

BIOLOGICAL RESOURCES ASSESSMENT



Prepared For:
690 Tule Creek Road
Hayfork, CA 96041
APN# 014-460-75-00

April 2, 2019
Completed by:
Klamath Wildlife Resources
Redding, CA 96001
Biologist: Brian Shaw
Brian Shaw

1. INTRODUCTION

This biological resources assessment is prepared in accordance with legal requirements in accordance with California Environmental Quality Act (CEQA) statutes for Trinity County, as well as the newest “Appendix D” for Regional Water Quality Control and California Department of Fish and Wildlife 2018 statutes for proposed new cannabis cultivation sites, as per *Section 722, Title 14 of the California Code of Regulations to read: § 722. General Lake or Streambed Alteration Agreement for Activities Related to Cannabis Cultivation.* The document presents technical information upon which later decisions regarding project impacts are developed. This document also covers the requirements of the California State Water Resources Control Board’s 2011 requirements for a Biological Resources Assessment.

The proposed project is a proposed Cannabis cultivation operation that is applying for annual licensing under the CalCannabis Cultivation Program. Please see **Figures 1-4** below for the description and location of current and proposed facilities that currently and are proposed for implementation for this production area.

PROJECT LOCATION

The project site consists of a 53.90 acre parcel located just off of Highway 3 on Tule Creek Road on the west side of the town of Hayfork, California. Cultivation is proposed to take place on APN # 014-460-75-00, (Figure 1: Vicinity Map). According to California USGS 7.5-Minute Quadrangles Index map, the project site is the Hayfork quadrangle. The project will consist of upgrading existing facilities on the property and adding a few out buildings, as per **Figure 4** below.

Figure 1: Vicinity Map

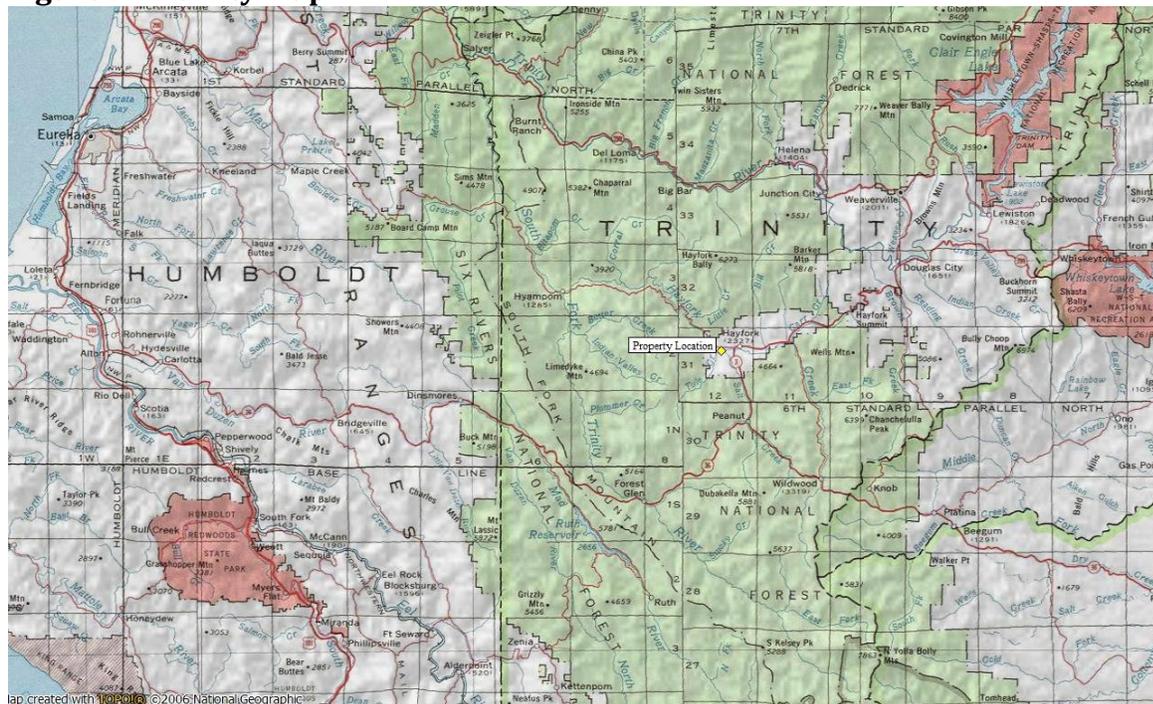


Figure 2: Project Site Location Map

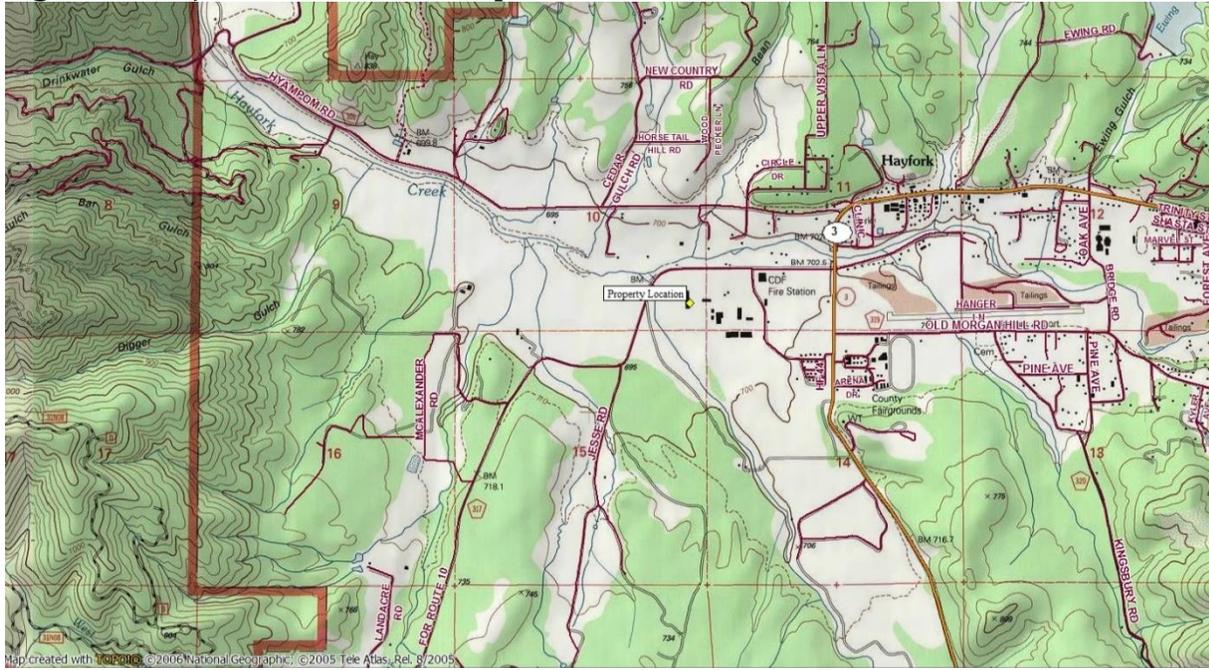


Figure 3: Project Site Map Air Photo



Figure 4: PROPOSED PROJECT SITE MAP

See Project Description above to reference along with the below map.



EXISTING SITE and HABITAT CONDITIONS

The near 54 acre property parcel is located along Tule Creek Road, which is about a half mile west of Highway 3 in Hayfork, CA. The property is unevenly shaped, with the western bordering Tule Creek. Access to the site is a simple driveway onto the site on the south side of Tule Creek Road. The property is located at a well-known previous timber processing mill site, long owned by Trinity Lumber Company until 1965. Then operated by Sierra Pacific Industries until 1996. The mill site has been abandoned and in a state of disrepair since that time. Due to this, the property is mostly in what is considered “non-native” or “industrialized” land. One exception to this is discussed below.

The property lies within the Klamath Mountains of northern California, which above ~2000 feet consist of continuous varying types of coniferous forest with some deciduous forest also. Below that elevation there is a mixing in of Oak-Pine forest and chaparral habitat types. The elevation of the property flat at the bottom is about 2300 feet.

There are no coniferous forests, mix coniferous-deciduous forests on this property as it is out in the middle of the Hayfork Valley and on a previously developed industrial site. There is a deciduous riparian wetland on the property, consisting of 8 acres in what used to be the “log floating pond” for the timber mill. This area is now a moderately mature riparian forest, with tall Black Cottonwood over story and willow, blackberry and open wetland understory, which is listed as Montane Riparian (MRI) as per California Wildlife

Habitat Relationships Laudenslayer, 1990. There are some California Black Oak mixed into this forest type also, which is typical at this elevation. Finally, there also exists riparian alder habitat along the full length of the edges of the strongly flowing Salt Creek located on the western edge of the property, which is a Class I creek.

Table 2 – NRCS Soils Survey Query

A soils search was completed for the property, using the NRCS Soils Search online query; only one soils associations (**Table 2**) occurring on the property. The **Dredge Tailings (Xerofluvents) and Carr Creek Gravelly Loam** soils families are the soils found underlying the property. The Xerofluent type is common in the Hayfork valley and a result of all of the historical dredging of large cobbles and gravels back during the large mining operations that occurred in the late-1800’s and early 1900’s. These are found nearer to Salt Creek. Similarly, the Carr Creek gravelly loam is also a valley soil consisting of deposited alluvial mountain stream channels. These are found on the slight upland areas just west of Salt Creek on the property. These are the only two soils found on the property. Water is also a constituent of the property and is listed on the soils report; which are found in the 8 acre wetland and Salt Creek itself.

NRCS Soils Table

Trinity County, California, Weaverville Area (CA606)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
102	ATTER-DUMPS, DREDGE TAILINGS-XEROFLUENTS COMPLEX, 2 TO 9 PERCENT SLOPES	17.9	33.1%
123	CARRCREEK GRAVELLY LOAM, 0 TO 2 PERCENT SLOPES	29.1	53.7%
220	WATER	7.1	13.2%
Totals for Area of Interest		54 AC	100.0%

NRCS Soils Survey Map – Figure 5



BIOLOGICAL QUALIFICATIONS

Klamath Wildlife Resources Senior Biologist, Brian Shaw has been approved by CDFW and CWQCB biologists as “qualified” to compete biological studies and reports for projects such as this, where there is ground manipulating activities on natural or non-natural lands. Brian Shaw has a Bachelor’s of Science in Biological Science and a Bachelors of Arts in Geography. His understanding of northern California ecosystems is well understood and on par with any biologist in the field in California. He has owned and operated Klamath Wildlife Resources since the year 2000 and has been completing all types of biological surveys and reports and many other types of environmental surveys and reports since that time. His resume is attached as Appendix B for further reference.

2. METHODS

LISTED, PROPOSED, AND CANDIDATE SPECIES POTENTIALLY PRESENT

A list of threatened, endangered and sensitive species list for the surrounding area including Hayfork and adjacent quadrangles; which were reviewed to evaluate the potential was created using the California Natural Diversity Database (CNDDDB) out to 10 miles from the property center. The following list was created as a result, showing the species’ state and federal listings:

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Table 1 – CNDDDB and USFWS TES Combined Species List

Species	CDFW	State Listing	Federal	CNPS Plant Ranking
Found Within 1 mile of Subject Property				
California Wolverine (<i>Gulo gulo</i>)		Threatened		
Western Pond Turtle (<i>Clemmys marmorata</i>)		SSC		
Pacific Fisher - West Coast DPS (<i>Pekania pennanti</i>)	SSC	SSC	Candidate	
Foothill Yellow-Legged Frog (<i>Rana boylei</i>)	SSC			
Golden Eagle (<i>Aquila crysaetos</i>)	SSC			
Tailed Frog (<i>Ascaphus truei</i>)	SSC			
Summer-run steelhead trout (<i>Oncorhynchus mykiss irideus</i>)	SSC			
Summer run chinook salmon (<i>Oncorhynchus tshawytscha spring-run</i>)	SSC			
Osprey (<i>Pandion haeliaetus</i>)	SSC			
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	-	Endangered	Threatened	
Pallid bat (<i>Antrozous pallidus</i>)	SSC	-	-	
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SSC			
Northern Spotted Owl (<i>Strix occidentalis caurina</i>)	SSC	Threatened	Threatened	
Gray Wolf (<i>Canis lupis</i>)			Endangered	
Nile's Harmonia (<i>Harmonia doris-nilesiae</i>)				CNPS 1B
Tracy's Eriastrum (<i>Eriastrum tracium</i>)				CNPS 1B

Hoover's Spurge (<i>Chamaesyce hooveri</i>)		Threatened		CNPS 1B
Slender Orcutt Grass (<i>Orcuttia tenuis</i>)		Threatened		CNPS 1B
Wooly Meadowfoam (<i>Limnanthes floccosea</i>)				CNPS 1B

The USFWS list of federally listed plants, animals and habitats is listed in the Appendices.

STUDIES REQUIRED

Studies required include a general wildlife and aquatic survey and botanical survey. Descriptions of the methodologies used to conduct the wildlife and botanical evaluations are provided below. These surveys were completed on March 14, 2019.

WILDLIFE and BIOLOGICAL EVALUATION

A wildlife evaluation was conducted to determine if habitat potentially capable of supporting endangered, threatened, proposed, or candidate species is present, or may be present, in the study area. The wildlife evaluation was conducted in two stages. First, historical occurrence databases were queried to identify federally listed, proposed, and candidate animal species previously reported in the vicinity of the study area, and/or potentially affected by construction within this project. These records include CNDDDB records (CDFW, 2019), and critical habitat GIS data maintained by the National Marine Fisheries Service (NMFS, 2019) and US Fish and Wildlife (USFWS, 2019), all listed above. The second stage of the project consisted of a habitat and species study within and just beyond the bounds of the imprint of the study area. Based on the results of the records review and this field evaluation, the potential for federally listed, proposed, and candidate animal species to utilize habitats in the study area was determined to be minimal. A field study was completed by Brian Shaw on March 14, 2019. The results of the survey are discussed below.

BOTANICAL EVALUATION

A botanical evaluation was conducted to determine if habitat potentially capable of supporting federally listed, proposed, or candidate plant species exists in the study areas. The botanical evaluation was completed in two stages. First, historical occurrence databases were queried to identify federally listed, proposed, and candidate species previously reported in the vicinity of the study area, and/or species that could potentially be affected by the construction within this project. These records included the USFWS species list for the Hayfork quadrangle and adjacent quadrangles, California Natural Diversity Data Base (CNDDDB) records (CDFW, 2019), and critical habitat geographic information system (GIS) data maintained by the USFWS (USFWS, 2019). The second stage of the study consisted of a field visit and project walkthrough and survey of the natural environment in and near the project footprint. The survey generally followed the CDFW *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, 2009*. Botanical TES species were the most likely life forms to be discovered on or near to the open field where the construction of processing buildings will be placed.

Time Spent At Site: A full four hours was spent evaluating the approximate 54 acre parcel, with focus on areas where buildings will be built. This was plenty of time to evaluate the variety of natural habitats and land uses on property for botanicals, birds, mammals, habitats and make in depth biological evaluations for the site.

AGENCY COORDINATION

There are no consultations necessary with regulatory agencies for fish, wildlife or botanical species are a result of the proposed project, or as a result of the biological and botanical survey.

BOTANICAL EVALUATION

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AGENCY COORDINATION

There are no consultations necessary with regulatory agencies for fish, wildlife or botanical species are a result of the proposed project, or as a result of the biological and botanical survey.

3. RESULTS: ENVIRONMENTAL SETTING

DESCRIPTION OF EXISTING BIOLOGICAL AND PHYSICAL CONDITIONS

The study area is located in the Trinity Mountains at 2300 feet above sea level and is mostly located in a north-south trending small creek valley with steep ridges on either side to the east and west. As the air photo above shows (**Figure 3**) the setting is within a few different habitat types, including Montane Riparian and Industrial (Laudenslayer, 1990) types, with only the already used agriculture flat areas that will be used for cannabis cultivation. There will be no trees removed nor habitat manipulated in either the forested or riparian vegetation type areas. Between the forested and riparian areas, the proposed portion of the valley that is already being used for agriculture has long since been mostly converted to farming for cannabis and other crops that can be grown at this elevation.

The climate of this part of Trinity County is on the edge of the Pacific Northwest climate and Mediterranean climate in nature, but exhibits the dry summers characteristic of

California. Thus, dry summers are the case here with somewhat to very wet, and somewhat temperate winters. Annual precipitation in Hayfork, CA the town is: 52” per year (WRCC, 2019).

4. RESULTS: BIOLOGICAL RESOURCES, IMPACTS, AND MITIGATION

OCCURRENCES OF FEDERAL and STATE LISTED, PROPOSED AND CANDIDATE WILDLIFE SPECIES

The USFWS and California State species list for the Hayfork and adjacent quadrangles list the following federal and state listed, proposed, or candidate, Critical habitat animal species as potentially being affected by work proposed in the quadrangle.

Animals

- **Northern Spotted Owl** (*Strix occidentalis*)
- **Yellow Billed Cuckoo** (*Coccyzus americanus*)
- **Gray Wolf** (*Canis lupis*)
- **Conservancy Fairy Shrimp** (*Branchinecta conservatio*)
- **Vernal Pool Fairy Shrimp** (*Branchinecta lynchi*)
- **Pacific Fisher** (*Martes pennant*)
- **California Wolverine** (*Gulo gulo*)

Discussion

For all of the above USFWS listed (first five above) species, the US Fish and Wildlife service has nearby “critical habitat” and occurrences for these species. Also, Appendix B further states that “there is critical habitat for one of these species” on the property. Northern Spotted Owl critical habitat is located on the property. However, this habitat is on the north and western fringes of the property where Klamath Mixed Conifer forest exists only in a small edge strip. Northern Spotted Owl is discussed further below.

Northern Spotted Owl (*Strix occidentalis caurina*)

A medium sized chocolate brown owl with dark eyes, the northern spotted owl is a nocturnal owl that captures its prey by perch and pounce stealth, eating mostly small forest rodents. Northern spotted owl live in forests characterized by dense canopy closure of mature and old-growth trees, abundant logs, standing snags, and love trees with broken tops. These forests have been largely reduced as a result of western forest logging in their range. As a result of this habitat loss, their numbers have significantly diminished by approximately half since the early 1980's to around 2000 pairs, with 560 pairs in northern California.

Habitat at the building site is non-forested, thus NSO and their habitat will not be affected by the minor construction of buildings on the property. No NSO or its habitat will be affected in any way by this project. Below is a list of the NSO territories found within a 5 mile radius.

NSO Territory State Name	NSO Geographic Name	Year Last Active	Distance from Subject Parcel
TRI-180	Little Creek	1990	2.5 Miles
TRI-403	Little Creek	1996	2.0 Miles
TRI-389	Sims Gap	2000	1.5 Mile

The last detection that was received from any of these territories was from the Sims Gap territory in 2000. Due to the lack of USFS NSO survey data and lack of forest management (which is mostly beneficial to NSO), there is no more current data on these territories. Only one of the three territories had a nest associated with it, which was the Sims Gap territory in 1997.

For the subject proposed project, the bottom line is that there will be no NSO Nests, individuals, territories, or NSO functional habitat modified or touched as a result of this project.

Yellow Billed Cuckoo (*Coccyzus americanus*)

This bird is a medium sized bird with plumage that is grayish-brown above and white below, with red primary flight feathers. The tail feathers are boldly patterned with black and white below. The legs are short and bluish-gray. Adults have a narrow, yellow eye ring. Western yellow-billed cuckoos breed in large blocks of riparian habitats (particularly woodlands with cottonwoods and willows). Dense understory foliage appears to be an important factor in nest site selection.

There are no known occurrences of YBC within from over ten miles of the project area. However, large areas of suitable riparian habitat do exist within this range along Hayfork Creek. However, there has not been a montane riparian detection of a Yellow-Billed Cuckoo in California in over 50 years. Also, there is no USFWS deemed critical habitat found anywhere close to the property. Further, the very small area that is to be built upon is not close to any riparian areas. There will be no effect on this species as a result of the project.

Osprey (*Pandion haliaetus*)

What used to be called the “fish hawk”, this species 100% hunts on fish from rivers and lakes. It nests on nearby broken topped conifer trees or power poles. The species is uninhibited about placing its nest in disturbed areas. As long as its near a productive fish producing body of water it can hunt, swoop and grab fish from.

The species was seen flying over the property during the field visit, upstream along Hayfork Creek where I am certain it was hunting for fish. CNDDDB also has an existing nest occurrence about 3 miles north of the property along Big Creek. However, without a doubt the species has territories up and down Hayfork Creek that simply haven’t been documented, which includes this individual that was seen during this spring 2019 survey. No large nest structures for this species or large other raptors were seen either during an

extensive search this day. The only large trees that could support an Osprey nest would be within the 8 acre riparian area on the north side of the property.

No existing known nests or territories or individuals of this species will be effected by this project.

Gray Wolf (*Canis lupus*)

Recently re-introduced into the northern California counties, both the State of California and the USFWS has listed the California population of wolves and its critical habitat areas as Endangered. The Gray Wolf, being a keystone predator, is an integral component of the ecosystems to which it typically belongs. The wide range of habitats in which wolves can thrive reflects their adaptability as a species, and includes temperate forests, mountains, tundra, taiga, and grasslands.

Trinity County and its wide open and remote spaces and wide variety of habitats provide very good potential habitat for the gray wolf. The species was found in Trinity County prior to modern settlement (past 150 years). However, at current time, there is only the two packs of wolves in California, which are have been very recently released and the again found and have moved along the northeastern counties of Siskiyou, Shasta, Modoc, Plumas, Sierra and Lassen Counties. This pack has also had offshoots of reproduction very recently forming another pack, which again are located in these same counties thus far.

There are no areas of critical habitat listed near the project area for gray wolf. Also, there are no recent or historical species accounts in any of the USFWS or CNDDDB databases for the species within ten miles of the project area. Thus no gray wolf or its habitat will be affected by this project.

California Wolverine (*Gulo gulo*)

Wolverines appear to have few specific habitat requirements aside from extensive areas of wilderness dominated by coniferous forest of sufficient size to support wide-ranging, solitary individuals. In the continental United States, wolverines are primarily found in stands dominated by true-fir, spruce, hemlock, Douglas-fir, or lodgepole pine.

In northern California, where the recent location of the wolverine was found, which now IS its known "habitat type", as it is the only currently known wolverine in California, includes high elevation Jeffrey pine, California red fir, Sierra mixed conifer, and lodgepole pine.

The California Wolverine is listed as a California State threatened species. The recent sightings show that wolverine still exist in California. There are undoubtedly many more of the species, as the species was discovered at a "bait station" while conducting "carnivore protocol surveys" by biologists. The vast majority of the vast mountainous, forested and above treeline alpine areas in California are not being surveyed in this way. Thus, it can be somewhat confidently surmised that more of the species exist, but just are not seen, as they are a reclusive species.

One other somewhat recent sighting was recorded somewhat near to the subject property, about 5 miles north along Philpot Creek near the Philpot Creek USFS campground in 1991.

And again, bait station Carnivore surveys (Zielinski et al protocol, 1995) have not been conducted on any type of wide ranging scale in any of the forests of northern California except the Plumas NF and their 10-year, well-funded “Quincy Library Group” set of forest fire protection pilot projects. Thus, with the one detection nearby to the subject property, it is easy to surmise that the species is still present in the Trinity Mountains and Trinity County.

However, there is no natural or native habitat existing on the project building site for really any species of animal or bird. These is thus no appropriate habitat for the species that will be modified as part of this project.

Pacific Fisher (*Pekania pennanti*)

A Federal Candidate and CA State Candidate species for listing, the Pacific Fisher is currently listed as a California species of special concern. Fishers prefer large areas of dense mature coniferous or mixed forest and are solitary animals. They are mainly nocturnal, but may be active during the day. They travel many miles along ridges in search of prey, seeking shelter in hollow trees, logs, rock crevices, and dens of other animals. Fishers in California prefer a strong component of oak, with California Black Oak for denning in their natural broken off tops and side branch holes that are left. Trinity County possesses very good habitat characteristics for the species, as is evident as four separate reported locations of the species exist within five miles of the project area, the most recent in 1995. The mixed-conifer and oak sub-component and wide open spaces of Trinity county provide very good habitat conditions for the species.

However, there is no natural or native habitat existing on the project building site for really any species of animal or bird. These is thus no appropriate habitat for the species that will be modified as part of this project.

Foothill Yellow-Legged Frog (*Rana boylei*)

Foothill yellow-legged frogs are primarily stream dwelling and can be found mostly near water with rocky substrate, as found in riffles, and on open, sunny banks. They are a small to medium sized frog (1” to 3” across) with yellow upper thighs on the undersides of their legs. They live in mostly mountain and foothill creeks through most of California, and are found in mostly undisturbed riparian areas with rocky or open sandy banks where they can bask and hunt.

The species and other amphibian/herpetophile species were searched for in both Hayfork Creek and the unnamed very small perennial creek that flows north to south through the property. Salt Creek is an appropriate sized creek with many gravel and rock bars along its length. There are no known occurrences of the species along the creek however anywhere near the property. Also – a full walk of the creek bank was completed by the biologist on this day, where no amphibians of any kind were found. An amphibian search also was completed down into as much of the wetland area that could be accessed. There were several pacific tree frogs (*Pseudacris regilla*) and bullfrog (*Lithobates catesbeianus*) found to inhabit the riparian area.

Further, there are no buildings or growing areas that will be built anywhere close to the creek. Also – the setbacks required for an production are far beyond the required distances from the creek as per CalCannabis requirements.

Tailed Frog (*Ascaphus truei*)

The single species of the frog family Ascaphidae (order Anura). It is restricted to cold, clear forest streams of the Pacific Northwest. They prefer cold, fast-moving streams with cobblestone bottoms. They are mostly aquatic, but adults may emerge during cool, wet conditions to forage terrestrially.

The species and other amphibian/herpetophile species were searched for in on the banks of Salt Creek. This creek would be considered “below average” quality of habitat for the frog. There were no adults, juveniles or egg sacs found during the search up both sides of the creek.

Further, there are no buildings or growing areas that will be built anywhere close to the creek. Also – the setbacks required for production are far beyond the required distances from the creek as per CalCannabis requirements.

Western Pond Turtle (*Emys marmorata*)

Western pond turtles can be found throughout California west of the Cascade-Sierras from near sea level to 4,700 feet. They prefer calm waters, typically found on and near lakes and ponds with basking sites that include protruding logs and rocks where often many can be seen basking at one time together.

There is the large wetland at the north end of the property. The wetland though has only minimal habitat for the turtle. There are some small pools of standing water that could provide adequate habitat for the species. The biologist walked as much of the riparian area as possible and saw no WPT individuals. The biologist also walked the banks of Salt Creek, which only has minimal habitat for the species (calm pools). No WPT were found during the search.

Finally, there are no buildings or growing areas that will be built anywhere close to the creek. Also – the setbacks required for production are far beyond the required distances from the creek as per CalCannabis requirements.

Deer Herds

A herd of 15-20 deer inhabit this and adjacent properties year round. These deer are of course attracted to the grasslands along the valley bottom of Hayfork Valley. They also have a year round water source here. Thus there is no reason for the deer to leave, as the elevation also is below where a snowpack occurs (there is snowfall, but mostly melts quickly). Thus, this is a year-round haven for these smart deer. There are vast areas of grasslands and water and forage for deer to continue to thrive here.

The minor construction and continued cannabis production here will not impede continued forage and habitat for deer herds that are permanent or seasonally migrating through the Hayfork Valley, which this property is a part of.

FISHERY SPECIES

Summer Run Steelhead Trout (*Oncorhynchus mykiss irideus*)

Spring Run Chinook Salmon (*Oncorhynchus tshawyacha*)

These two anadromous fish species run up Hayfork Creek and its tributaries during the summer months as it comes up from the main stem Trinity River downstream. Salt Creek flows into Hayfork Creek just north (150 feet) of the NW corner of the property boundary. This creek is not listed on the CNDDDB or USFWS databases to be migrating or spawning grounds for either species. However, these fish most certainly use the creek to some degree due to the close proximity to its confluence with Hayfork Creek. However, the creek remains untouched by any of the cannabis operations currently and are far from the proposed building location. There will be no effect on either species as a result from the project.

Other Species

The following TES species are listed on the USFWS and CNDDDB wildlife queries for the area as occurring close to the project site, but have no suitable habitat located on the subject property building location:

- Conservancy Fairy Shrimp (*Branchinecta conservation*) - No vernal pools on property.
- Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) - No vernal pools on property.
- Vernal Pool Tadpole Shrimp (*Lepidurus packardii*) – No vernal pools on property.

Wildlife/Avian Survey and Results

KWR biologist Brian Shaw completed a wildlife and avian survey on March 14, 2019. A pair of red-tailed hawks were seen flying over during the survey. A nest search was conducted in the riparian area, with no nests found. Thus a generalized observation survey was completed. There were no Endangered, Threatened, Candidate or Sensitive species found, nor were there any nests found that would be protected by the Migratory Bird Treaty Act during the March 2019 field survey. All observed avian and wildlife species that were detected are listed below:

Birds

- Turkey Vulture x 2
- Red-Tailed Hawk – Fly Over
- Canada Geese x 6
- Scrub Jay
- White-crowned Sparrow
- Tree Swallow

BOTANICAL STUDY

USFWS Listed Plants – Hayfork and adjacent quadrangle query out to 10 miles from project site:

- Hoover’s Spurge (*Chamaesyce hooveri*)
- Slender Ocrutt Grass (*Orcuttia tenuis*)
- Woolly Meadowfoam (*Limnanthes floccosea*)

Further Review of CNDDDB/CDFW records found the following additional California Native Plant Society (CNPS) plant species and information: California Department of Fish and Wildlife considers rare plant species as defined by CNPS to be special status species “List 1B, List 2” species are considered special status, as are List 3 and 4 species if they can be shown to meet the definition of Rare or Endangered under CEQA Guidelines sections 15125 (c) and/or section 15380. Impacts to these species must be analyzed during the CEQA process. These species thus, are as follows:

Eriastrum tracyi – Tracy’s eriastrum: CNPS 1B

Harmonia doris-nilesiae: Nile’s harmonia CNPS 1B

The CNPS listed species shown above are the California protected species when considering a new project in an area. *C. hooveri* and *O. tenuis* are found only in vernal pool areas, and there are no vernal pools on any part of the subject property. Thus this species will not be affected by the proposed project. *E. tracyi* is found in shaly, clay soils and open rocky lands, often amongst chaparral species like *A. fasciculatum* on very exposed hillsides. While *H. doris-nilesiae* is a serpentine soil specific plant. The flat heavily used and industrial used bottomland do not contain this type of habitat. Thus it is very unlikely that these plants would grow in these types of soils. To be certain however, a plant survey was conducted using CDFW *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, 2009*. The resultant plant species discovered during the survey are listed below.

Botanical Survey and Results

Botanical Species Found during the March 14, 2019 field survey are listed below:

Arbutus menziesii

Salix spp

Acer circunatum

Acer macrophyllum

Populus tricocarpa

Ribes spp

Alnus rombifolia

Erigonium cicutarium

Amsinckia spp.

Lasthenia californica

Eschscholzia californica

Bromus spp
Lupinus bicolor
Castilleja spp (Popcorn flower)
Ceanothus cordulatus
Trifolium hirtum
Arctostaphylos patula
Arctostaphylos mewukka
Ceanothus intergerrimus
Centaurea solstitialis
Rubus ursinus
Typhus spp (cattails)
Juncus (rushes)

There were no threatened, endangered, or sensitive plant species found during the botanical survey.

WATERS OF THE UNITED STATES:

A “Surface Waters” assessment study and evaluation was completed on March 14, 2019. This includes a study and full walk through of the property to evaluate if Class I-IV watercourses, lakes, ponds, artesian wells, springs, seeps and man-made canals are present or not. The findings are below.

40 CFR 230.3(s) of the Federal Registry states this to be: The term waters of the United States means: 1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; 2. All interstate waters including interstate wetlands; 3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters.

The Army Corps of Engineers (ACOE) is the lead agency and oversees all matters in this latter category (Category 3). A reconnaissance query of the National Wetlands Inventory (NWI) through USFWS wetland mapping database was completed. There is one Class I (year-round) creeks, Salt Creek that flows through the property.

Water Features on Property

There are two water features on this property. There is one Class I Creek, Salt Creek that borders the properties’ western edge and flows northward. There is also a large 8 acre wetland that has been on the property for tens of years and was created originally for the many years of timber processing at the mill site for many years.

Neither the creek nor the wetland will not be affected by this project as the project is to follow the stated setbacks required by the new cannabis ordinance guidelines.

CRITICAL HABITAT

Critical habitat is a specific geographic area that is essential for the conservation of a threatened or endangered species, and may require special management or protection (USFWS, July 15, 2013). Critical habitat can be designated by the USFWS or the National Marine Fisheries Service (NMFS). The USFWS species lists for the project area and the Hayfork USGS quadrangle out to ten miles do not identify designated critical habitat for any federally listed animal or plant species as per the USFWS TES Query at the back of the document. There is NO listed USFWS Critical TES habitat per the USFWS completed at authoring time of this document (March, 2019). Mostly due to the fact that the site is an old industrial site used for timber manufacturing and processing for 50 years and is also mostly covered already with asphalt.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, established the EFH mandate, that only applies to fish species managed under a federal Fishery Management Plan. As such, EFH analysis is required for the Pacific salmon. Essential fish habitat for the Pacific salmon fishery consists of “those waters and substrate necessary for salmon production needed to support a long-term sustainable salmon fishery and salmon contributions to a healthy ecosystem” (NMFS, 2001). There are no creeks or tributary creeks that flow into any critical habitat streams or rivers for anadromous ocean dwelling fish, as the closest creek – Hayfork does flow along the property, but this far up the creek is too far to allow anadromous fish to make it up this far. This finding was confirmed through review of Figure A-1 in the Pacific Fisheries Management Council’s *Appendix A: Identification and Description of Essential Fish Habitat, Adverse Impacts, and Recommended Conservation Measures for Salmon* (August 1999). As well as the NOAA EFH Mapping website, which shows all creeks that are accessible to anadromous fish. Trinity River is listed as EFH. Class I tributaries are included in this that flow directly into the river. Thus, Salt Creek is very near to Hayfork Creek, which is an EFH creek, but Salt Creek itself is not listed as an EFH creek. However, and again, the cultivation area is the state required distance from the creek. The creek will be left untouched and protected, into the future for all migrating and year-round fisheries species. There will be no effect on any fisheries species from the proposed project.

DISCUSSION OF SPECIES POTENTIALLY AFFECTED

As determined through the records search and field evaluation, no currently known locations of federally listed, proposed, or candidate wildlife or plant species would be affected by project implementation. The most significant features on the property are the Class I Salt Creek which does contain anadromous fish from the Trinity River whose confluence is just downstream. However, the creek is not considered critical habitat for anadromous fish and is only used briefly for swimming and not spawning salmon and steelhead. Northern Spotted Owl is often a concern for most parcels of property wanting construction. However, the property is far from any contiguous areas of NSO habitat, and over 2 miles from any known NSO detection. Thus the species is not a concern at all for this project. For both anadromous fish, no portions of their habitat will at all be affected by the small project, as the project is and will continue to be on an already paved over area used for industry for over 50 years. The wetland on the property was not found to contain

any TES animals or plants either and will be left untouched anyway. Further, a wildlife and botanical survey was completed, with no listed, proposed or candidate species or Migratory Bird Treaty Act nests found on the subject property.

PROJECT EFFECTS

See **Figure 4** for the map of the proposed building that is to be placed on the subject property. They are as follows:

The proposed project will not have any impacts on any federally or state listed endangered, threatened, species of special concern, candidate wildlife species or plant species. Most of the buildings that will be used for the project already exist. The few new buildings will be built on an open, paved over already, flat piece of land that has been already used for large industrial timber and log processing for over 50 years. There thus will be no disruption in native ecosystems as a result of this project. The 8 acre wetland on the property will be left undisturbed and will not be effected in any way.

AVOIDANCE/MINIMIZATION MEASURES

There are no avoidance/minimization required for the project.

ESTIMATE OF TAKE ON TES SPECIES OR HABITATS

There will be no TES species or their habitats found on or near the subject property. Thus, there will be no “harm or harassment” or “take” of any TES or candidate species.

CUMULATIVE EFFECTS

Cumulative effects are effects that when treated separately do not create an adverse effect for a habitat or TES species singularly, but when combined, would create a negative affect for that species or its habitat.

There is one other known current projects that is about to be implemented near to this property. This project is just across the Hayfork Creek and just on the other side of Hyampom Road about a half mile away. This is another cannabis project that will have very few impacts on any resources, but still should be mentioned.

Often in Trinity County timber harvesting on adjacent properties (USFS and private) often can add to cumulative effects. However, the property is not in forested habitat, nor is really anywhere close to timbered forested lands. Clearcutting by private timber companies over time, does lower the level of biodiversity in a contiguous ecosystem, which in most of Trinity County and in the Peanut area consists of Mixed Conifer (PIPO, PSME, ABCO, CADE, PILA spp. w/ some QUKE) and Douglas fir coniferous forest ecosystems. This needs to be mentioned here as this forest “management” can degrade the overall ecosystem richness in any given watershed that it occurs within and within Trinity County as a whole. On the other hand - The Shasta Trinity National Forest conducts mostly fire-protective and habitat promoting silvicultural practices on their lands that are meant to promote a more healthy forest and sensitive species/habitat protections for TES species. Thus, the two complete against one another, with typically the private forest clearcutting causing an overall decrease in ecosystem richness and abundance.

However, logging and forest management is a good distance away from this subject project, which means that there will be no immediately nearby cumulative impacts that will affect this project or the overall ecosystem of the Hayfork Valley or this property in any way negatively.

5. CONCLUSIONS

Due to the minor size of the project that will be implemented here, and the already industrialized paved and builded upon piece of property here, there will be no effect on the ecosystems or TES species that are found at or near the project area.

6. REFERENCES

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U.S. Geological Survey. 1993. Lewiston, California, 7.5-minute topographic map. Western Regional Climate Center (WRCC). 2018. Lewiston, Trinity County, CA.
<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3157>

Western Regional Climate Center (WRCC). 2018. Hayfork, Trinity County, CA.
<<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3157>>

Appendix B: Resume

Brian Shaw

Company Owner and Supervisory Biologist
1760 Kenyon Drive
Redding, CA 96001

Education

Graduated: Double Major - California State University, Chico

Bachelors of Science Biological Science: Spring 1997

Bachelors of Arts: Geography (GIS Emphasis) - Spring 1993

Affiliations/Certifications/Permits

USFWS Permit Number **TE-20914-B-0** - California Gnatcatcher

CDFW Scientific Collecting Permit Number: **#SC-3910**

CALFIRE Certified Spotted Owl Expert #29 (Formerly PCB #0050)

Member of The Wildlife Society Western Chapter and Shasta-SAC Chapter

Wetland Certification - Tiburon Wetland Training Certified ESRI Arc GIS Certification and Classes:
CSU Chico, Shasta College, DOT, ESRI

Employment Experience

Klamath Wildlife Resources - Company Owner/Senior-Supervisory Biologist

Owner and Senior Biologist, Technical Writer and GIS/GPS Senior of **Klamath Wildlife Resources (KWR)** from 2000-2015 (current). I manage and oversee all aspects of company ownership/management, including: budget items, staff scheduling, staff performance evaluations, proposal writing, contract acquisition and project management. The company specializes in biological, watershed evaluation, GIS, botanical and environmental analysis and assessment. Our focus area has been in natural resource related science and planning, GIS/GPS mapping/data management, environmental permitting/reporting, **Construction monitoring** (Wind Farm/Telecommunication/Power Lines) NEPA, CEQA Documents, EA, BA, BE, FONSI, ND) and sensitive species assessments. Our company and myself also complete protocol surveys and studies for: California Gnatcatcher, Least Bells Vireo, Northern Goshawk, Spotted Owl, Siskiyou Mountains Salamander, Willow Flycatcher, Fellers and Freel Amphibian surveys, Great Gray Owl, Carnivores, point count avian surveys, bat surveys (mines, mist netting, acoustical) as well as vegetation & botanical surveys and timber cruising for the USFS, BLM and private land and timber owners of northern California. Complete environmental assessments, wetland delineation (certified delineator), biological evaluations/assessments, agency permitting (404, 401, 1601) and agency consultation (CDFG, USFWS, ACOE, RWQCB). We/I also assist land developers their future planning and land use documentation, including environmental, traffic, noise studies. Certified CALFIRE Spotted Owl Expert #29 (Formerly PCB #0050, Habitat Evaluation Expert). CDFW permit holder for small mammal, amphibian, bird/owl handling in support of wildlife studies. Involved with wind farm biological clearance surveys, which involves systematic searching through the year below all existing wind turbines on platforms and in surrounding vegetation for avian/chiropteran impacts. These surveys are multi-tiered, involving Searcher Efficiency Trials, Live Avian Bird Counts, Scavenger Trials as well as the Post Construction Fatality Surveys. Our company also completes the recently very often offered Environmental Site Assessment and Evaluations for environmental remediation typically on government properties. I have personally prepared over 400 technical proposals for a wide range of environmental, biological, botanical, and wildlife projects. This has resulted in being awarded over 250 separate projects based on these

proposals/offers. My company and myself as the representative have many solid and long-standing solid business relationships with the US Forest Service, BLM, National Parks Service, Private Timber Companies throughout the west, large and small engineering/land planning firms, California State Parks, CALFIRE, many Native American Tribes through the west, PG&E, WAPA, SoCAL Edison, and have working contracts currently in five separate western states.

Previous Employment

Department of Transportation – Environmental and Transportation Planner Districts 2 & 3: 2001-2004: Redding and Marysville, CA

Environmental: Under the direction of a Senior Environmental Planner, I assessed the impacts of the more difficult transportation projects for biological resources, and made recommendations for the appropriate environmental approvals, mitigation measures and permits. Deep and well-rounded knowledge of the California Environmental Quality Act, National Environmental Policy Act, Federal and State Endangered Species Act and other state and federal laws. Wrote many environmental impact reports (called Natural Environment Study at Caltrans), covering many species and habitats, involving consultation with ACOE, NMFS, USFWS and CDFG.

Transportation: Under the supervision of the Chief, Regional Planning & Local Assistance Regional/Systems Planning Senior served as the point of contact between District 2 and 3 Division of Planning and the Regional Transportation Planning Agency (RTPA) for Siskiyou and Lassen Counties. Provided technical assistance and arranged annual meetings with tribal governments and RTPs. Monitored fund administration documents prepared by RTPA staff-including Federal and State public transportation grant programs. Was point of contact for assignments relating to Regional Planning activities outside of Siskiyou and Lassen Counties (other local counties). Conducted Transportation Concept Reports and traffic flow modeling, ATR data acquisition and analysis to assess traffic in Redding, Marysville, Burney and many other north-state cities and highways. Wrote corridor management plan for Highway 299 from Modoc County (Nevada State Border) to the Humboldt County line.

Senior Wildlife Biologist - Natural Resources Manager, Alpine Land Information Services (01/98 to 1/00): Company wildlife biologist for Roseburg Resources Company through contract to Alpine LIS. Represented RRC on all wildlife management issues, most importantly Northern Spotted Owl, but also Northern Goshawk, Willow Flycatcher, Osprey, Bald Eagle, amphibians, and botanicals. Also wrote cumulative impact reports for Sierra Pacific Industries (SPI). I planned and completed ecological investigations (studies/reports, etc.) and GIS habitat evaluation and management of timberland development proposals to determine their effect on these species. I also studied watercourses on their lands, delineating impacts caused by storms and/or roads. I also planned and carried out herpetological (Tailed Frog, Yosemite Toad, Foothill and Mountain Yellow-legged Frog, Cascades Frog) and macroinvertebrate surveys on their lands. I coordinated, worked within and supervised contracts for Northern Spotted Owl, Goshawk and conducted Willow Flycatcher surveys and monitored nests/known locations for Roseburg Resources Co. I also carried out these surveys following their respective protocols. I professionally represented Sierra Pacific Industries (SPI) on Northern Goshawk, Bald Eagle, Osprey, Great Blue Heron and Northern Spotted Owl Consultations and botanical surveys with biologists and botanists from the USFS, CDFG and USFWS. I proposed mitigation and protection measures for these species. I wrote several Section IV's of the Option "a" and "c" for many Timber Harvest Plans for SPI. I completed botanical and biological investigations and surveys in the Klamath, Sierra Nevada and southern Cascades mountains. Full botanical and wildlife surveys were conducted by Shaw and crew technicians for especially CNPS 1B and sensitive plants, as well as all sensitive and T&E plants and animals. Familiar with all sensitive and T&E plants and animals of California. Using Atlas G.I.S. and ArcView 3.2, created many varieties of biological, botanical and geographical maps. I was in charge of five cumulative impacts assessment THP portions as well as crews of natural resources

personnel, making sure timelines and plans were completed on time and efficiently, and surveys and data were submitted accurately.

GIS Specialist/ Biologist, Enplan (10/97-5/98)

I spent half of my time between working with computer mapping programs (AutoCad versions 13, 14 and 14 Map, Map Info, and Arc View 3.1) and serving as the wildlife biologist. The mapping portion worked with programs that are used to digitize city streets, property boundaries, enter or locate coordinates, enter acreage, tabulate area, and create functional city, rural and biological maps for various northern California agencies. The wildlife biology portion required writing proposals and bids for endangered species projects for various government agencies. I also spent time in the field working on existing projects, identifying all animal and bird species within proposed development areas. I have worked on projects involving the cities of Grass Valley, Fort Jones, Montague, Redding, and Shasta County. Finally, I wrote a technical proposal for a Great Gray Owl/Northern Spotted Owl project that we eventually were awarded by the U.S. Forest Service. I headed up the field portion of this project as the supervising wildlife biologist over eight other field biologists. This included air photo station and call route placement based on habitat conditions (which differ per owl), suggested habitat management and field report writing to the BLM and USFS.

Scientific Aid, California Department of Fish and Game (8/15/97-10/1/98)

I worked as a biological scientific aid administering studies of salmonid populations on the northern portion of the Sacramento River between Cottonwood and Redding, CA. My duties included monitoring and maintenance of screwtraps, weighing, measuring and identifying all sizes and species of fish, snorkeling and seining, driving boats with both outboard and jet engines up to 18' long up and down an unpredictable river., data compilation, driving of government vehicles and much social interaction with a crew of eight other workers as well as the public. We also tagged the carcasses of the dying chinook salmon runs during their respective migrations.

Environmental Specialist 1, Jones and Stokes and Associates (6/1/97-8/15/97)

Determined population status of the Northern Spotted Owl and the Great Gray Owl near Detroit and Sisters, Oregon. Using voice imitated techniques as well as playing a tape through a tape recorder and loud speaker we drove in our personal vehicles along Willamette National Forest roads at night to illicit responses from the owls. All protocol techniques were used to draw the birds near including mousing, hooting, running to catch up to the bird and triangulation. Much exact map reading of topographic maps was necessary as well as extreme situational hiking through rugged terrain on the forest.

Supervising Wildlife Biologist, Jones and Stokes and Associates (6/1/96-9/1/96)

Supervised crew of four on forest carnivore goshawk, and spotted owl study of the Plumas National Forest, Quincy District. Used track plate and trailmaster cameras to monitor fisher, pine marten, fox, and any other small mammals of the forest. Used juvenile, alarm, and fledgling calls through a call box to illicit responses from the goshawks being studied. Also, we identified all tree and shrub species at our forested survey areas (northern Sierra Nevada species). Responsible for all data entry, expenses, monitoring work of others, air photo interpretation and placement of call stations and routes and helped with the final project report.