

Northern Spotted Owl Scoping Report

December 13, 2021



Prepared for:
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APN 524-114-007-000

Prepared by:
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A handwritten signature in black ink that reads "Jack A Henry".

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Background

Wildlife Biologist Jack Henry was asked to evaluate and interpret existing Northern Spotted Owl survey data associated with APN 524-114-007-000. Owl status determinations, habitat classification, and data assessment are based on "Protocol for Surveying Proposed Management Activities that May Impact Northern Spotted Owls" (USFWS 2011) while the discussion about potential disturbance impacts is predicated on "Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted owl and Marbled Murrelets in Northwestern California" (USFWS 2020) and additional cited literature. Mr. Henry has been managing northern spotted owls in the Humboldt, Trinity, and Mendocino region for 8 years (9 survey seasons) and has ample experience generating take avoidance documents for CalFire and USFWS.

Project Description

The Project Parcel occurs in the SW 1/4 of Section 35, T6N, R5E, Humboldt County. The project location is approximately 6.8 air miles southeast of Willow Creek, California in the Hennessy Peak, CA 7.5' USGS Quadrangle. The project proposes operating 43,560 sq. ft. of pre-existing outdoor cultivation. The cultivation operation will utilize pre-existing cultivation sites and infrastructure in their current configuration with no removal of vegetation or significant alterations. The Biological Assessment Area (BAA) associated with this project is defined as a 0.7 mile buffer around the boundary of both Project Areas.

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Survey History

The project parcel and surrounding timberlands have a long history of NSO surveys associated with the USFS timber management and the Willow Creek Demographic Study. Historic survey data within the database goes back to 1979. Although no private landowner harvest plans have occurred in the last 30 years, there is evidence of past federal timber harvest within the BAA. The BAA contains one documented NSO Activity Center (AC): HUM0065.

Habitat Conditions

Forested habitat within the BAA is dominated by Douglas-fir (*Pseudotsuga menziesii*) with a strong tanoak association present. Minor components of hardwood forests occur as well. Since this area has experienced a long history of timber harvest, stand structure may be described as mid-seral with a multi-level canopy. Understory vegetation varies but can often be characterized by bare forest floor or a dense shaded shrub layer. Common shrub associates include evergreen huckleberry (*Vaccinium ovatum*), poison oak (*Toxicodendron diversilobum*), and pacific rhododendron (*Rhododendron macrophyllum*). The BAA is dominated by potential nest/roost and foraging habitat for NSO, with small areas of non-habitat concentrated along South Fork Trinity River. The Project Parcel is surrounded on all four sides by mapped Critical Habitat for NSO as identified by USFWS.

HUM0065 (Database Review)

The HUM0065 AC is currently located in the NW ¼ of the Project Parcel along Mahala Creek. HUM0065 has a long history of activity due to its location in USFS lands where an active demographic study of NSO has been occurring. This NSO pair was first encountered in 1979, during some of the earliest surveys for NSO, prior to federal protocol. Between 1979 and 2017, positive observations have occurred within this owl territory every year except 1989 and 1991. No NSO detections have occurred in this territory since 2017, with barred owls being detected over the last four years. Given the length of time of occupancy at this AC, at least two generations of NSO have occupied the site.

HUM0065 has nested in multiple locations within their territory generally focused along the ridge north of Mahala Creek. Reproduction was documented in 10 of the 42 years of survey data through either observation of an active nest or fledglings. The majority of reproductive activity occurs north of Mahala Creek, outside of property boundaries. The current mapped AC is based off a 2015 observation of a pair of NSO with a nest structure. This is the most recent observation of an active nest related with this NSO pair. This AC location occurs approximately 1,070 feet away from the nearest Project Area. The pair was observed non-nesting in different locations within their territory in years 2016 and 2017.

Estimating the Effects of Auditory and Visual Disturbance

The proposed project does occur within an active NSO territory. As such, this report includes recommended mitigations to prevent potential impacts to NSO. The "Protocol for Surveying Proposed Management Activities that May Impact Northern Spotted Owls" (USFWS 2011) and "Estimating the Effects of Auditory and Visual

Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California" (USFWS 2020) provides a scenario based decision support tool for evaluating disturbance impacts for NSO.

The project does not propose any new construction, ground disturbance, or vegetation removal. Daily noise generating activities will consist of automobile use along the road network, small electric hand tools/water pumps, and variable levels of human speech. Power will be supplied by a 2500 watt solar array with an emergency backup generator. The generator will be a Honda EU2200i. This generator is rated for a maximum noise output of 50 dB(A) measured at 50ft (15.2m). The solar array will provide power for nursery lighting and general ventilation. Lights are expected to be used during the months of March through May utilizing an 18 hour light cycle (18 hours of light and 6 hours of dark). There may be irregular incidental use of gas powered tools such as a chainsaw but the limited use of this equipment is not considered to contribute to daily project generated noise averages. The project as proposed is expected to produce Ambient [<50 dB(A)] noise levels on a daily basis.

Per USFWS guidance, these expected noise levels do not pose a potential risk for disturbance impacts to NSO (USFWS 2020). This assessment is based on background noise meeting natural ambient levels [35 dB(A)] with Ambient project generated noise levels. The potential project generated noise levels will not significantly increase baseline noise levels within the BAA. The project does not risk significantly impacting NSO from potential noise disturbance impacts. Light pollution impacts are less understood in relation to spotted owls, but given the documentation of light impacts on other wildlife mitigations are necessary. The nursery structures shall be covered with a black-out cover that prevents any light escape if lit during night time hours (30 min prior to sunset and 30 mins post sunrise). This mitigation will reduce the risk of light pollution impacts to occur to NSO within the BAA. Given the low project generated noise levels and mitigations for covering the lighted nursery, the project as proposed will not result in the take of NSO.

Attachments:

- 1) NSO Observations Map
- 2) Report #2 – Observations Reported

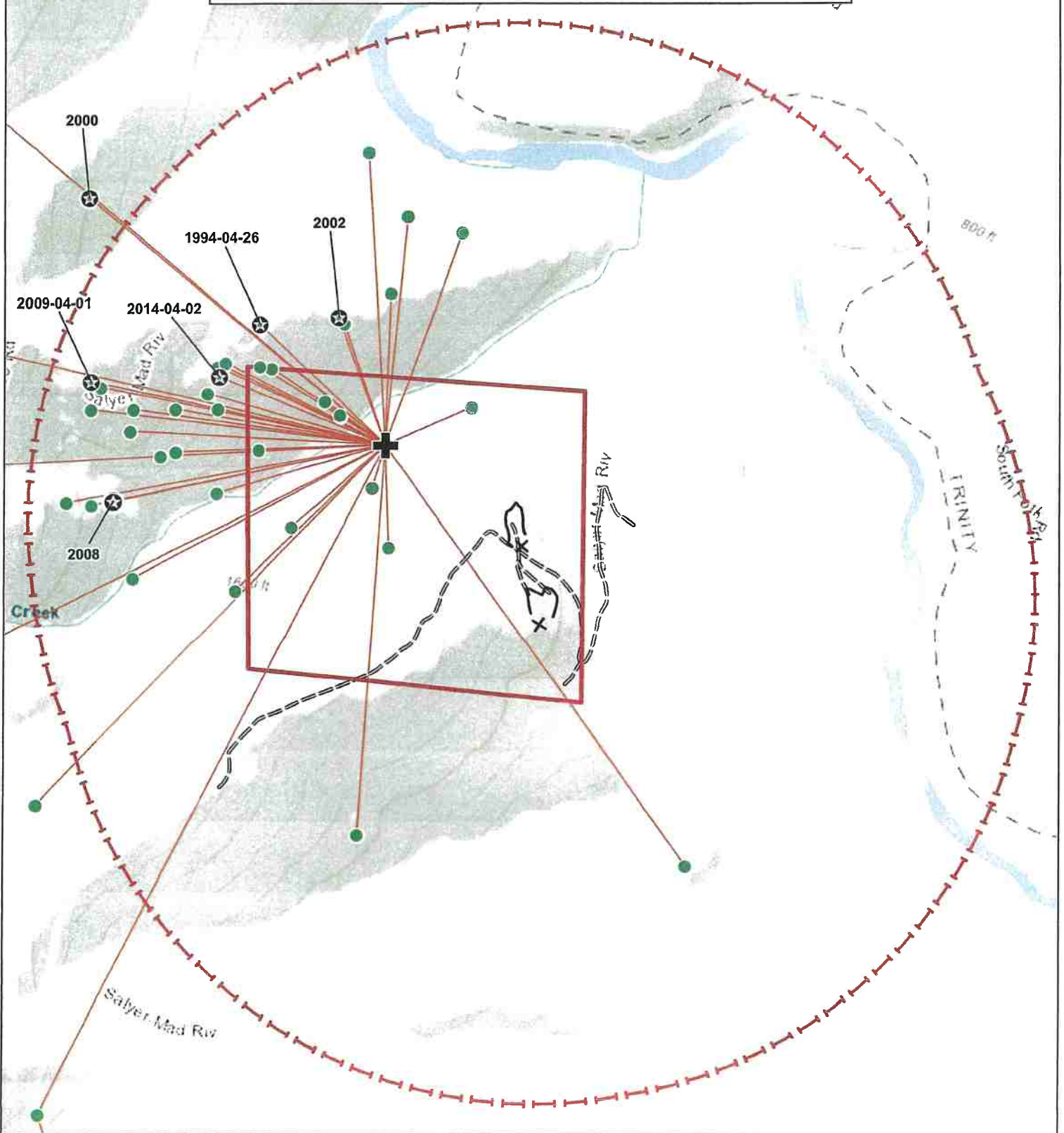
References

- U.S. Fish and Wildlife Service. 2011. Protocol for Surveying Proposed Management Activities that May Impact Northern Spotted Owls. 2012 rev. ed.
- U.S. Fish and Wildlife Service. 2020. Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California. Arcata Fish and Wildlife Office, 1655 Heindon Road Arcata, California, 95521.

NSO Observations Map
ESRI World Topographic



Located in the SW 1/4 of Section 35, T6N, R5E, HB&M



Data Version Date:
10/27/2021

Report Generation Date:
12/1/2021



Report #2 - Observations Reported
List of observations reported by site.

Meridian, Township, Range, Section (MTRS) searched:

H_06N_05E Sections(34,35);

Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
Masterowl: HUM0065 Subspecies: NORTHERN											
POS	1979		2	UMUF	Y			40.850572	-123.606865	H 06N 05E 34	Quarter-section centroid
POS	1980-04-15		2	UMUF	Y			40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	1981-05-01		2	UMUF	Y			40.850572	-123.606865	H 06N 05E 34	Quarter-section centroid
POS	1982		2	UMUF	Y			40.850572	-123.606865	H 06N 05E 34	Quarter-section centroid
POS	1982-06-16		1	UM				40.843566	-123.599434	H 05N 05E 03	Quarter-section centroid
POS	1982-06-16		1	UF				40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	1982-07-07		2	UMUF	Y			40.843566	-123.599434	H 05N 05E 03	Quarter-section centroid
POS	1982-07-28		2	UMUF	Y			40.844195	-123.608325	H 05N 05E 03	Quarter-section centroid
POS	1982-08-04		1	UM				40.850572	-123.606865	H 06N 05E 34	Quarter-section centroid
POS	1982-08-13		1	UM				40.843566	-123.599434	H 05N 05E 03	Quarter-section centroid
POS	1983		2	UMUF	Y			40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	1983		2	UMUF	Y	Y		40.837035	-123.599340	H 05N 05E 03	Quarter-section centroid
POS	1984-05-24		1	UM				40.844195	-123.608325	H 05N 05E 03	Quarter-section centroid
POS	1984-05-31		1	UM				40.850572	-123.606865	H 06N 05E 34	Quarter-section centroid
POS	1985		1	UM				40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	1986		2	UMUF	Y			40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid

Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
NEG	1987		0					40.853514	-123.602407	H 06N 05E 34	Section centroid
POS	1988		1	UM				40.842281	-123.581202	H 05N 05E 02	Quarter-section centroid
POS	1989		1	UM				40.842281	-123.581202	H 05N 05E 02	Quarter-section centroid
POS	1990		1	UM				40.842281	-123.581202	H 05N 05E 02	Quarter-section centroid
POS	1990-07-08		1	SF				40.842281	-123.581202	H 05N 05E 02	Quarter-section centroid
POS	1990-07-09		1	SM				40.842928	-123.590389	H 05N 05E 02	Quarter-section centroid
POS	1990-07-24		1	SM				40.842928	-123.590389	H 05N 05E 02	Quarter-section centroid
POS	1992-05-20		2	UMUF	Y		1	40.851826	-123.590895	H 06N 05E 35	Contributor
POS	1992-06-23	1609	1	AF	Y		2	40.853808	-123.590794	H 06N 05E 35	Contributor
POS	1993-03-18	1830	1	UF			0	40.857415	-123.590115	H 06N 05E 35	Contributor
POS	1993-03-19	1020	1	UF	Y		0	40.854445	-123.589495	H 06N 05E 35	Contributor
POS	1993-03-19	1020	1	UM	Y		0	40.855717	-123.587489	H 06N 05E 35	Contributor
POS	1993-06-16	0421	2	AMAF	Y		0	40.852025	-123.587219	H 06N 05E 35	Contributor
POS	1994		2	UMUF	Y			40.849498	-123.592257	H 06N 05E 35	Activity center
POS	1994-04-26	1440	1	AM	Y	Y	0	40.853796	-123.593167	H 06N 05E 35	Contributor
POS	1995-06-28	1600	1	AF	Y		0	40.852889	-123.594345	H 06N 05E 34	Contributor
POS	1996		2	UMUF	Y	N	0	40.856060	-123.589035	H 06N 05E 35	Quarter-section centroid

Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
POS	1996-04-17	0615	2	SMSF	Y			40.852895	-123.593159	H 06N 05E 35	Contributor
POS	1996-06-07	0405	2	SMSF	Y			40.851081	-123.595516	H 06N 05E 34	Contributor
POS	1997		2	SMSF	Y			40.861835	-123.606291	H 06N 05E 27	Contributor
POS	1997		2	UMUF	Y	N	0	40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	1998		2	UMUF	Y	N	0	40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	1998-04-22		2	AMAF	Y			40.851970	-123.597896	H 06N 05E 34	Contributor
POS	1999		2	UMUF	Y	N	0	40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	1999-04-14		2	AMAF	Y			40.851988	-123.594337	H 06N 05E 34	Contributor
POS	2000		2	UMUF	Y	Y		40.856456	-123.597961	H 06N 05E 34	Quarter-section centroid
POS	2001		2	UMUF	Y			40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	2002		1	UF				40.849961	-123.597878	H 06N 05E 34	Quarter-section centroid
POS	2002		2	UMUF	Y	Y	0	40.853942	-123.590962	H 06N 05E 35	Contributor
POS	2002-06-03		1	UF				40.853510	-123.602402	H 06N 05E 34	Section centroid
POS	2003-04-01		2	SMSF	Y			40.851125	-123.593185	H 06N 05E 35	Contributor
POS	2004-05-10		2	AMAF	Y			40.848404	-123.596720	H 06N 05E 34	Contributor
POS	2004-06-11		2	AMAF	Y		2	40.850218	-123.594363	H 06N 05E 34	Contributor
POS	2004-06-11		2	UMUF	Y		2	40.850218	-123.594363	H 06N 05E 34	Contributor

Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
POS	2005-05-16		2	AMAF	Y			40.850020	-123.598579	H 06N 05E 34	Contributor
POS	2006-05-09		2	AMAF	Y			40.849053	-123.589537	H 06N 05E 35	Contributor
POS	2007-04-23		1	AM				40.851975	-123.596710	H 06N 05E 34	Contributor
POS	2007-05-21		2	AMAF	Y			40.851982	-123.595523	H 06N 05E 34	Contributor
NEG	2008		0			Y		40.850036	-123.597274	H 06N 05E 34	Contributor
POS	2008-04-02		2	AMAF	Y			40.850990	-123.595944	H 06N 05E 34	Contributor
POS	2008-06-19		2	AMAF	Y			40.851517	-123.596803	H 06N 05E 34	Contributor
POS	2009-04-01		2	AMAF	Y	Y	2	40.852565	-123.597903	H 06N 05E 34	Contributor
POS	2009-06-23		0				1	40.852449	-123.597618	H 06N 05E 34	Contributor
POS	2010-04-06		2	AMAF	Y			40.852147	-123.591337	H 06N 05E 35	Contributor
POS	2010-04-15		1	AM				40.850330	-123.589998	H 06N 05E 35	Contributor
POS	2010-06-23		0				1	40.851856	-123.590913	H 06N 05E 35	Contributor
POS	2011-04-19		2	AMAF	Y			40.852898	-123.594179	H 06N 05E 34	Contributor
POS	2012-04-09		2	AMAF	Y	N		40.852852	-123.592826	H 06N 05E 35	Contributor
POS	2013-05-30		2	AMAF	Y	N		40.852971	-123.594121	H 06N 05E 34	Contributor
POS	2014-04-02		2	AMAF	Y	Y		40.852673	-123.594308	H 06N 05E 34	Contributor
AC	2015-04-23		2	AMAF	Y	Y		40.851228	-123.589644	H 06N 05E 35	Contributor

Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
POS	2016-05-25		2	SMAF	Y	N		40.848144	-123.593828	H 06N 05E 34	Contributor
POS	2017-04-05		2	AMAF	Y	N		40.852311	-123.594625	H 06N 05E 34	Contributor