Biological Report

Little Larabee Creek Watershed, Humboldt County, California

APN 208-113-008

Prepared for:
Mika Cook

Prepared by:
Jennifer Hahn
Natural Resources Management Corporation
1434 Third Street
Eureka, CA 95501

October 23rd, 2018

Contents

I. Summary of Findings and Conclusions

The project at parcel APN 208-113-008, located off of Highway 36 near Little Larabee Creek in Humboldt County, California (Figure 1), involves the development of *Cannabis* cultivation infrastructure (Figure 4).

This Biological Report reviewed the project at the above APN to determine to what extent wildlife species currently listed or proposed for listing would be affected, including American peregrine falcon (*Falco peregrinus anatum*), Cooper's hawk (*Accipiter cooperii*), Humboldt marten (*Martes caurina humboldtensis*), fisher (*Pekania pennant*), foothill yellow-legged frog (*Rana boylii*), Sonoma tree vole (*Arborimus pomo*), and northern spotted owl (*Strix occidentalis caurina*). See Table 2 for a list of reviewed species.

No sensitive wildlife species were found within or near the project area, though suitable habitat exists outside the project footprints for northern spotted owl. I have determined that the project and operations could potentially affect northern spotted owl, Cooper's hawk, fisher and Humboldt marten if they are present in the project vicinity.

Summary of Surveys Needed and Mitigation Recommendations

- If previously undisturbed areas surrounding current project footprint are used following the permitting of 28,000 square feet of cultivation seasonally appropriate, protocol-level botanical surveys will be necessary.
- Generators and fans are used on this site, so a noise study should be conducted to determine the effect on northern spotted owls and other sensitive wildlife. Generators should also be housed in sheds designed to minimize noise.
- Any structure requiring lighting (mixed light greenhouses or nurseries) before sunrise or after sunset MUST be covered to avoid any effects on nocturnal wildlife.
- Wildlife hazards such as loose netting and metal wire cages should be stored in a way that would eliminate or minimize interaction with wildlife.

II. Introduction, Background, and Project Understanding

The purpose of this Biological Report is to review the project in sufficient detail to determine potential impacts to wildlife species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) or designated as sensitive by the California Department of Fish and Wildlife; these species are hereinafter referred to as special status species. Species with potential habitat present, or whose presence was not confirmed but potentially occur in the general area, are considered in further detail and include American peregrine falcon (*Falco peregrinus anatum*), Cooper's hawk (*Accipiter cooperii*), Humboldt marten (*Martes caurina humboldtensis*), fisher (*Pekania pennant*), foothill

yellow-legged frog (*Rana boylii*), Sonoma tree vole (*Arborimus pomo*), and northern spotted owl (*Strix occidentalis caurina*).

A biological assessment of the project area and the surrounding habitat was conducted to evaluate any potential habitat for special status animal species or other environmental issues. In addition, these areas were surveyed in order to describe any terrestrial and aquatic animals occurring in and around the project area.

Project Site

The project is located in Humboldt County APN 208-113-008 off of Highway 36 in the vicinity of Little Larabee Creek, in the Van Duzen watershed. The legal description of the site is within the USGS 7.5' quadrangle Larabee Valley Quad, T1N, R4E Sec 17 HB&M. The parcel is approximately 40 acres in size, sloping from approximately 1,480 feet in elevation on the southern border to approximately 1,080 feet in elevation along the northwestern border down to Little Larabee Creek. Prior to the current landowner, sections of this parcel equal to 2 acres have undergone unauthorized timberland conversion; the current landowner has addressed this with Cal-Fire and submitted the appropriate reports. Current *Cannabis* cultivation is located within cleared flats surrounded by forested habitat. There are three areas where cultivation is located on the parcel and are connected by dirt roads. The neighboring landowner to the west has encroached onto this parcel with their cultivation and this is being addressed with a lot line adjustment. This neighboring cultivation area is not within this project. See Figures 1-2.

Biological Description

This parcel is primarily forested, with younger trees around most of the cultivation area clearings as these areas were clear cut within the last 15 years. The tree species composition is primarily Douglas fir, tan oak, coast redwood and pacific madrone. The parcel is on a north-facing slope, with some naturally benched areas (see Figure 1).

There are no streams or wetlands within the project footprints. A wet area identified at a previous site visit by NRM, caused by a cutbank seep, was over 50 feet downslope from the easternmost project area, has since been eliminated with the installment of proper drainage, and will not be affected by the project. Little Larabee Creek is approximately 600 feet downslope from the project areas. This creek is tributary to the Van Duzen River.

Project Description

The project sites are all existing *Cannabis* cultivation and according to the landowner up to 28,000 square feet has been included in their permitting application. The project will be expanding from its current square footage to meet the proposed cultivation on their application.

There is currently a total of approximately 13,155 square feet of cultivation on this property, split up between four gardens. The first garden (moving east to west, see Figure 2) is on graded

flat. This garden is currently six 40-foot by 16-foot hoop houses; there was a seventh 50-foot by 16-foot hoop house that was broken down prior to this biological site visit, with a total of 4,640 square feet of cultivation. The landowner plans on adding an eighth 50-foot by 16-foot hoop house in the future. The second garden is located on a natural landing. There is one 40-foot by 20-foot hoop house with 750 square feet of outdoor plants in smart pots, totaling 1,500 square feet. The third garden is located on a large flat and has 260 square feet of outdoor plants and three 40-foot by 25-foot hoop houses, totaling 3,260 square feet. The fourth garden is on a natural landing and has 2,275 square feet of all outdoor plants. The cultivation area on the western property line is an encroachment cultivation totaling 1,430 square feet, for which the current landowner is getting a lot-line adjustment; this garden will no longer be on APN 208-113-008 once it is complete.

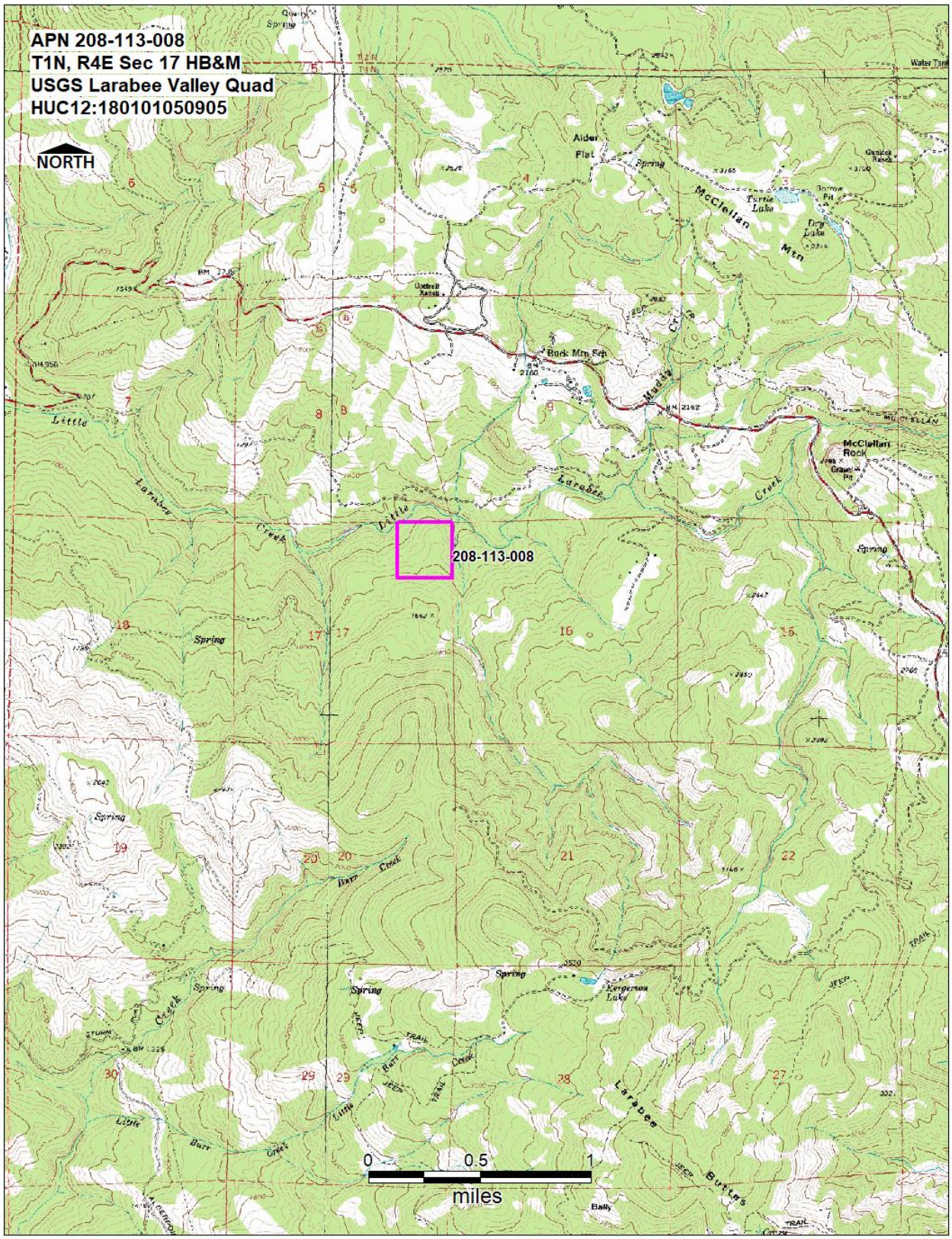

Figure 1. Vicinity Map for APN 208-113-008

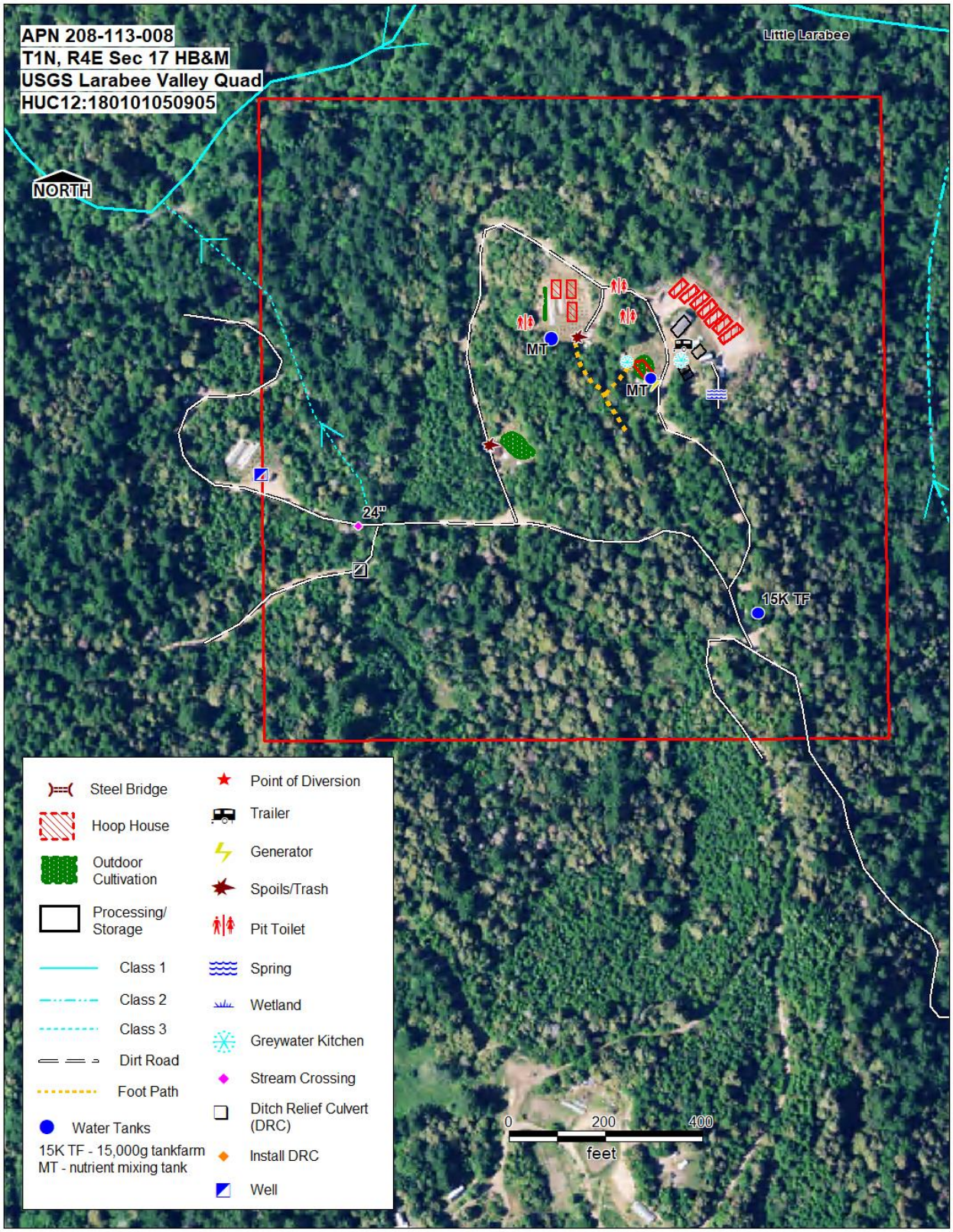

Figure 2. Ortho Map (2016) for Parcel with Existing Infrastructure

III. Methods

Pre-Field Review

Prior to the survey, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB, 2018) record of wildlife species occurrences for Humboldt County was queried for a nine-Quad area around the project site, to determine which special status species may occur within the project area and to compile a target species list (Table 1). There are two northern spotted owl (NSO) Activity Centers in the vicinity of this project: Activity Center HUM0755 is 0.6 miles away and HUM0125 is 1.1 miles away. Recent NSO activity is displayed in Table 2 for each Activity Center and Figure 3 shows the locations of the NSO Activity Centers in relation to the parcel and project areas.

Aerial photos (1998-2016) were examined to determine the closest NSO foraging and nest/roost habitat to the project areas (Figure 4). The closest foraging habitat to the project is 60 feet away, to the north of the project area. The closest nest/roost habitat is off-property approximately 950 feet away (Table 3).

Table 1. CNDDB list of potential special status wildlife species in the Larabee Valley nine-Quad area

Scientific Name	Common Name	Fed/State Listing
Accipiter cooperii	Cooper's hawk	Watch List
Accipiter gentilis	northern goshawk	State Special Concern
Aquila chrysaetos	golden eagle	Fully Protected
Arborimus pomo	Sonoma tree vole	Species of Special Concern
Ascaphus truei	Pacific tailed frog	Species of Special Concern
Corynorhinus townsendii	Townsend's big-eared bat	Species of Special Concern
Emys marmorata	western pond turtle	Species of Special Concern
Falco peregrinus anatum	American peregrine falcon	Fully Protected
Martes caurina humboldtensis	Humboldt marten	State Endangered
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	Species of Special Concern
Pandion haliaetus	osprey	Watch List
Pekania pennanti	fisher - West Coast DPS	State Candidate Threatened
Rana aurora	northern red-legged frog	Species of Special Concern
Rana boylii	foothill yellow-legged frog	State Candidate Threatened
Rhyacotriton variegatus	southern torrent salamander	Species of Special Concern

Table 2. NSO activity enters in the vicinity of APN 208-113-008

NSO Activity Center	Last Reported Positive Data	Last Reported Negative Data	Approximate Distance to Project Area (miles)
HUM0755	2007	2004	0.6
HUM0125	2012	1997	1.1

Table 3. NSO Habitat Typing Areas and Distance to Projects

Habitat Type	Total Area within 0.5-mi (acres)	Distance to Project Area (feet)
Low Quality Forage	182	60
Forage	234	200
Nest/Roost	31	950
High Quality Nest/Roost	0	none within 0.5 mi

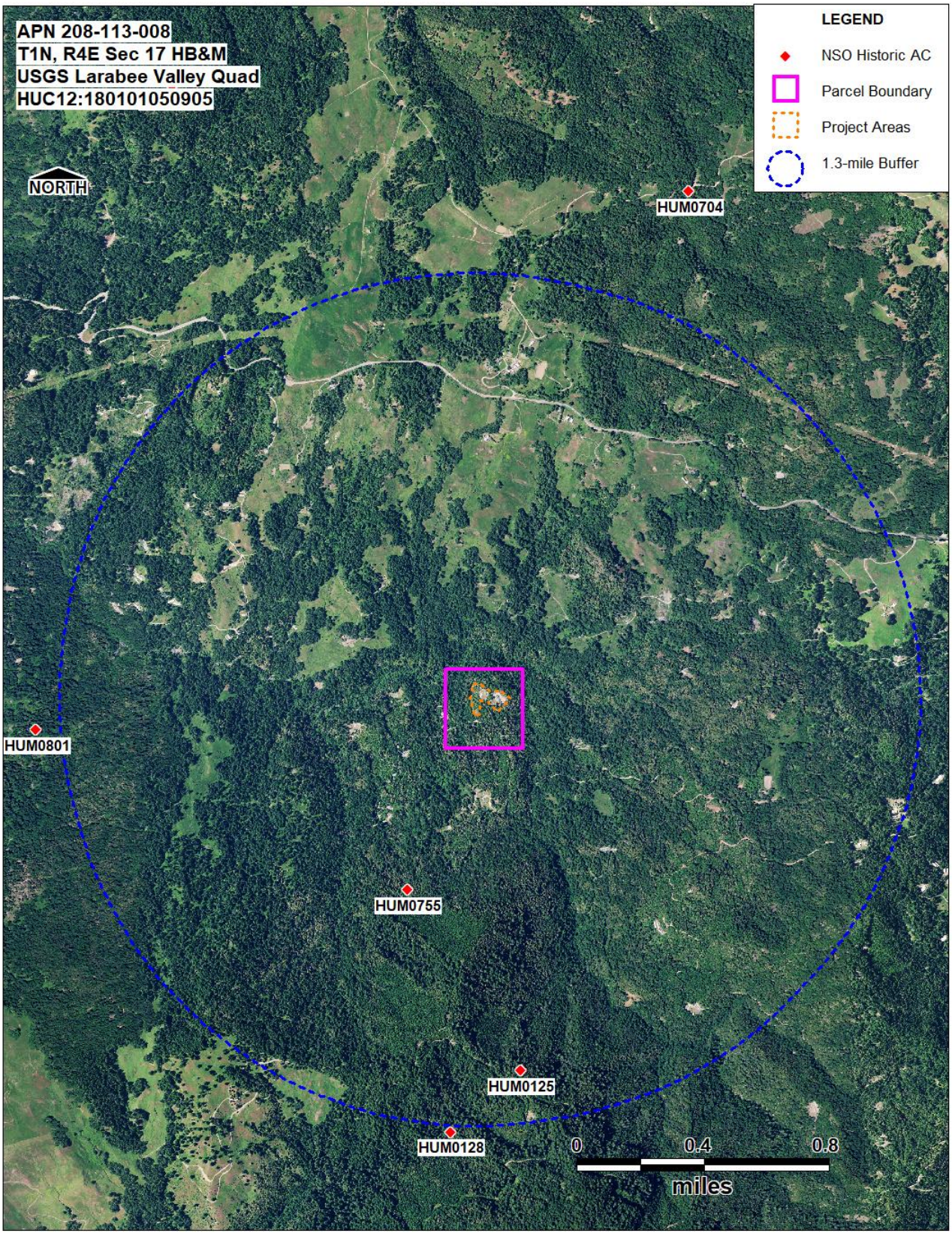

Figure 3. Map of NSO Historic ACs in Project Vicinity

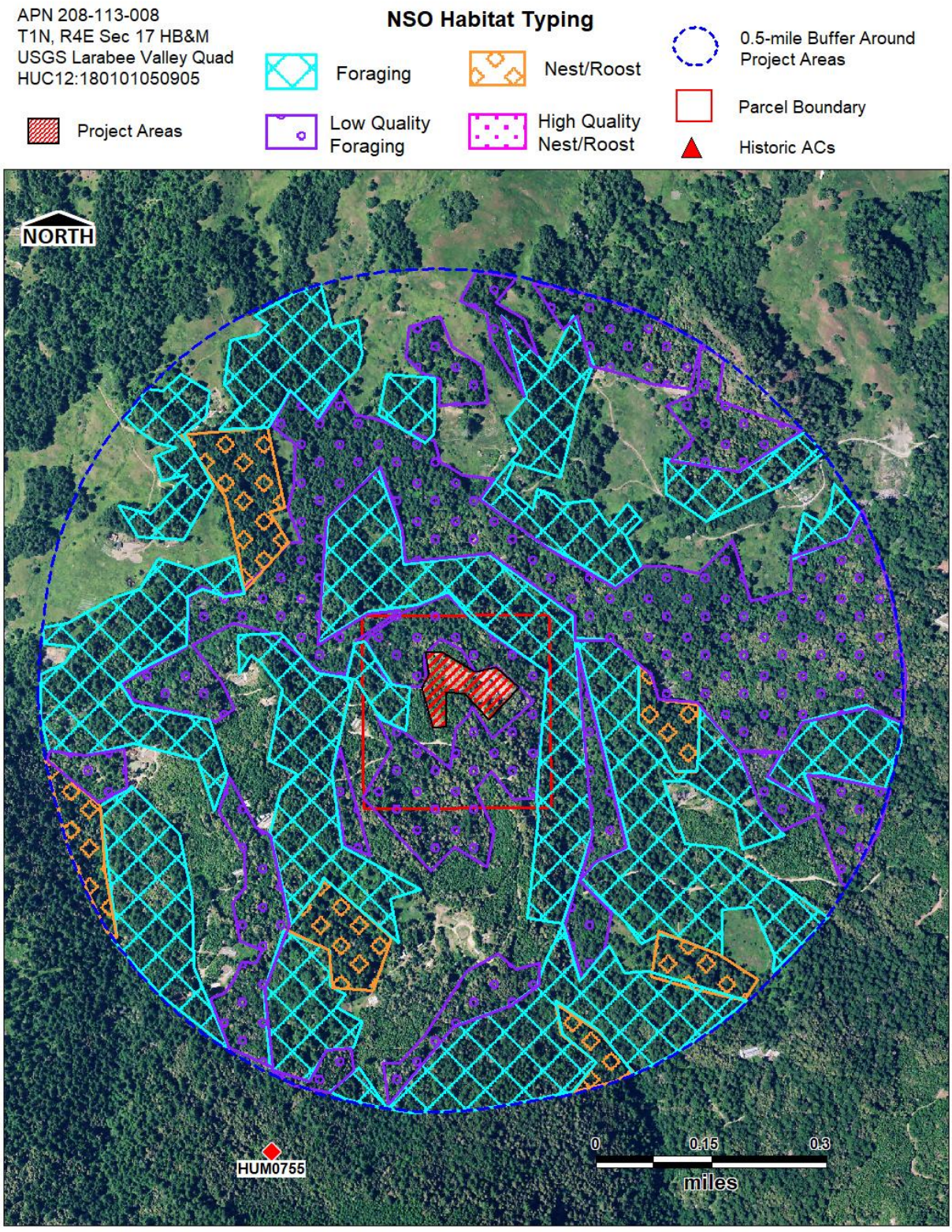

Figure 4. Closest Nest/Roost and Foraging NSO Habitat to Projects

Field Survey

On October 9th, 2018 NRM wildlife biologists Jennifer Hahn and Ivonne Romero conducted a site visit to survey the project and surrounding area for all terrestrial and aquatic species present. Jennifer holds a B.A. degree in Biology with a Research Concentration and has over 7 years of field experience conducting wildlife surveys, and 2.5 of these years specifically in the Pacific Northwest. Ivonne holds a B.S. in Wildlife and has over 5 years of experience in wildlife research, 3 of which are specific to bird nesting ecology on the west coast. The survey was conducted for 1 hour and 45 minutes on a warm (63°F/17°C), sunny morning.

While walking the area all audial detections of bird and mammal species were noted and the entire area traversed (an approximate 100-foot buffer around the proposed project areas) was scanned for wildlife sign (tracks and scat). In addition, trees were inspected for activity or sign of use by wildlife (cavities, nests, scrapes or accumulated vegetation), and cover objects were inspected for potential amphibian species.

IV. Results and Discussion

Summary of Findings

For all species, direct effects are those which are caused by the action (project) and occur at the same time and place. Indirect effects are defined as those effects caused by the proposed action and are later in time, but still reasonably certain to occur. No listed wildlife species or special status species were detected during the survey. Special status and additional species of interest, and the potential for project impacts, are presented in Table 4, below. Impacts to species from the proposed projects either directly or indirectly are expected to be minimal if light restrictions are adhered to and generators are housed in noise blocking containment. All species detected during the survey are listed in Table 5. There is northern spotted owl foraging-quality habitat within 100 feet of the eastern project area and potential disturbance due to noise and light pollution is addressed in the Management Recommendation section.

Survey Results and Discussion

A CNDDB database search for all special status species within a 1-mile radius of the project revealed records for foothill yellow-legged frog (*Rana boylii*), and American peregrine falcon (*Falco peregrinus anatum*).

The parcel is forested with clearings for *Cannabis* cultivation, roads and infrastructure. The tree species composition is primarily Douglas fir, tan oak, coast redwood and pacific madrone. The eastern project area is the largest and contains the most recent clearing from 2014 (to the northeast of the road). This forested habitat is within 100 feet of the project area and had approximately 75-percent canopy cover and estimated average tree dbh of 11 inches which fits the *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted*

Owls: Appendix B (Interior) definitions of northern spotted owl low-quality foraging habitat (Photo 12). The other two project areas are connected by footpath through a mixed conifer stand with estimated average tree dbh approximately 10 inches and a canopy cover of approximately 75-percent (Photo 7). This stand of trees is likely too young to be used by northern spotted owl. There is some edge habitat between the project footprints and the forest edge that consists of shrubs and grasses, and could provide some habitat to wildlife, although human disturbance would be high in these areas.

Some potential amphibian habitat was located in the vicinity of the projects. Potential habitat was found in the forested area by the nutrient tanks, although there was no water present at the time of the survey. The ground by the trail had a mossy covering and contained some decomposing woody debris (Photo 10). There was another wet area out in the open to the north of the eastern project area (Photo 13). The ground was wet in places, but not suitable habitat for sensitive amphibian species. Regardless, the project footprint is over 50 feet from this protected wet area. No amphibians were found when cover was turned over, and no habitat for tadpoles was observed. Downslope (north) from the southern project area, there was a forested low spot with some decomposing woody debris that could potentially provide habitat for amphibians during the rainy season. This area will not be disturbed by the project, as it is outside the footprint and in an area not accessed by people. It was dry at the time of surveying and no amphibians observed. These areas are not suitable habitat for foothill yellow-legged frogs, pacific tailed frog or southern torrent salamander since these species require riparian habitat.

Little Larabee Creek, which is tributary to the Van Duzen River, is downslope approximately 600 feet from the project areas. There are no watercourses within the project areas and this site is complying with the Water Board Regional Order to reduce erosion and waste discharge.

There were several wildlife hazards located during the biological survey. Loose plastic netting was found on the ground in several places in the project areas (Photo 5). This netting poses a threat to wildlife as it could entangle wildlife or biodegrade and get into the watercourses. Cooper's hawk, which hunt in forest edges and clearings, could get tangled in this clear plastic netting while hunting. Metal wire cages used for cultivation were also found piled haphazardly on the edge of the project areas (Photos 6 & 15). Wildlife such as deer or bear could be injured on these wire cages when they are left out on the edge of the forested area. They should be stored in a manner that will prevent accidents with wildlife.

The biggest threat to sensitive species is most likely the generator noise produced by this project (Photo 11). The landowner has plans to build a generator shed with sound insulating materials which would reduce this source of noise disturbance. Lights currently are not used for *Cannabis* cultivation for this project but may be used in the future (less than 600 watts). There

were some dim lights on the ground set up for use by the people working at this site to navigate the area when it is dark. Rodenticides are not used on this site.

Special status and additional species of interest, and the potential for project impacts, are presented in Table 4, below. The site is defined as the project footprint and surrounding area to 100 feet from project; species are considered on a case-by-case basis as to the project's affect based on considerations such as home range, habitat and sensitivity to disturbance. All species detected onsite are recorded in Table 5.

Table 4. Special status species, species present in project area, and potential impacts

Common Name ***Scientific Name***	**Listing Status**	**General Habitat Description**	**Presence of Suitable Habitat w/in Site?**	**Potentially Affected by Project?**	**Comments**
BIRDS					
Cooper's hawk	WL	Woodland, chiefly of open, interrupted or marginal type	Yes	Yes	Potential foraging habitat within project areas, generator noise could potentially be disturbing.
American peregrine falcon	FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.	No	No	No habitat within project areas.
osprey	WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	No	No	Parcel is within 15 miles of Van Duzen. Forested area on parcel outside of project areas potential for nesting.
golden eagle	FP, WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No	No	No nesting habitat within project areas. Potential to occur within the larger vicinity.
northern spotted owl	FT, ST, SSC	Old-growth forests or mixed stands of old-growth and mature trees; occasionally in younger forests with patches of big trees	No	Yes	Foraging habitat within 100 ft, generator noise and lights could affect NSO, if present in area.
MAMMALS					
Sonoma tree vole	SSC	North coast fog belt from Oregon border to Sonoma County; in Douglas-fir, redwood & montane hardwood-conifer forests	Yes	No	No trees will be removed. Douglas fir tree stands in part of the project areas.
Humboldt marten	CE	Only in the coastal redwood zone from the Oregon border south to Sonoma County. Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	No	Yes	Foraging habitat within 100 ft, generator noise and lights could affect marten, if present in area.
fisher	FC, SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure	No	Yes	Foraging habitat within 100 ft, generator noise and lights could affect fisher, if present in area.
Townsends big-eared bat	SSC	Throughout California in a wide variety of habitats; most common in mesic sites	No	No	No ideal habitat for roosting, nesting or

		Typically found in caves, mines, manmade structures			foraging within project areas.
HERPETOFAUNA					
western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation	No	No	No habitat within project areas, likely present in Little Larabee Creek >500 feet downslope from project.
Pacific tailed frog	SSC	Occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats	No	No	No streams within project areas. Site is complying with Water Board rules to reduce erosion and waste discharge.
foothill yellow-legged frog	SC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Apparently will also use shallow/ephemeral mid-elevation ponds	No	No	No streams within project areas. Site is complying with Water Board rules to reduce erosion and waste discharge.
southern torrent salamander	SSC	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats; Old growth forests	No	No	No habitat within project areas. Site is complying with Water Board rules to reduce erosion and waste discharge.
FISH					
summer-run steelhead trout	SSC	Cool, swift, shallow water & clean loose gravel for spawning, & suitably large pools in which to spend the summer.	No	No	No fish-bearing streams within project areas. Site is complying with Water Board rules to reduce erosion and waste discharge.

Federal:
FC Candidate
FE Endangered (legally protected)
FT Threatened (legally protected)

State:
FP Fully protected (legally protected)
SC Candidate
SE Endangered (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)
ST Threatened (legally protected)

Table 5. Species detected at APN 208-113-008, October 9th, 2018

Common Name	Scientific Name	Fed/ State Listing	Detection Method
Steller's jay	*Cyanocitta stelleri*	None	auditory
American robin	*Turdus migratorius*	None	auditory
black-capped chickadee	*Poecile atricapillus*	None	auditory
white-breasted nuthatch	*Sitta carolinensis*	None	auditory
wrentit	*Chamaea fasciata*	None	auditory
common raven	*Corvus corax*	None	auditory
northern flicker	*Colaptes auratus*	None	auditory
ruby-crowned kinglet	*Regulus calendula*	None	visual
turkey vulture	*Cathartes aura*	None	visual
Douglas squirrel	*Tamiasciurus douglasii*	None	auditory

Species Accounts

Cooper's hawk

Regulatory Status: The Cooper's hawk is on the California Department of Fish and Wildlife Watch List.

Habitat Requirements and Natural History: Breeds March through August; peak activity May through July. Often uses patchy woodlands and edges with snags for perching. Dense stands with moderate crown-depths used for nesting.

Potential for Occurrence within the Project Area: Project areas are clearings within a greater forested area, so if Cooper's hawk is present in the area, they are likely to use the forest edge and clearings for foraging. Potential nesting habitat exists outside of the project areas as well.

Direct Effects: No trees will be removed for this project. Plastic netting was present on this site, which could potentially entangle birds (and other wildlife).

Indirect Effects: Generator noise could disturb the Cooper's hawk if nesting in the area, or while foraging.

Determination: It is determined that this project could have some effect on the Cooper's hawk.

Sonoma tree vole

Regulatory Status: The Sonoma tree vole is on the California Department of Fish and Wildlife Watch List.

Habitat Requirements and Natural History: Specializes on needles of Douglas-fir and grand fir. The home range probably encompasses one to several fir trees. Breeds year-round, but mostly from February through September.

Potential for Occurrence within the Project Area: The project areas are surrounded by forested habitat with Douglas fir trees present. There are several stands of trees within 100 feet of project footprints that could potentially provide habitat for Sonoma tree voles.

Direct Effects: No trees will be removed for this project, so no direct effects are expected.

Indirect Effects: If Sonoma tree voles are present in the area, some disturbance could occur due to human presence, but unlikely to be significant since the cultivation areas are primarily in clearings.

Determination: This project is unlikely to affect the Sonoma tree vole.

Humboldt Marten

Regulatory Status: The Humboldt marten is a State Candidate Endangered species and a State Species of Special Concern.

Habitat Requirements and Natural History: This species is found in various mixed conifer forests with greater than 40 percent canopy closure that includes large trees and snag; requires variety of different aged stands. Important features include large tree/snag cavities or logs for reproduction and cover. Birth occurs in late March or April, and the young leave the company of their mother and disperse in late summer or autumn.

Potential for Occurrence within the Project Area: Assume nighttime foraging can/will occur in the project vicinity; no nesting habitat observed within the immediate project vicinities, as the forested areas adjacent to the project areas were primarily younger stands of trees. Unlikely to occur within the project areas, as they are in cleared areas with significant amount of human disturbance.

Direct Effects: No trees will be removed for this project, and no direct effects are expected.

Indirect Effects: This landowner does **not** use rodenticides. Generator noise and lights could potentially disturb the Humboldt marten, if they are present in the area.

Determination: There is potential that this project would affect foraging Humboldt marten, but if generator noise and light restrictions are complied with then effects would be minimal.

Fisher

Regulatory Status: The west coast population of fisher is a Federal and State Proposed Candidate Threatened species, and a State Species of Special Concern.

Habitat Requirements and Natural History: This species occurs in intermediate to large-tree stages of coniferous forests and deciduous-riparian habitats with a high canopy closure. Young born February through May. Young remain with female until late autumn.

Potential for Occurrence within the Project Area: Assume nighttime foraging can/will occur in the project vicinity; Assume nighttime foraging can/will occur in the project vicinity; no nesting habitat observed within the immediate project vicinities, as the forested areas adjacent to the project areas were primarily younger stands of trees. Unlikely to occur within the project areas, as they are in cleared areas with significant amount of human disturbance.

Direct Effects: No trees will be removed for this project, and no direct effects are expected.

Indirect Effects: This landowner does **not** use rodenticides. Generator noise and lights could potentially disturb the fisher, if they are present in the area.

Determination: There is potential that this project would affect fisher, but if generator noise and light restrictions are complied with then effects would be minimal.

Foothill yellow-legged frog

Regulatory Status: The foothill yellow-legged frog is a State Candidate Threatened species.

Habitat Requirements and Natural History: This species is found in or near rocky streams in a variety of habitats and is rarely encountered far from permanent water. They often bask on exposed rock surfaces, diving under cover objects when disturbed. Breeding and egg laying typically occur from mid-March through May. Eggs hatch in about five days with tadpoles transforming in three to four months.

Potential for Occurrence within the Project Area: This species was not observed during surveys of the project areas. No streams are present within the project areas, or in the immediate vicinity.

Direct Effects: No direct effects are expected.

Indirect Effects: No indirect effects are expected.

Determination: It is determined the project will have no effect on the foothill yellow-legged frog.

Northern Spotted Owl

Regulatory Status: The northern spotted owl is a Federal and State Threatened species.

Habitat Requirements and Natural History: This species is an uncommon, permanent resident that resides in dense, old-growth, multi-layered mixed conifer, redwood and Douglas-fir habitats. Breeds early March through June, with young independent and dispersing by September/October.

Potential for Occurrence within the Project Area: Assume nighttime foraging can/will occur in the project vicinity if northern spotted owls are present in the area; potential breeding habitat in general vicinity. The forested habitat adjacent (within 100 feet) of the eastern project area is potential foraging habitat for northern spotted owl.

Direct Effects: No trees will be removed, so no direct effects are expected.

Indirect Effects: Generator noise and light pollution are potential effects, though light pollution at this site is currently minimal. No rodenticides are used on this parcel.

Determination: It is determined that this project could affect the northern spotted owl, but if generator noise and light restrictions are adhered to then effects should be minimal.

Cumulative Effects

We have determined that the project and operations are likely to have some effect on Humboldt marten, fisher, northern spotted owl and possibly Cooper's hawk if they are present in the project vicinity. Impacts to species from the proposed projects either directly or indirectly are expected to be minimal if management recommendations are adhered to.

Management Recommendations

1. Strict adherence to the Dark Sky Association standards will be required, as this cultivation area is within 1.3 miles of two NSO Activity Centers as well as potential Humboldt marten and fisher habitat. Any structure requiring lighting (mixed light greenhouses or nurseries) before sunrise or after sunset MUST be covered to avoid any effects on nocturnal wildlife.
2. Generators and fans will be housed in sheds designed for noise reduction and a noise study will be conducted to determine effect on wildlife. All attempts to keep noise levels at a minimum during year-round operations will help maintain the quality of habitat for all wildlife species.
3. Plastic netting should be stored where wildlife cannot interact with it, since this is a hazard that can ensnare or strangle wildlife. It is recommended that nettings made from non-synthetic materials (not plastic or nylon) be used instead for cultivation activities. Plastic netting on erosion control materials is prohibited in the State Water Board Cannabis Cultivation General Order.
4. Metal wire structures may be used for cultivation but need to be stored where wildlife cannot get trapped or injured by them. Leaving these wire cages lying in disarray next to the cultivation areas or in the forest edge habitat presents a wildlife hazard.
5. Should the current project footprint be exceeded with the addition of new cultivation onto previously undisturbed areas botanical surveys will be necessary to determine the impact, if any, to surrounding vegetative habitat.

VI. References Cited

California Natural Diversity Database (CNDDB). 2018. RareFind 5 [Internet]. California Department of Fish and Wildlife [Version 5.2.14]. Accessed October 2nd, 2018.

Final Environmental Impact Report for the Amendments to Humboldt County Code Regulating Commercial Cannabis Activities. January 2018. Humboldt County Planning and Building Department.

Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls. February 2, 2011. Revised January 9, 2012. U.S. Fish and Wildlife Service.

Order WQ 2017-0023-DW General Waste Discharge Requirements and Waiver of Waste Discharge Requirements For Discharges of Waste Associated with Cannabis Cultivation Activities. October 17, 2017. California State Water Resources Control Board.

Appendix A (Pictures taken October 9th, 2018)

Photo 1. Southeast tree line of southern project area, younger trees

Photo 2. Tree line to the north of southern project area

Photo 3. Road from southern project area to central project area

Photo 4. Looking down road at northwest tree line from central project area.

Photo 5. Plastic netting next to central project area

Photo 6. More wire fencing next to central project area that could be wildlife hazard

Photo 7. Forested area to south of the central project area

Photo 8. Forested habitat can be seen in distance looking north of central project area

Photo 9. Trail to nutrient tanks south of central project area, forested habitat

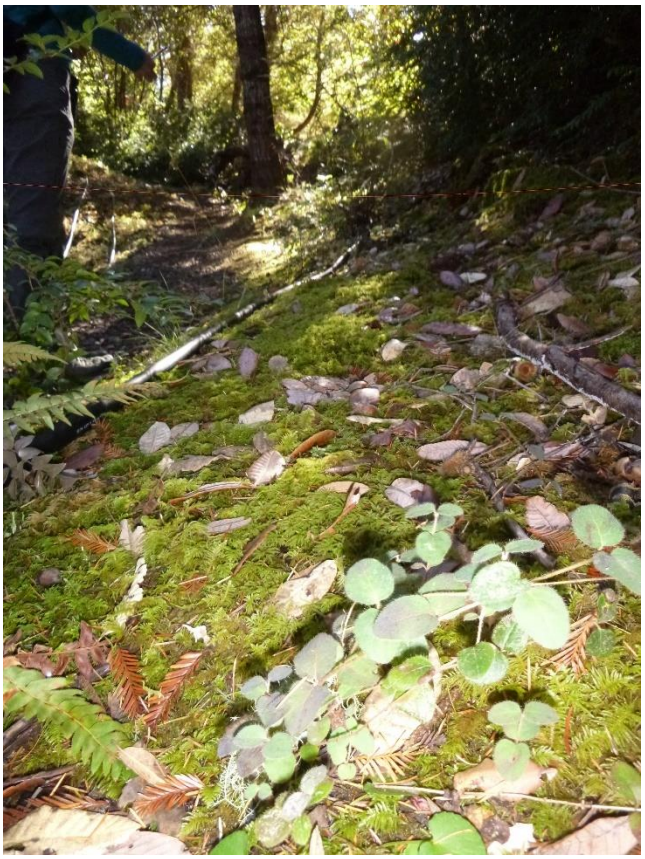

Photo 10. Mossy forested habitat by nutrient tanks

Photo 11. Generator location, no sound blocking material present

Photo 12. Edge habitat north of eastern project area, possible low quality NSO forage habitat

Photo 13. Overview of eastern project area with adjoining forest in distance to north

Photo 14. Wire cages next to the eastern project area, possible wildlife hazard