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**Initial Biological Scoping Report**  
**Staton Road**  
**APN: 524-072-010**



Prepared by  
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6/24/2022

For  
Hohman and Associates  
Hydesville, CA

Signature:

A handwritten signature in black ink that reads "Corrina Kamoroff".

Date: 6/24/22

## Setting

The Staton Road project is located in Section 17 Township 6 North, Range 5 East HB&M; Humboldt County, on the Willow Creek USGS 7.5' quadrangle. The project area is located southeast of the town of Willow Creek, CA off of Friday Ridge Road. The biogeographic region can be described using a three-tiered hierarchy of province, region and sub-region. This site lies within the California Floristic Province, Northwestern California region, and North Coast sub-region. The parcel lies approximately 1.25 miles from the Trinity River. The elevation ranges from approximately 1860 to 2020 feet. Slopes on the property are moderate, and the aspect is primarily east-facing. The vegetation is mapped by the USFS CalVeg as primarily Douglas fir (*Pseudotsuga menziesii*), Gray pine (*Pinus sabiniana*), Canyon Live Oak (*Quercus chrysolepis*) and Annual Grasses and Forbs. The property is approximately 22 acres.

## Methods

The Biological Scoping Report for this project was conducted by Corrina Kamoroff. Corrina Kamoroff is a Wildlife Biologist for Hohman and Associates Forestry Consultants. Corrina received her B.S. in Evolution, Ecology and Biodiversity from University of California, Davis. Corrina is currently pursuing her M.S. in Natural Resources with a concentration in Wildlife from Humboldt State University. Corrina has over 8 years of wildlife experience in Northern California, including over two years conducting biological surveys and evaluating potential impacts in fulfillment of CEQA requirements.

The Biological Scoping report considers the potentially occurring species and communities that could be affected by the project based on available spatial data and habitat requirements. A site visit should be conducted to further evaluate potential habitat value to protected, endangered, threatened, rare, and sensitive species and finalize survey recommendations.

A list of special-status animal species to consider was downloaded from CNDDDB BIOS for the Willow Creek 9-quad area. Animals on the CNDDDB list were primarily included based on state or federal listing status or CDFW designation. Native pollinators found in the area were also included based on state rarity and their potential to be affected by cannabis cultivation. Additional species were added to the CNDDDB list for consideration based on potential habitat or high levels of conservation concern. Habitats within the 1.3-mile Biological Assessment Area (BAA) for potentially occurring species were evaluated based on CALVEG vegetation mapping and aerial photos. Attachment A shows the vegetation map of the CALVEG (Classification and Assessment with LANDSAT of Visible Ecological Groupings) dominant vegetation alliances for the parcel and surrounding area (U.S. Forest Service 2000). Attachment B shows nearby occurrences of special status taxa as mapped in CNDDDB. A Spotted Owl Database Check Map can be found in Attachment C. Rank Definitions are provided in Attachment D. Additional surveys have been recommended to fully address potential biological impacts (See Table 6).

## Potentially Occurring Special-Status Animal Species for Willow Creek 9-Quad Area

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Species Name	Common Name	FESA	CESA	CDFW	GRank	SRank	Potential
<i>cooperii</i>	Cooper's hawk	None	None	WL	G5	S4	Yes
<i>noronae</i>	Northern goshawk	None	None	SSC	G5	S3	Yes
<i>cygnus</i>	great blue heron	None	None	SSC	G5	S4	Yes
<i>viridis</i>	Olive-sided flycatcher	None	None	SSC	G4	S4	Yes
<i>haliaeetus</i>	bald eagle	Delisted	Endangered	FP	G5	S3	Yes
<i>flaviceps</i>	Yellow-breasted chat	None	None	SSC	G5	S3	Yes
<i>regalis</i>	osprey	None	None	WL	G5	S4	Yes
<i>flammeolus</i>	Flammulated owl	None	None	-	G4	S2S4	Yes
<i>ruber</i>	Red-breasted sapsucker	None	None	-	G5	S4	Yes
<i>noronae caurina</i>	Northern spotted owl	Threatened	Threatened	SSC	G3T3	S2S3	Yes

## Mammals

Common Name	FESA	CESA	CDFW	GRank	SRank	Potential
<i>Sonoma tree vole</i>	None	None	SSC	G3	S3	Yes
<i>Townsend's big-eared bat</i>	None	None	SSC	G3G4	S2	Yes
<i>North American porcupine</i>	None	None	-	G5	S3	Yes
<i>California wolverine</i>	Proposed Threatened	Threatened	FP	G4	S1	Unlikely
<i>Silver-haired bat</i>	None	None	-	G5	S3S4	Yes
<i>Hoary bat</i>	None	None	-	G5	S4	Yes
<i>Humboldt marten</i>	None	Endangered	SCC	G5T1	S1	Yes
<i>Long-eared myotis</i>	None	None	-	G5	S3	Yes
<i>Fringed myotis</i>	None	None	-	G4	S3	Yes
<i>Long-legged myotis</i>	None	None	-	G5	S3	Yes
<i>Yuma myotis</i>	None	None	-	G5	S4	Yes
<i>fisher - West Coast DPS</i>	Endangered	Threatened	SSC	G5T2T3Q	S2S3	Yes

## Amphibians and Reptiles

Common Name	FESA	CESA	CDFW	GRank	SRank	Potential
<i>Pacific tailed frog</i>	None	None	SSC	G4	S3S4	Yes
<i>Western pond turtle</i>	None	None	SSC	G3G4	S3	Yes
<i>Del Norte salamander</i>	None	None	WL	G4	S3	Yes
<i>Northern red-legged frog</i>	None	None	SSC	G4	S3	Yes
<i>foothill yellow-legged frog</i>	None	Endangered	SSC	G3	S3	Yes
<i>Southern torrent salamander</i>	None	None	SSC	G3G4	S2S3	Yes

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Common Name	FESA	CESA	CDFW	GRank	SRank	Potential	
<i>medirostris</i>	Green sturgeon	Threatened	None	SSC	G3	S1S2	Yes
<i>tridentatus</i>	Pacific Lamprey	None	None	SSC	G4	S4	No
<i>us clarkii clarkii</i>	Coast cutthroat trout	None	None	SSC	G4T4	S3	Yes
<i>us kisutch pop. 2</i>	coho salmon - southern Oregon / northern California ESU	Threatened	Threatened	-	G4T2Q	S2?	Yes
<i>us mykiss 1</i>	steelhead - Klamath Mountains Province DPS	None	None	SSC	G5T3Q	S2	Yes
<i>us mykiss 16</i>	steelhead - northern California DPS	Threatened	None	-	G5T2T3Q	S2S3	Yes
<i>us mykiss 36</i>	summer-run steelhead trout	None	Candidate Endangered	SSC	G5T4Q	S2	Yes
<i>us tshawytscha</i>	chinook salmon - California coastal ESU	Threatened	None	-	G5	S1	Yes
<i>us tshawytscha</i>	Chinook salmon – upper Klamath and Trinity Rivers ESU	Candidate	Candidate Endangered	SSC	G5	S1S2	Yes

## vertebrates

Common Name	FESA	CESA	CDFW	GRank	SRank	Potential	
<i>ginosus</i>	obscure bumble bee	None	None	-	G4?	S1S2	Yes
<i>identalis</i>	western bumble bee	None	Candidate Endangered	-	G2G3	S1	Yes

## Potential Special-Status Animal Species Details

### Birds

#### 1. Cooper's hawk (*Accipiter cooperii*)

**Special Status:** CDFW Watch List; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S4.

**Family:** Accipitridae

**Habitat/Life-history Requirements:** Cooper's hawks are common year-round residents in wooded areas of California, and they can be found in urban and suburban areas as well (Cornell Lab). The raptor commonly nests in riparian and lowland habitats throughout much of Humboldt County (Hunter et al. 2005). The medium-sized hawk builds nests made of piles of sticks over two feet wide in tall trees, typically 25-50 feet off the ground (Cornell Lab). Nesting trees include pines, oaks and Douglas firs (Cornell Lab). Dense stands are typically used for nesting and patchy open areas are commonly used for hunting (Zeiner et al. 1988).

**Potential Impact:** The BAA could provide habitat for the Cooper's hawk. No tree removal or removal of riparian brush is proposed on the parcel, which limits the potential impact for many nesting birds. However, the surrounding area provides high quality nesting habitat for raptors and other birds that may be sensitive to disturbance. Pre-construction raptor scan surveys are recommended prior to any construction or ground disturbance during the breeding season (Feb 1-Aug 31) (**BIO-4**). Additionally, the project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.

#### 2. Northern goshawk (*Accipiter gentilis*)

**Special Status:** CDFW Species of Special Concern; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S3.

**Family:** Accipitridae

**Habitat/Life-history Requirements:** The northern goshawk inhabits mature coniferous and mixed-coniferous forests that provide suitable nesting structures and adequate prey for this large hawk (Shuford and Gardali 2008). The northern goshawk builds nests that are 3-4 feet long (Cornell Lab) in stands of large trees with high canopy closure and an open understory (Shuford and Gardali 2008). Northern goshawks are known to breed in the Klamath and Inner North Coast Ranges (Hunter et al. 2005). They have also been spotted in the southwestern area of the county (Hunter et al. 2005). The northern goshawk is sensitive to disturbance, and aggressive toward intruders near their nest. They typically nest in wild forested areas, away from human-caused disturbances (Cornell Lab).

**Potential Impact:** The BAA could provide habitat for the Northern goshawk. The raptor is on the CDFW Species of Special Concern and protected under the Migratory Bird Treaty Act (MBTA). Pre-construction raptor scans are needed prior to any further vegetation removal or construction (**BIO-4**). Additionally, the project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.



### 3. Great blue heron (*Ardea herodias*)

**Special Status:** California Department of Forestry and Fire Protection classified as *Sensitive* to timber operations; protected under the California Forest Practice Rules; Protected under Migratory Bird Treaty Act; CDFW Species of Special Concern; NatureServe Ranks: G5, S4.

**Family:** Ardeidae

**Habitat/Life-history Requirements:** Great blue herons are fairly common in estuaries and emergent wetlands throughout California, and are occasionally observed in a variety of other habitats as well (Zeiner et al. 1988). These waterbirds are highly sensitive to disturbance of nesting colonies, which may cause desertion (Zeiner et al. 1988). Great blue herons typically nest in conspicuous colonies known as rookeries, but may build solitary nests as well (Zeiner et al. 1988). Although they prefer to nest in large trees adjacent to wetland feeding areas, nests may be up to 10 miles from feeding grounds (Zeiner et al. 1988). In Humboldt County, breeding areas are typically limited to the coastal slope and waterways in more inland areas (Hunter et al. 2005).

**Potential Impact:** The BAA could provide habitat for the Great blue heron. Pre-construction raptor scans are needed prior to any further vegetation removal or construction (**BIO-4**). Additionally, the project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.

### 4. Olive-sided flycatcher (*Contopus cooperi*)

**Special Status:** CDFW Species of Special Concern; NatureServe Ranks: G4, S4

**Family:** Tyrannidae

**Habitat/Life-history Requirements:** The olive-sided flycatcher is a CDFW Species of Special Concern. The songbird occurs in a variety of forest habitats, preferring to nest in mixed conifer, montane hardwood-conifer, Douglas-fir, and redwood stands (Zeiner et al. 1988). The songbird forages near canyons, meadows, lakes, clearings, and other open terrains (Zeiner et al. 1988).

**Potential Impact:** The BAA could provide habitat for the Olive-sided flycatcher. The immediate area of impact should be surveyed for signs of nesting birds prior to operations (**BIO-3**).

Additionally, the project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.

### 5. Bald eagle (*Haliaeetus leucocephalus*)

**Special Status:** Federally Delisted, California Endangered, CDFW Fully Protected; Protected under Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act; NatureServe Ranks: G5, S3.

**Family:** Accipitridae

**Habitat/Life-history Requirements:** Federally delisted, but still considered Endangered in California, bald eagles occur along rivers, large creeks, and coastlines throughout Northwestern California (Harris 2005). Fish are a primary source of prey, and bald eagles are typically found in

forested areas near large fish-bearing waters (Cornell Lab). Bald eagles build large nests about 6 feet wide. Nests are typically found in large trees, but may be built on other available vegetation or structures (Cornell Lab).

**Potential Impact:** The bald eagle may occur in the BAA. The project area is ~ 1.25 miles from the Trinity River, which provides habitat for the species. The project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife. Pre-construction raptor scan surveys are recommended prior to any construction or ground disturbance during the breeding season (Feb 1 - Aug 31) (**BIO-4**). Additionally, the project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.

## 6. Yellow-breasted chat (*Icteria virens*)

**Special Status:** CDFW Species of Special Concern; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S3.

**Family:** Parulidae

**Habitat/Life-history Requirements:** The yellow-breasted chat is a CDFW Species of Special Concern. This songbird nests in dense riparian brush. The distribution of the yellow-breasted chat in Humboldt County largely follows the riparian habitat surrounding the major rivers, especially the Eel, Trinity, Klamath, and Mad Rivers (Hunter et al. 2005). The yellow breasted chat is relatively numerous in Humboldt County, whereas much of California has seen a decline in population (Shuford and Gardali 2008). Protecting riparian areas, including shrub layers, is important for the conservation of this species.

**Potential Impact:** The BAA may provide habitat for the Yellow-breasted chat. The immediate area of impact should be surveyed for signs of nesting birds prior to operations (**BIO-3**). Additionally, the project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.

## 7. Osprey (*Pandion haliaetus*)

**Special Status:** CDFW Watch List; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S4.

**Family:** Accipitridae

**Habitat/Life-history Requirements:** Ospreys primarily prey on fish and they require large fish-bearing waters for hunting (Zeiner et al. 1988). Ospreys are widespread along the Trinity, Klamath, Van Duzen, Eel, and South Fork Eel Rivers in Humboldt County (Harris 2005). Ospreys typically make large nests in tall snags or trees high off the ground in open forest habitats (Zeiner et al. 1988).

**Potential Impact:** The Osprey may occur in the BAA. The project area is ~ 1.25 miles from the Trinity River, which provides habitat for the species. The project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife. Pre-construction raptor scan surveys are recommended prior to any construction or ground disturbance during the breeding season (Feb 1 - Aug 31) (**BIO-4**).



8. **Flammulated owl (*Psiloscopus flammeolus*)**

**Special Status:** NatureServe Rankings: G5, S2S4

**Family:** Strigidae

**Habitat/Life-history Requirements:** The flammulated owl nests in montane regions at 6000-10,000 feet with low to moderate canopy cover (Zeiner et al. 1988). This small owl nests in cavities or woodpecker holes in snags or trees, and it is frequently found on the edges of ponderosa pine forest (Zeiner et al. 1988).

**Potential Impact:** The BAA and parcel may provide habitat for the Flammulated owl. The project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.

9. **Red-breasted Sapsucker (*Sphyrapicus ruber*)**

**Special Status:** NatureServe Rankings: G5, S4

**Family:** Picidae

**Habitat/Life-history Requirements:** The Red-breasted sapsucker is a woodpecker that primarily breeds in coniferous forests. The woodpecker has also been known to breed in riparian habitat. The bird typically nests in cavity in dead trees or branches (Cornell Lab). Forest practices that remove snags may decrease Red-breasted Sapsucker abundance in specific areas (Cornell Lab).

**Potential Impact:** The BAA and parcel may provide habitat for the Red-breasted sapsucker. The immediate area of impact should be surveyed for signs of nesting birds prior to operations (**BIO-3**). The project should incorporate measures to reduce disturbance from noise and lights to birds and other sensitive wildlife.

10. **Northern spotted owl (*Strix occidentalis caurina*)**

**Special Status:** Federally Threatened, California Threatened, CDFW Species of Special Concern, Protected under Migratory Bird Treaty Act; NatureServe Ranks: G3T3, S2S3.

**Family:** Strigidae

**Habitat/Life-history Requirements:** Northern spotted owls typically nest or roost in multi-layered, mature coniferous forest with high canopy closure, large overstory trees, and broken-topped trees or other nesting platforms (USFWS 2012). Confirmed breeding areas are widespread throughout Humboldt County (Hunter et al. 2005). Northern spotted owls may use a broad range of habitats for foraging. Their favored prey, the dusky-footed woodrat (*Neotoma fuscipes*), typically inhabits the forest edge (Harris 2005). USFWS protocol surveys are needed for any activity that may modify nesting, roosting, or foraging habitats for northern spotted owls (USFWS 2012).

**Potential Impact:** USFWS protocol surveys are needed for any activity that may modify nesting, roosting, or foraging habitats for northern spotted owls (NSO) (USFWS 2012). There are three known activity centers (HUM0049, HUM1059, and HUM0050) documented within the 1.3 mi BAA. There is potential NSO habitat within the BAA and on the parcel. Northern Spotted Owl Surveys were conducted in 2020, 2021 and are being conducted in 2022 (Attachment F).

## Mammals

### 1. Sonoma tree vole (*Arborimus pomo*)

**Special Status:** CDFW Species of Special Concern, NatureServe Ranks: G3, S3

**Family:** Muridae

**Habitat/Life-history Requirements:** The Sonoma tree vole occurs along the North Coast in old-growth and other forests, mainly Douglas-fir, redwood, and montane hardwood-conifer habitats (Zeiner et al. 1988). The small rodent specializes in feeding on Douglas-fir and grand fir needles, and typically constructs nests in Douglas-fir trees (Zeiner et al. 1988).

**Potential Impact:** The arboreal rodent has the potential to occur within the BAA. The nearest occurrence mapped in CNDDDB is ~ 5.5 miles south east from the project. However, no expansion into forested areas is planned and no impacts are expected. The project should also incorporate measures to reduce disturbance from noise and lights to sensitive wildlife.

### 2. Townsend's big-eared bat (*Corynorhinus townsendii*)

**Special Status:** CDFW Species of Special Concern, NatureServe Ranks: G3G4, S2.

**Family:** Vespertilionidae

**Habitat/Life-history Requirements:** Although it can be found in a wide range of habitats, the bat requires caves, mines, tunnels, buildings, or other human-made structures for roosting (Zeiner et al. 1988). Townsend's big-eared bat is highly sensitive to disturbance of roosting sites (Zeiner et al. 1988).

**Potential Impact:** The nearest occurrence mapped in CNDDDB is over 9 miles from the project. If there is any modification to any cave, tunnels or structures, bat surveys should be conducted. The current proposed operations are not expected to impact the Townsend's big-eared bat. However, the project should incorporate measures to reduce disturbance from noise and lights to sensitive wildlife.

### 3. North American porcupine (*Erethizon dorsatum*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G5, S3

**Family:** Erethizontidae

**Habitat/Life-history Requirements:** The American porcupine is most commonly found in montane conifer, Douglas-fir, alpine dwarf-shrub, and wet meadow habitats (Zeiner et al. 1988). The herbivore feeds on a wide variety of aquatic and terrestrial herbs, shrubs, fruits, leaves, and buds in the summer (Zeiner et al. 1988). During the winter, the porcupine diet includes evergreen leaves, twigs, bark, and cambium of trees, particularly conifers (Zeiner et al. 1988).

**Potential Impact:** Although widely distributed throughout North America and occurring in many habitats, the North American porcupine is considered vulnerable in California. The area should be considered potential habitat for the mammal. The nearest occurrence mapped in CNDDDB is approximately 1 mile from the project. The property and the surrounding BAA has potential habitat

for the North American porcupine. However, no expansion into forested area are planned and no impacts to the species are expected.

#### 4. California wolverine (*Gulo gulo*)

**Special Status:** Federally proposed Threatened; California Threatened; CDFW Fully Protected; NatureServe Ranks: G4, S1.

**Family:** Mustelidae

**Habitat/Life-history Requirements:** The wolverine primarily uses Douglas-fir and mixed conifer habitats (Zeiner et al. 1988). The scavenger requires open areas for hunting and denser forest stands for resting (Zeiner et al. 1988). Wolverines prey on rodents, vertebrates, berries, insects, and carrion (Zeiner et al. 1988). They prefer areas with caves, cliffs, logs, cavities, rock outcrops, and low human disturbance (Zeiner et al. 1988).

**Potential Impact:** The wolverine is not likely extent in Humboldt County. No impacts to the wolverine are expected.

#### 5. Silver-haired bat (*Lasionycteris noctivagans*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G5, S3S4.

**Family:** Vespertilionidae

**Habitat/Life-history Requirements:** The silver-haired bat is primarily a forest-dweller. The insectivore roosts in a wide variety of locations including hollow trees, snags, rock crevices, caves, under bark, and in man-made structures (Zeiner et al. 1988).

**Potential Impact:** The nearest occurrence is mapped approximately 1.5 miles from the project site. The Silver-haired bat has the potential to occur in the project area. The project should incorporate measures to reduce disturbance from noise and lights to bats and other sensitive wildlife. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of cultivation.

#### 6. Hoary bat (*Lasiurus cinereus*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G5, S4.

**Family:** Vespertilionidae

**Habitat/Life-history Requirements:** The most widespread North American bat, the hoary bat can be found in a wide variety of habitats throughout California (Zeiner et al. 1988). The insectivore typically roosts in medium to large trees with nearby openings for foraging (Zeiner et al. 1988).

**Potential Impact:** The nearest occurrence is mapped approximately 0.5 miles from the project site. The Hoary bat has the potential to occur in the project area. The project should incorporate measures to reduce disturbance from noise and lights to bats and other sensitive wildlife. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of cultivation.

7. **Humboldt marten** (*Martes caurina humboldtensis*)

**Special Status:** California Endangered; CDFW Species of Special Concern; NatureServe Ranks: G5T1, S1.

**Family:** Mustelidae

**Habitat/Life-history Requirements:** Martens use structurally complex conifer forest with large trees and low human disturbance (Zeiner et al. 1988). Martens require old-growth conifers and snags with cavities for denning and nesting (Zeiner et al. 1988). Martens are currently known to inhabit the northern part of Humboldt County near Prairie Creek Redwood State Park and the Klamath Mountains. Historically, martens occupied a great deal of Humboldt and Mendocino Counties (Hamlin et al. 2010).

**Potential Impact:** The nearest occurrence mapped in CNDDDB is approximately 5 miles from the project. The property and the surrounding BAA has potential habitat for the Humboldt marten. However, no expansion into forested area are planned and no impacts to the species are expected.

8. **Long-eared myotis** (*Myotis evotis*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G5, S3

**Family:** Vespertilionidae

**Habitat/Life-history Requirements:** The long-eared myotis is widespread in California's brush, woodland, and forest habitats, but uncommon. The insectivore nests in cavities, under bark, in snags, or in buildings (Zeiner et al. 1988).

**Potential Impact:** The Long-eared myotis has been mapped ~ 1.5 miles away from the project area. The parcel could provide potential habitat for the Long-eared myotis. The project should incorporate measures to reduce disturbance from noise and lights to potential bat roosting habitat in the area. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of cultivation.

9. **Fringed myotis** (*Myotis thysanodes*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G4, G3.

**Family:** Vespertilionidae

**Habitat/Life-history Requirements:** The fringed myotis uses a wide variety of open habitats, especially pinyon-juniper, valley foothill hardwood and hardwood-conifer habitats. The insectivore requires water, and typically forages over lakes, streams, and ponds (Zeiner et al. 1988). The bat roosts in caves, mines, buildings, and crevices (Zeiner et al. 1988).

**Potential Impact:** The Fringed myotis has been mapped ~ 7.5 miles away from the project area. The parcel could provide potential habitat for the species. The project should incorporate measures to reduce disturbance from noise and lights to potential bat roosting habitat in the area. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of cultivation.



#### 10. Long-legged myotis (*Myotis volans*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G5, S3.

**Family:** Vespertilionidae

**Habitat/Life-history Requirements:** Although most commonly found in high elevation woodland and forest habitats, this small bat can be found in a wide variety of habitats (Zeiner et al. 1988). The long-legged myotis uses denser woodlands and forests for cover and reproduction, and feeds over water or open habitats (Zeiner et al. 1988). The species may roost in rock crevices, buildings, snags, mines, caves, or under tree bark (Zeiner et al. 1988).

**Potential Impact:** The Long-legged myotis has been mapped ~ 1.5 miles away from the project area. The parcel could provide potential habitat for the species. The project should incorporate measures to reduce disturbance from noise and lights to potential bat roosting habitat in the area. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of cultivation.

#### 11. Yuma myotis (*Myotis yumanensis*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G5, S4.

**Family:** Vespertilionidae

**Habitat/Life-history Requirements:** The Yuma myotis is common and widespread in low-elevation habitats of California (Zeiner et al. 1988). The bat requires water for drinking and foraging habitat, and roosting structures such as buildings, mines, caves, or crevices (Zeiner et al. 1988). Open woodlands and forests provide optimal habitat (Zeiner et al. 1988).

**Potential Impact:** The Yuma myotis has been mapped ~ 1.5 miles away from the project area. The parcel could provide potential habitat for the species. The project should incorporate measures to reduce disturbance from noise and lights to potential bat roosting habitat in the area. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of cultivation.

#### 12. Fisher - West Coast DPS (*Pekania pennanti*)

**Special Status:** Federally Endangered, California Threatened, CDFW Species of Special Concern; NatureServe Ranks: G5T2T3Q, S2S3.

**Family:** Mustelidae

**Habitat/Life-history Requirements:** The fisher uses large expanses of forest with moderate to high canopy closure, and will avoid open forest, grasslands, and wetlands (USFWS 2014). Fishers use cavities in live trees, snags and down logs for reproductive dens (USFWS 2014). Structural complexity is a critical element of fisher habitat, necessary to provide cover for resting and denning, and habitat for prey (USFWS 2014).

**Potential Impact/Mitigation:** The nearest occurrence mapped in CNDDB is approximately 0.25 miles from the project area. The property and the surrounding BAA has potential habitat for the Fisher. However, no expansion into forested area are planned and no impacts to the species are expected. The project should incorporate measures to reduce disturbance from noise and lights to the



species. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of cultivation.

## Amphibians and Reptiles

### 1. Pacific tailed frog (*Ascaphus truei*)

**Special Status:** CDFW Species of Special Concern; NatureServe Ranks: G4, S3S4

**Family:** Ascaphidae

**Habitat/Life-history Requirements:** The Pacific tailed frog requires permanent, cool streams in conifer-dominated habitats including redwood, Douglas fir, mixed-conifer, and ponderosa pine habitats (Zeiner et al. 1988). They prefer turbulent waters with rocky substrates in steep-walled valleys with dense vegetation, where the water temperature remains low (Zeiner et al. 1988). Increased water temperature and siltation from logging pose threats to the amphibian (Zeiner et al. 1988). Additionally, invasive American bullfrogs may pose a threat to native amphibians through competition, predation, and spread of disease.

**Potential Impact:** The nearest occurrence mapped in CNDDDB is approximately 0.25 miles from the project. The project will not likely impact the Pacific tailed frog, but the project should avoid impacts to amphibians by minimizing runoff.

### 2. Western pond turtle (*Emys marmorata*)

**Special Status:** CDFW Species of Special Concern; NatureServe Ranks: G3G4, S3

**Family:** Emydidae

**Habitat/Life-history Requirements:** The western pond turtle is associated with permanent or nearly permanent water in ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams (Zeiner et al. 1988). Invasive American bullfrogs prey upon hatchlings and juveniles (Zeiner et al. 1988).

**Potential Impact:** The BAA provides habitat for the western pond turtle. The nearest occurrence mapped in CNDDDB is within the BAA, approximately 1.5 miles from the project. The project should avoid impacts to the western pond turtle by minimizing runoff.

### 3. Del Norte salamander (*Plethodon elongatus*)

**Special Status:** CDFW Watch List; NatureServe Ranks: G4, S3

**Family:** Plethodontidae

**Habitat/Life-history Requirements:** The Del Norte salamander can be found in moist forested habitats, including riparian, Douglas-fir, redwood, and montane hardwood-conifer forests at low to middle elevations (up to ~3,600ft) (Zeiner et al. 1988). The lungless terrestrial salamander takes cover under rotting logs, stabilized talus, or other elements that provide moist microhabitats (Zeiner et al. 1988). Breeding occurs on moist soil, and standing water is not a habitat requirement (Zeiner et al. 1988).

**Potential Impact:** The BAA provides habitat for the Del Norte salamander. The nearest occurrence mapped in CNDDDB is within the BAA, approximately 3 miles from the project area. The project should avoid impacts to the species by minimizing runoff and observing SMA buffers.

**4. Northern red-legged frog (*Rana aurora*)**

**Special Status:** CDFW Species of Special Concern; NatureServe Ranks: G4, S3

**Family:** Ranidae

**Habitat/Life-history Requirements:** The northern red-legged frog inhabits low-elevation wetlands of the North Coast Ranges from Del Norte to Mendocino Counties (Zeiner et al. 1988). The northern red-legged frog requires permanent or nearly permanent pools in streams, marshes, or ponds (Zeiner et al. 1988).

**Potential Impact:** Areas of permanent or near-permanent water in the surrounding area could provide habitat for the northern red-legged frog. The nearest occurrence mapped in CNDDDB is approximately 9.5 miles from the project. The project should avoid impacts to amphibians by minimizing runoff.

**5. Foothill yellow-legged frog (*Rana boylei*)**

**Special Status:** State Endangered; CDFW Species of Special Concern; NatureServe Ranks: G3, S3

**Family:** Ranidae

**Habitat/Life-history Requirements:** The foothill yellow legged frog inhabits rocky streams with permanent water in many habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadows (Zeiner et al. 1988). The invasive American bullfrog and introduced fish species contribute to the reduction of foothill yellow legged frog populations (Zeiner et al. 1988).

**Potential Impact:** Riparian areas in the BAA are likely to provide habitat for the foothill yellow-legged frog. The nearest occurrence mapped in CNDDDB overlaps the BAA, ~0.5 miles from the project site. The project should avoid impacts to amphibians by minimizing runoff.

**6. Southern torrent salamander (*Rhyacotriton variegatus*)**

**Special Status:** CDFW Species of Special Concern; NatureServe Ranks: G3G4, S2S3

**Family:** Rhyacotritonidae

**Habitat/Life-history Requirements:** The southern torrent salamander primarily occupies cold, shaded permanent streams and seeps in redwood, Douglas fir, mixed conifer, montane riparian and montane hardwood-conifer habitats in Sonoma, Mendocino, Humboldt and Lake Counties (Zeiner et al. 1988). The salamander requires rapid, permanent streams with rocky substrate for breeding and larval development (Zeiner et al. 1988).

**Potential Impact:** There are not documented occurrences of the Southern torrent salamander within the BAA. Permanent, rocky streams in the surrounding area could provide habitat for the southern torrent salamander. The nearest occurrence mapped in CNDDDB is ~6 miles from the project site. The project should avoid impacts to amphibians by minimizing runoff.

## Fish

### 1. Green sturgeon (*Accipenser medirostris*)

**Special Status:** Federally Threatened; CDFW Species of Special Concern; NatureServe Ranks: G3, S1S2.

**Family:** Acipenseridae

**Habitat/Life-history Requirements:** This is a large-bodied fish species that is slow to grow and mature. The green sturgeon is known to spawn only in the Sacramento and Klamath river systems in California and the Rogue River in Oregon (NatureServe 2017). There is recent evidence of limited green sturgeon spawning in the Eel River based on the collection of both adult and juvenile fish in the mid-1990s. Green sturgeons spend most of their lives in coastal marine waters, estuaries, and the lower reaches of large rivers. They ascend rivers to spawn, but specific spawning and rearing habitats are poorly known.

**Potential Impact:** The Trinity River and its tributaries provide habitat for the Green sturgeon. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.

### 2. Coast cutthroat trout (*Oncorhynchus clarkii clarkii*)

**Special Status:** CDFW Species of Special Concern; NatureServe Ranks: G4T4, S3.

**Family:** Salmonidae

**Habitat/Life-history Requirements:** The coastal cutthroat trout is a small salmonid that may be anadromous or resident to watersheds of the Pacific coast from the Eel River of Humboldt County north to Alaska (Moyle et al. 2008). Much like steelhead and other salmonids, coastal cutthroat require cool streams with deep pools and cover (Moyle et al. 2008). Coastal cutthroat prefer small, low gradient coastal streams, and they may be outcompeted by steelhead in larger streams and rivers where they co-occur (Moyle et al. 2008). Spawning occurs in gravel-bottom riffles and pools (Moyle et al. 2008). The Smith and Klamath River drainages support nearly half of the coastal cutthroat populations in California (Gerstung 1997 cited in Moyle et al. 2008).

**Potential Impact:** The Trinity River and its tributaries provide habitat for the anadromous salmonid. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.

### 3. Coho salmon - southern Oregon / northern California ESU (*Oncorhynchus kisutch*)

**Special Status:** Federally Threatened, California Threatened; NatureServe Ranks: G4T2Q, S2?

**Family:** Salmonidae

**Habitat/Life-history Requirements:** Coho salmon are a federally and state-listed anadromous fish that occupy low gradient rivers and coastal streams (CDFW). The anadromous salmonids return to these watersheds in the fall and early winter to spawn in gravel substrate, after the first major rains (Moyle et al. 2008). Coho require cool, clear perennial streams and rivers with structural complexity

for cover and low suspended sediment (Moyle et al. 2008). Juveniles are most abundant in well-shaded, deep pools with many structural elements that provide cover (Moyle et al. 2008). Sedimentation is a major threat to salmonids in their early life stages.

**Potential Impact:** The Trinity River and its tributaries provide habitat for the anadromous salmonid. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.

#### 4. Steelhead - Klamath Mountains Province DPS (*Oncorhynchus mykiss irideus*)

**Special Status:** CDFW Species of Special Concern; NatureServe Ranks: G5T3Q, S2

**Family:** Salmonidae

**Habitat/Life-history Requirements:** Steelhead are anadromous rainbow trout that migrate to the ocean as juveniles and return to freshwater habitats to spawn. The Klamath Mountains Distinct Population Segment (DPS) ranges from Klamath and Trinity basins and streams north to the Smith, Rogue and Elk Rivers in Oregon (Moyle et al. 2008). Salmonids, including steelhead, require cool, clear perennial streams and rivers with structural complexity for cover and low suspended sediment. Steelhead may swim upstream in during the winter to spawn in stream segments that are not accessible to other salmonids during low flows (Moyle et al. 2008). Sedimentation is a major threat to salmonids in their early life stages.

**Potential Impact:** The Trinity River and its tributaries provide habitat for the anadromous salmonid. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.

#### 5. Steelhead - northern California DPS (*Oncorhynchus mykiss irideus*)

**Special Status:** Federally Threatened; NatureServe Ranks: G5T2T3Q, S2S3

**Family:** Salmonidae

**Habitat/Life-history Requirements:** Steelhead are anadromous rainbow trout that migrate to the ocean as juveniles and return to freshwater habitats to spawn. The Northern California Distinct Population Segment (DPS) ranges from Redwood Creek to just south of the Gualala River, and includes the Eel River watershed (Moyle et al. 2008). Salmonids, including steelhead, require cool, clear perennial streams and rivers with structural complexity for cover and low suspended sediment. Steelhead may swim upstream in during the winter to spawn in stream segments that are not accessible to other salmonids during low flows (Moyle et al. 2008). Sedimentation is a major threat to salmonids in their early life stages.

**Potential Impact:** The Trinity River and its tributaries provide habitat for the anadromous salmonid. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.



6. **Summer-run steelhead trout (*Oncorhynchus mykiss irideus*)**

**Special Status:** State Candidate Endangered; CDFW Species of Special Concern; NatureServe Ranks: G5T4Q, S2

**Family:** Salmonidae

**Habitat/Life-history Requirements:** Summer-run steelhead trout remain in freshwater habitats until they reach maturity (Moyle et al. 2008). These steelhead have similar requirements during their juvenile stages, with an additional need for freshwater habitats to remain suitable throughout the summer (Moyle et al. 2008). Summer steelhead are sensitive to human disturbance and typically are only found in the most remote areas of the watersheds (Moyle et al. 2008). Sedimentation is a major threat to salmonids in their early life stages.

**Potential Impact:** The Trinity River and its tributaries provide habitat for the anadromous salmonid. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.

7. **Chinook salmon - California coastal ESU (*Oncorhynchus tshawytscha*)**

**Special Status:** Federally Threatened; NatureServe Ranks: G5, S1

**Family:** Salmonidae

**Habitat/Life-history Requirements:** The Federally Threatened Chinook salmon is the largest Pacific salmonid (Moyle et al. 2008). The California Coast Evolutionary Significant Unit (ESU) is composed of Chinook spawning in watersheds ranging from Redwood Creek south to the Russian River (Moyle et al. 2008). The anadromous salmonids return to these watersheds in the fall to spawn, after the first major rains (Moyle et al. 2008). Chinook, like other salmonids, require cool, clear perennial streams and rivers with structural complexity for cover and low suspended sediment (Moyle et al. 2008). Juvenile chinook may inhabit estuaries for an extended period (Moyle et al. 2008). Chinook are particularly sensitive to temperature and water quality, and require larger cobble and coarse gravel substrate for spawning compared to other salmonids (Moyle et al. 2008). Sedimentation is a major threat to salmonids in their early life stages.

**Potential Impact:** The Trinity River and its tributaries provide habitat for the anadromous salmonid. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.

8. **Chinook salmon – upper Klamath and Trinity Rivers ESU (*Oncorhynchus tshawytscha*)**

**Special Status:** State Candidate Endangered; CDFW Species of Special Concern; NatureServe Ranks: G5, S1S2.

**Family:** Salmonidae

**Habitat/Life-history Requirements:** The Upper Klamath and Trinity Rivers ESU includes both spring and fall-run chinook spawning upriver of the confluence of the Klamath and Trinity Rivers (Moyle et al. 2008). While fall-run chinook re-enter freshwater habitat for spawning as sexually mature adults, spring-run chinook will re-enter freshwater prior to reaching maturity and inhabit cold-water refugia for 2-4 months before spawning (Moyle et al. 2008). The anadromous salmonids



may emigrate to the ocean in the summer after emergence, or they may rear in freshwater habitats for an extended period through the fall or winter (Moyle et al. 2008). A small number remain in fresh water for a year and emigrate as yearlings (Moyle et al. 2008). Chinook are the largest Pacific salmon, and preservation of cool water habitats in the upper Klamath and Trinity Rivers is essential to the conservation of the ESU (Moyle et al. 2008). Like other salmonids, chinook are also threatened by flow reduction, sedimentation, and reduced water quality.

**Potential Impact:** The Trinity River and its tributaries provide habitat for the anadromous salmonid. The project should avoid impacts to fish and other aquatic species by minimizing runoff and observing SMA buffers.

## Invertebrates

### 1. Obscure bumble bee (*Bombus caliginosus*)

**Special Status:** CDFW Special Animals List (2020); NatureServe Ranks: G4?, S1S2

**Family:** Apidae

**Habitat/Life-history Requirements:** The obscure bumble bee occupies open grassy coastal prairies and Coast Range meadows (IUCN). This long-tongued species may pollinate flowers with elongated corollas, such as *Keckiella* spp. (IUCN). The obscure bumblebee does not fare well in agricultural or urban/suburban environments, where it is often outcompeted by more common bumblebees (NatureServe 2017). The obscure bumblebee has declined in the San Francisco Bay area, and may be threatened by habitat loss from development (NatureServe 2017).

**Potential Impact:** An occurrence mapped in CNDDDB is over 12 miles away. The property has the potential to support many native pollinators. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of agricultural activities.

### 2. Western bumble bee (*Bombus occidentalis*)

**Special Status:** State Candidate Endangered; CDFW Special Animals List (2020); NatureServe Ranks: G2G3, S1

**Family:** Apidae

**Habitat/Life-history Requirements:** The western bumble bee is a generalist short-tongued forager that may be found in open habitats such as grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows (IUCN). Like many bumble bees, the western bumble bee nests underground in abandoned rodent holes (IUCN). The western bumble bee is threatened by disease, habitat loss and degradation, and insecticides.

**Potential Impact:** An occurrence mapped in CNDDDB ~6 miles away. The property has the potential to support many native pollinators. Adhering to restrictions and regulations of pesticide use in cannabis cultivation areas, including preventing drift to native vegetation, is expected to minimize the potential impact of agricultural activities.

## Conclusion

The Staton Road Cultivation Project (APN: 524-072-010) is set in an open mosaic of mixed coniferous forest and grassland. Floristic surveys for protected plant species were completed in 2020 (see attachment E) (**BIO-1**). The BAA may provide the high canopy-closure forest habitat that supports northern spotted owls, and surveys for northern spotted owls are recommended. Surveys were completed for the 2020 season (see attachment F). Northern spotted owls should be continued to protocol until required permits are acquired (**BIO-2**). Pre-construction bird surveys are needed prior to further construction or vegetation removal during the breeding season (**BIO-3**). Pre-construction raptor and nesting bird surveys are also recommended (**BIO-4**). Raptor surveys were completed for the 2020 season (see attachment G). Raptor surveys should be continued to protocol until required permits are acquired. The applicant may avoid indirect impacts to special-status fish, amphibians, and reptiles by adhering to state and regional waterboard guidelines to minimize runoff from cultivation and observing SMA buffer distances. Minimizing light pollution and adhering to International Dark Sky Association standards will minimize potential impacts on birds, bats and other light-sensitive species. Minimizing noise pollution from generators is also important for sensitive birds, bats, and other wildlife.

## Recommended Biological Surveys

Survey Name	Description	Timing
Floristic Survey	Complete floristic surveys based on the Protocol for Surveying and Evaluating Impacts to Special Status native Plant Populations and Natural Communities (CDFW 2018).	Seasonally appropriate surveys were completed 2020-2021.
Northern Spotted Owl (NSO) Surveys	USFWS Northern Spotted Owl Protocol surveys (2012). See Attached NSO Maps and 2020 Data.	March-August, 6 visits a year. Surveys shall to protocol until necessary permits are acquired for proposed project.
Pre-Construction Bird Surveys	If natural vegetation will be removed during the nesting season for construction, pre-construction surveys for nesting birds are recommended.	Surveys will occur prior to any additional construction or clearing native vegetation Feb 1 - Aug 31.
Raptor survey	The area will be surveyed for nesting/roosting raptors by scanning the property and surrounding area from a prominent location.	Two, three-hour surveys will occur during the early/peak breeding season. Surveys will occur prior to any additional construction or clearing native vegetation between Feb 1 and Aug 31. Surveys shall be continued to protocol until necessary permits are acquired for the proposed project.

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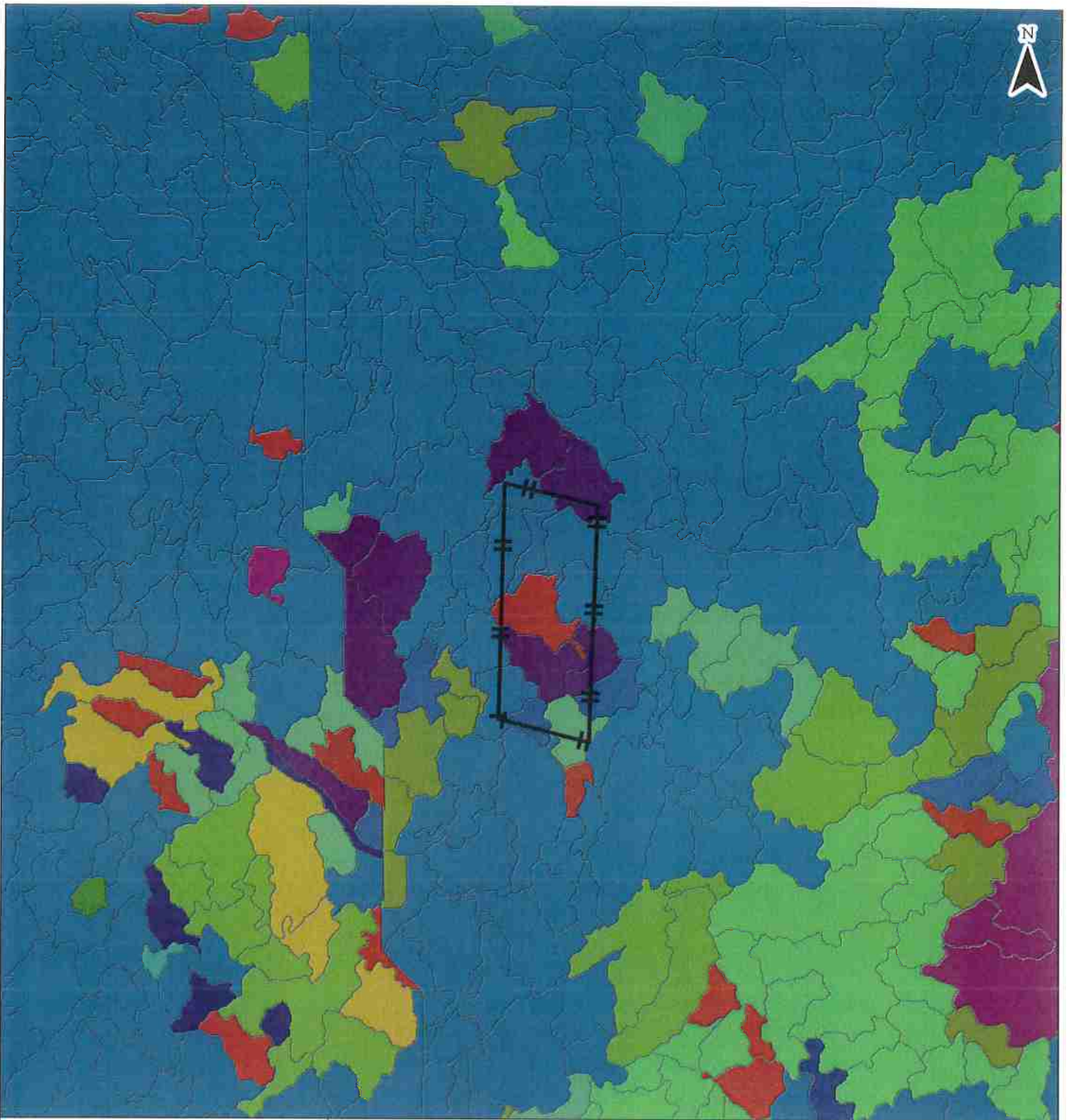
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
















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524-072-010

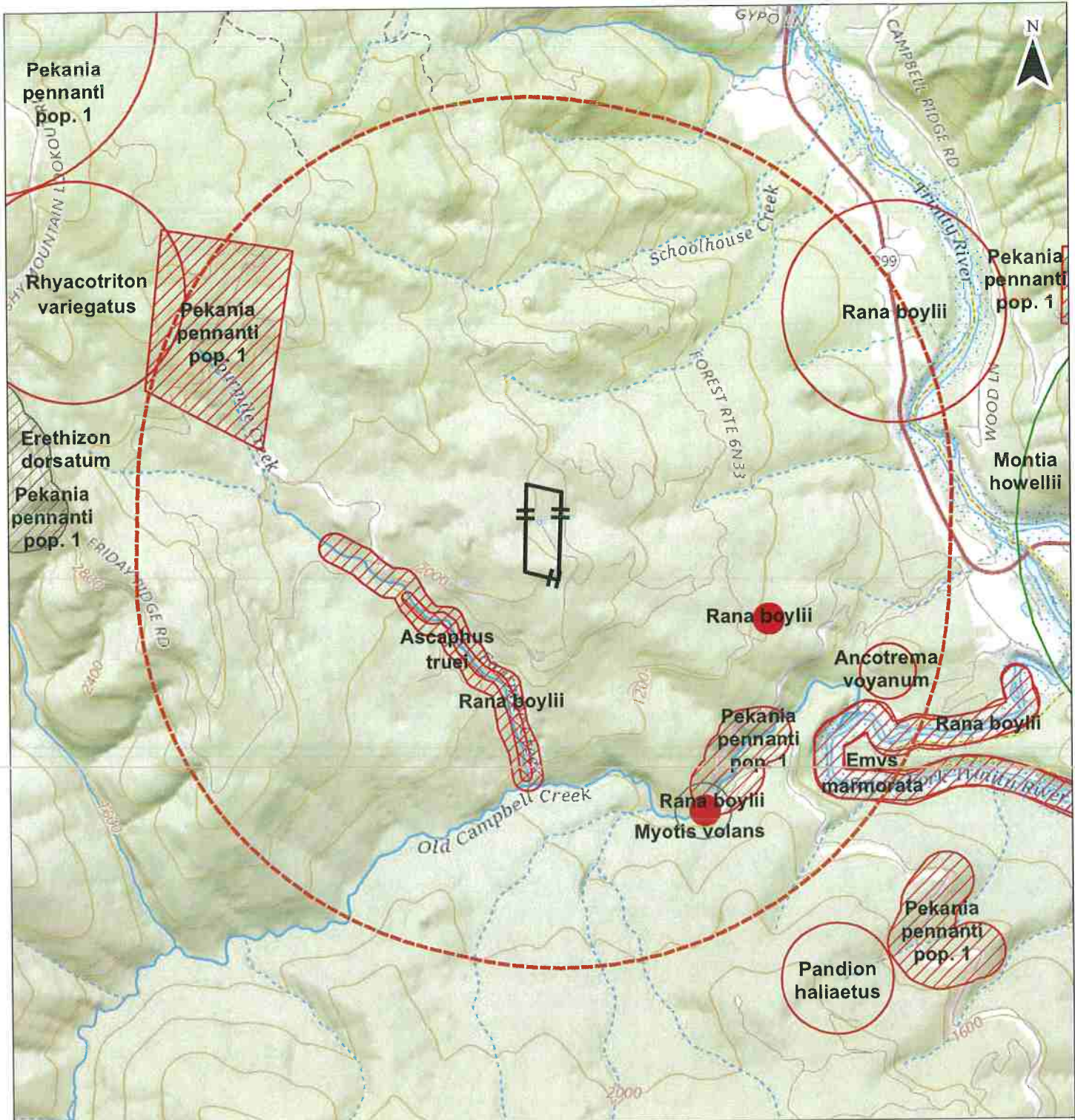
Section 17; T6N; R5E; HB&M; Humboldt  
County  
Located on the Willow Creek 7.5' USGS  
Quadrangle

- |  |   |   |
|--|---|---|
|  Parcel Boundary              |  Lower Montane Mixed Chaparral |  Tanoak (Madrone)              |
|  Annual Grasses and Forbs     |  Manzanita Chaparral           |  Upper Montane Mixed Chaparral |
|  Black Oak                    |  Montane Mixed Hardwood        |  Urban-related Bare Soil       |
|  Canyon Live Oak              |  Non-Native/Ornamental Shrub   |  Urban/Developed (General)     |
|  Douglas-Fir - Ponderosa Pine |  Oregon White Oak              |   |
|  Gray Pine                    |  Pacific Douglas-Fir           |   |
|  Interior Mixed Hardwood      |  Perennial Grasses and Forbs   |   |

0 435 870 1,740 Contour Interval: 40'  
 Feet 1 inch = 943 feet










Hohman And Associates Forestry Consultants  
Date: 6/13/2022





Staton Road APN:  
524-072-010

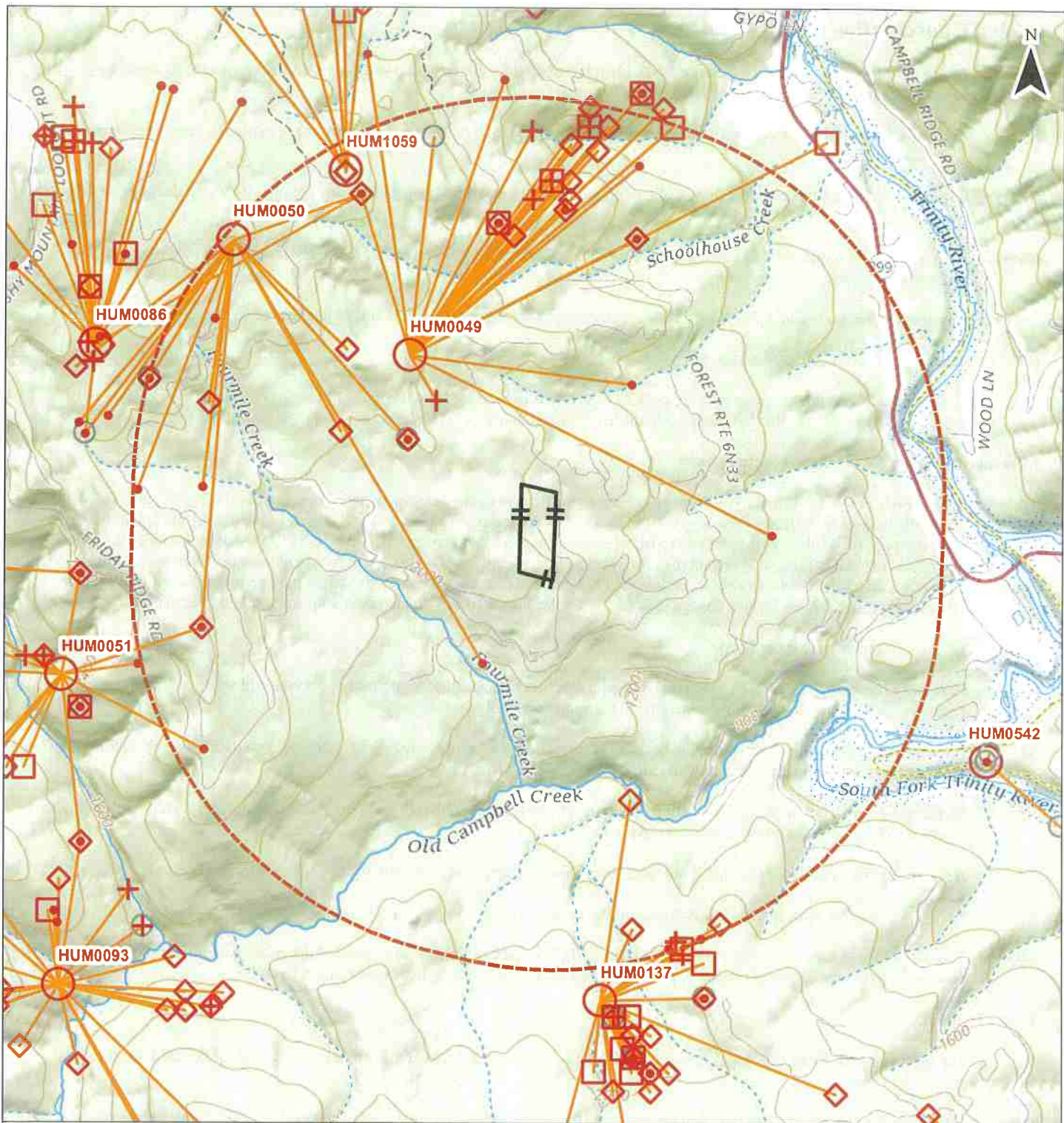
Section 17; T6N; R5E; HB&M; Humboldt  
County  
Located on the Willow Creek 7.5' USGS  
Quadrangle

-  Parcel Boundary
-  1.3 mi BAA
-  Plant (circular)
-  Animal (80m)
-  Animal (specific)
-  Animal (non-specific)
-  Animal (circular)
-  Multiple (non-specific)
-  Multiple (circular)












Contour Interval: 40'  
1 inch = 2,530 feet





Staton Road  
 APN: 524-072-010

Section 17; T6N; R5E; HB&M; Humboldt  
 County  
 Located on the Willow Creek 7.5' USGS  
 Quadrangle

-  Parcel Boundary
-  1.3 mi BAA
-  Nest
-  Young
-  Pair
-  Other Positive Observation
-  Negative Observation
-  Activity Center
-  Spotted Owl Spider Diagram

0 1,150 2,300 4,600  
 Feet Contour Interval: 40'  
 1 inch = 2,530 feet

# Attachment D

## Global Conservation Status Definition

Listed below are definitions for interpreting NatureServe global (range-wide) conservation status ranks. These ranks are assigned by NatureServe scientists or by a designated lead office in the NatureServe network.

- G1** **Critically Imperiled** – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- G2** **Imperiled** – At high risk of extinction or elimination due to very restricted range, very few populations, steep declines, or other factors.
- G3** **Vulnerable** – At moderate risk of extinction or elimination due to a restricted range, relatively few populations, recent and widespread declines, or other factors.
- G4** **Apparently Secure** – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5** **Secure** – Common; widespread and abundant.
- G#G#** **Range Rank** – A numeric range rank (e.g. G2G3, G1G3) is used to indicate the range of uncertainty about the exact status of a taxon or ecosystem type. Ranges cannot skip more than two ranks (e.g., GU should be used rather than G1G4).

## Intraspecific Taxon Conservation Status Ranks

- T#** **Intraspecific Taxon** (trinominal) – The status of intraspecific taxa (subspecies or varieties) are indicated by a “T-rank” following the species global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T subrank cannot imply the subspecies or variety is more abundant than the species. For example, a G1T2 subrank should not occur. A vertebrate animal population, (e.g., listed under the U.S. Endangered Species Act or assigned candidate status) may be tracked as an intraspecific taxon and given a T-rank; in such cases a Q is used after the T-rank to denote the taxon’s informal taxonomic status.

## Subnational (S) Conservation Status Ranks

- S1** **Critically Imperiled** – Critically imperiled in the jurisdiction because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the jurisdiction.
- S2** **Imperiled** – Imperiled in the jurisdiction because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from jurisdiction.
- S3** **Vulnerable** – Vulnerable in the jurisdiction due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation.
- S4** **Apparently Secure** – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5** **Secure** – Common, widespread, and abundant in the jurisdiction.
- S#S#** **Range Rank** – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).

## Rank Qualifiers

- ?** **Inexact Numeric Rank** – Denotes inexact numeric rank; this should not be used with any of the Variant Global Conservation Status
- Q** **Questionable taxonomy that may reduce conservation priority** – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or inclusion of this taxon or type in another taxon or type, with the resulting taxon having a lower-priority (numerically higher) conservation status rank. The “Q” modifier is only used at a global level and not at a national or subnational level.



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**Raptor Survey Report  
APN #524-072-010**

Prepared by  
Grace Sanderson  
9/1/2021  
Revised  
6/24/2022

Prepared for  
**Mad River Properties**  
and  
**Hohman and Associates**  
Hydesville, CA





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## Raptor Survey Summary

June 24, 2022

Hohman and Associates has conducted pre-construction raptor surveys on behalf of Michael Bobillot, who is seeking permits for commercial cannabis cultivation under the Humboldt County Commercial Cannabis Land Use Ordinance (CCLUO a.k.a Ordinance 2.0). The property is located in Section 17, Township 6 North, Range 5 East HB&M; Humboldt County, on the Willow Creek USGS 7.5' quadrangle. The project area consists of one assessor's parcel (APN: 524-072-010). The property is approximately 30 acres. The property provides potential nesting and foraging habitat for sensitive and protected raptor species.

Two raptor surveys were conducted on April 1, 2021 and May 20, 2021. No sensitive or protected raptor species were observed during the two surveys. Turkey vultures were observed during both surveys. No nesting behavior was observed on or near the property and no further surveys are recommended for 2021. The proposed operations are not expected to impact any nesting raptors at this time, but the project should incorporate measures to reduce disturbance from noise and lights to raptors. If additional construction is planned for 2022, raptors surveys will be recommended again for the breeding season in 2022.

Please see attachments as follows:

- April 1, 2021 Raptor Scan Survey Sheet
- May 20, 2021 Raptor Scan Survey Sheet
- Raptor Survey Station Map

Please contact us by phone or email if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "G Sanderson", is written over a horizontal line.

Grace Sanderson  
Biologist  
Hohman & Associates Forestry Consultants  
GSanderson@hohmanandassociates.com



P.O. Box 733, Hydesville, CA 95547 . (707) 768-3743 . (707) 768-3747 fax

# RAPTOR SURVEY SHEET

Target Species: \_\_\_\_\_ Survey Type: Raptor Survey #: 1 Date: 4/1/21

Location: Station Rd. Harvest Plan: Bobo Hot Surveyor: Shane S

Station Locations\*: \_\_\_\_\_

\*Record locations of all stations used for the survey in Lat, Long

Station #	Start Time	End Time	Species	Time Detected	Detection Type (Visual/Auditory)	Sex/Age	Distance (ft.)	Azimuth (Deg)	Temp (F°)	Precip	Wind	Notes (behavior, nesting status, disturbance and any other pertinent observations)
1	11:30	2:30	1									
1			Turkey Vulture	12:15	✓		700'	45°	65	0	1	
1			Turkey Vulture	1:30	✓		500'	80°	70	0	1	

**Precipitation**

- 0=None
- 1=Fog
- 2=Mist
- 3=Light rain
- 4=Heavy rain
- 5=Snow

**Wind**

- 0=Calm (0mph, No wind)
- 1=Light air (1-3mph, cannot feel wind on face)
- 2=Light breeze (4-6mph, leaves rustle, can feel wind on face)
- 3=Gentle breeze (7-10mph, leaves and twigs in constant motion)
- 4=Moderate breeze (11-16mph, wind raises dust, small branches move)

• worker mentioned sightings of an Osprey by the pond behind survey location mainly in the evenings.



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# RAPTOR SURVEY SHEET

Target Species: Raptors Survey Type: Raptor scan Survey #: 2 Date: 5/20/21  
 Location: Station Rd. Harvest Plan: Babbitt Station Road Surveyor: S.S.

**Station Locations\*\*:**

\*\*Record locations of all stations used for the survey in Lat, Long

Station #	Start Time	End Time	Species	Time Detected	Detection Type (Visual/Auditory)	Sex/Age	Distance (ft.)	Azimuth (Deg)	Temp (F)	Precip	Wind	Notes (behavior, nesting status, disturbance and any other pertinent observations)
1	11:45	2:45	Turkey Vulture	12:30	V		300'	60°	60	0	1	
			Turkey Vulture	1:10	V		200'	120°	63	0	1	

Precipitation
0=None
1=Fog
2=Mist
3=Light rain
4=Heavy rain
5=Snow

Wind
0=Calm (0mph, No wind)
1=Light air (1-3mph, cannot feel wind on face)
2=Light breeze (4-6mph, leaves rustle, can feel wind on face)
3=Gentle breeze (7-10mph, leaves and twigs in constant motion)
4=Moderate breeze (11-16mph, wind raises dust, small branches move)



Staton Road New Earth Farms  
Raptor Station Map  
Sec. 17, T6N, R5E, HB&M  
Humboldt County, CA  
USGS 7.5' Quad: Willow Creek

1 inch = 1,000 feet



Raptor Station



New Earth Farms Parcel

