMBER: WR 1 SITE NAME WHEELER RIDGE STATE: WA

VISIT #: 3 OUTING #: 1 YEAR: 2018 OUTING DATE: 11 June

LANDOWNER: Stemilt PHYSIOGRAPHIC PROVINCE

COMPLETE VISIT: (Y/N) Y OBSERVERS: A.L.

TYPE OF SURVEY: ACS SC CC FO RV AV OPP

ACS=Activity Center Search **SC**=Station Calling **CC**= Continuous Calling **FO**=Follow Up Outing **RV**=Reproductive Visit
AV=Additional Visit **OPP**=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)
T R Sec 1/4 1/16 WEATHER: Clear, calm, ~50°

OWLS DETECTED: (Y/N)

Station	Start	End	SPP	Obs Type[1]	Sex	Bearing/ Distance	T / R / Sec	¼	1/16	UTM East	UTM North
4	2030	2040	Ø								
3	2047	2057	Ø								
2	2106	2116	Ø								
1	2130	2140	Pygmy								
5	2155	2205	Flammulated								

[1]**ObsType** = V=Visual A=Audio S=Sign

awesome acoustics tonight.

~possible cougar/bobcat @ St 1 heard "meow" but quite a ways from house & it came closer. Too big!

Follow-up - cougar sighting @ Park by Mtn Biker

Appendix 6: Template Field Data Collection Form
SITE VISIT FORM

SITE ID NUMBER: WP 1 SITE NAME Wheeler Ridge STATE: WA

VISIT #: 4 OUTING #: 1 YEAR: 2018 OUTING DATE: 19 July

LANDOWNER: Stewart PHYSIOGRAPHIC PROVINCE _____

COMPLETE VISIT: (Y/N) Y OBSERVERS: A Lyons

TYPE OF SURVEY: ACS (SC) CC FO RV AV OPP

ACS=Activity Center Search **SC**=Station Calling **CC**=Continuous Calling **FO**=Follow Up Outing **RV**=Reproductive Visit
AV=Additional Visit **OPP**=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)
T_____R_____Sec_____1/4_____1/16_____ WEATHER: Clear, calm, 75°

OWLS DETECTED: (Y/N) _____

Station	Start	End	SPP	Obs Type[1]	Sex	Bearing/ Distance	T / R / Sec	¼	1/16	UTM East	UTM North
4	2000	2010	Ø								
3	2019	2029	Ø*								
2	2043	2053	Ø	dog							
1	2104	2114	Ø								
5	2120	2130	Ø								

*AG with a need owl before [illegible] call
bit breezier on this side

[1]ObsType – V–Visual A–Audio S–Sign

Appendix 6: Template Field Data Collection Form
SITE VISIT FORM

SITE ID NUMBER: WR 1 SITE NAME Wheeler Ridge STATE: WA

VISIT #: 5 OUTING #: 1 YEAR: 2018 OUTING DATE: 26 July

LANDOWNER: Stemilt PHYSIOGRAPHIC PROVINCE

COMPLETE VISIT: (Y/N) Y OBSERVERS: A Lyons

TYPE OF SURVEY: ACS (SC) CC FO RV AV OPP

ACS=Activity Center Search **SC**=Station Calling **CC**= Continuous Calling **FO**=Follow Up Outing **RV**=Reproductive Visit
AV=Additional Visit **OPP**=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)
T_____ R_____ Sec_____ 1/4_____ 1/16_____ WEATHER: Still Warm Partly cloudy 80° @ 9pm

OWLS DETECTED: (Y/N)_____

Station	Start	End	SPP	Obs Type[1]	Sex	Bearing/ Distance	T / R / Sec	¼	1/16	UTM East	UTM North	
2	2056	2106	Ø									
3	2116	2126	Ø									Pygmy
4	2135	2145	Ø									lots of nighthawks
1	2001	2011	Ø									
5	2016	2026	Ø									airplane

[1]**ObsType** = V=Visual A=Audio S=Sign

Appendix 6: Template Field Data Collection Form
SITE VISIT FORM

SITE ID NUMBER: WR 1 SITE NAME Wheeler Ridge STATE: WA

VISIT #: 6 OUTING #: 1 YEAR: 2018-1 OUTING DATE: 3 Aug. 2018

LANDOWNER: Stemult PHYSIOGRAPHIC PROVINCE

COMPLETE VISIT: (Y/N) Y OBSERVERS: A. Lyons

TYPE OF SURVEY: ACS (SC) CC FO RV AV OPP

ACS=Activity Center Search **SC**=Station Calling **CC**= Continuous Calling **FO**=Follow Up Outing **RV**=Reproductive Visit
AV=Additional Visit **OPP**=Opportunistic Siting

HISTORICAL SITE CENTER LOCATION (use if historical site center is being surveyed)
T R Sec 1/4 1/16 WEATHER: few clouds, calm 75°

OWLS DETECTED: (Y/N)

Station	Start	End	SPP	Obs Type[1]	Sex	Bearing/ Distance	T / R / Sec	1/4	1/16	UTM East	UTM North
4	1941	1951	Ø								
3	1957	2007	Ø								
2	2020	2030	Ø								
1	2035	2045	Ø								
5	2128	2138	Ø								

windier on this side

People camped in group site in park

[1]**ObsType** = V=Visual A=Audio S=Sign

Sunsets toward the mountains