

Biological Resources

Del Dotto Distribution Facility, P16-00190 Planning Commission Hearing Date – July 19, 2017

Forest Ecosystem Management, PLLC PO Box 455 * Potomac, MT 59823 (406) 490-7427 * cptown@blackfoot.net

April 21, 2017

Guadalupe S. Chavarria, PE, QSD/QSP PO Box 1782 Windsor, CA 95492 gschavarria1@yahoo.com

RE: Del Dotto Winery Distribution Facility Section 1 T4N, R4W, MDB&M - Napa County

Mr. Chavarria,

Per your request, I have completed surveys for Swainson's Hawks for the Del Dotto Winery Distribution Facility off Devlin Road in Napa, CA. Swainson's Hawks were identified during three of the surveys; however, no nest sites were identified and the Swainson's Hawks appeared to stay on the east side of Highway 12/29. The trees within or immediately adjacent to the Project Area did not contain any raptor nests and are probably too small to support a large stick nest structure. Historically (2007 & 2012), there was a Swainson's Hawk nest to the north of the Project Area, within the Eucalyptus trees between Highway 12/29 and Devlin Road. No active nest structure was located this year.

Other species identified were recorded, with no listed or sensitive wildlife species identified within the Project Area.

If you have any questions, feel free to contact me.

Sincerely,

Pamela J. Town

Pamela J. Town Consulting Wildlife Biologist

Surveys for Swainson's Hawks – Del Dotto Winery Distribution Facility

Section 1, T04N, R04W MDB&M - Napa County

April 21, 2017

Project Description:

The project proposes converting a small open commercial lot (Parcel #057250006000) to a two story building with a parking lot. The Project Area is located between Devlin Road and State Highway 29 north of Middleton, CA in Napa County. The project site is on flat ground located around 60 feet in elevation and is just over 3 acres. The Project Area is within the Sheehy Creek local drainage, within the Napa River watershed. The legal description is Section 1 of T04N, R04W; MDB&M.

The Project is proposing:

- Build a 2 story building to be used as office space, warehouse, and storage.
- Construct a parking lot to hold 70 stalls.

Swainson's hawks are uncommon breeding residents and migrants in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and the Mojave Desert; with very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley (CWHR). This species has recently colonized Napa County and has established breeding sites in the southern portion of the Napa Valley in areas where habitat conditions are similar to the breeding sites in Central Valley.

Site Description:

The Project Area is located between Devlin Road and State Highway 29 north of the Highway 29 and Highway 12 intersection (Attachment #1). The Project Area is a commercial lot with commercial buildings/parking lots on adjacent parcels. Surrounding the Project Area are commercial properties, both existing and commercial lots for sale. Highway 29 is an extensively used route between Napa Valley and the San Francisco Area. Traffic during the surveys was moderate to heavy with cars, trucks, and RVs. The Project Area is currently vegetated with grasses and weeds.

Swainson's Hawk:

The Swainson's hawk is a state-listed threatened species, protected pursuant to the California Endangered Species Act (CESA), and Title 14 of the California Code of Regulations. It is also protected from a direct take under the federal Migratory Bird Treaty Act; with the bird, nest,

eggs, and young also protected under California Fish and Game Code (Sections 3503, 3503.5, and 3513).

Swainson's hawks are a migratory species breeding in the western United States and Canada, and are adapted to forage in open areas (i.e. grasslands, agricultural fields). Swainson's hawks often nest within riparian areas; however, will also use lone trees in agricultural fields, pastures, or along roadsides. The primary management issues facing Swainson's hawks in California include the loss of preferred nesting habitat, loss or adverse modification of high-quality foraging habitat, and high mortality due to pesticide use on migration routes and wintering areas.

Nests are on a platform of sticks, bark, and vegetation in a tree, tall bush, or utility pole. In the Central Valley of California, the majority of Swainson's hawk nests and territories are associated with riparian systems and nests are commonly found in cottonwoods (*Populus species*), willows (*Salix species*), and oaks (*Quercus species*). Throughout the range of Swainson's hawks, nests may be constructed in a wide variety of tree species including sycamores (*Platanus species*), valley oaks (*Quercus lobate*), walnut (*Juglans species*), eucalyptus (*eucalyptus species*), black locust (*Robinia pseudoacacie*), Osage orange (*Maclura pomifera*), pines (*Pinus species*), and redwoods (*Sequoia sempervirens*); existing as riparian forest, remnant riparian trees, planted windbreaks, shade trees at residences, along roadsides, or within solitary upland oaks. Generally nests are semi-exposed in the upper canopy or lateral branches of a tall tree affording a panoramic view of the area.

Swainson's hawk diet consists of rodents (primarily Microtines and pocket gophers), rabbits, large arthropods, amphibians, reptiles, birds, and rarely fish. Foraging habitat includes open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Some examples of foraging habitat includes: grasslands, alfalfa fields, fallow fields, agricultural fields (beets, tomatoes and other low-growing row or field crops), pasture, and rice land when not flooded. Agricultural areas may be the preferred foraging habitat due to higher prey populations as well as agricultural practices allowing greater access to prey. Vineyards, cotton fields, and mature orchards are generally not thought to provide foraging habitat for Swanson's hawks; however, they have been found successfully nesting in areas of Napa Valley dominated by dense vineyard development (Napa River Watershed Restoration 2013).

Swainson's hawk occupies large home ranges that are primarily composed of foraging habitats. The amount and intensity of land uses within a home range are the primary factors determining habitat quality (primarily a function of prey abundance/availability) for a given territory. In the Central Valley, most home ranges consist of agricultural crops, and often have insignificant areas of nesting trees. The amount and distribution of different crop types and the small mammal populations associated with them, creates a shifting mosaic of foraging habitat in the Central Valley landscape.

Predation does not appear to be an influential factor affecting Swainson's hawk populations. Great Horned Owls are the most commonly reported predator of nestlings and an occasional adult hawk. Other predators may include coyotes, Golden Eagles, and bobcats. Swainson's hawks often exhibit highly aggressive nest defense and are able to drive off most diurnal predation attempts by other raptors. Swainson's hawks may use the same nest over several years; however, as they are a migratory species, they may find their nest already occupied by another raptor (i.e. Red-tailed hawk, red-shoulder hawk, or great horned owl) when they arrive. Competition for nest sites may be an indicator of limited suitable nesting habitat.

Methodology:

The CNDDB identified 5 recorded occurrences of Swainson's hawk within a 5-mile radius of the Project Site. The Napa Vault Storage Facility listed an additional occurrence along Suscol Creek. It is believe this occurrence includes Swainson's hawk nests found in 2005 and 2012 (cnddb occurrence number 1619). A nest site is considered to be active if it was used at least once during the past 5 years. Of the 6 recorded occurrences, 3 had activity reported within the past 5 years (2012 – 2016); however, only 1 recorded occurrence is within ½ mile of the Proposed Project (cnddb occurrence number 1719).

Swainson's Hawk Survey Design:

Using recommendation by the Swainson's Hawk Technical Advisory Committee (2000), we proposed under the November 16, 2016 Assessment for Swainson's Hawks for the Del Dotto Winery Distribution Facility to survey the Project Area using the following design:

- 1. A ½ mile radius around the Project Area would be surveyed.
- 2. Driving or windshield surveys would be used when available.
- One survey date will be completed between January 1 and March 20 to look for existing nests, before the trees have leafed out. At that time, the known 2012 nest site within ½ mile of the project area would be looked for to determine if still present.
- 4. Surveys would be completed for at least the two survey periods immediately prior to initiating any Project-related construction work. With anticipated operations to begin in mid-April:
 - a. Three surveys will be completed between March 20 to April 5 during sunrise to 1000 hrs. and 1600 hrs. to sunset.
 - b. Three surveys will be completed between April 5 to April 20 during sunrise to 1200 hrs. and 1630 hrs. to sunset.

Results:

No Swainson's hawk nesting habitat occurs within the Project Area (no trees large enough to support a large stick nest), with the closest known nesting habitat consisting of a stand of Eucalyptus trees located approximately 1,300' north of the Proposed Project. The foraging habitat on the site is limited due to the less-than-optimal conditions (size of lot, adjacent to

developed lots, and vegetation conditions that would not sustain rodent populations for foraging Swainson's hawks) and the availability of more optimal surrounding foraging habitat.

Del Dotto Winery Distribution Project – Looking at Project Site and Adjacent Trees



Del Dotto Winery Distribution Project – Trees Adjacent to Project (NOTE: In distance across Highway, there is grassland, vineyards, and patches of trees)



Del Dotto Winery Distribution Project – Eucalyptus Trees where Historic SWHA was located.



Landscape on the East side of Highway 12/29. Picture looking across Highway 12 and Devlin Road near the eucalyptus trees.



Survey Dates:

Survey Dates for the Del Dotto Winery Distribution Facility

	Weather	Sunrise &	Survey	Swainson's	
Date	Conditions	Sunset Times	Times	Hawk Identified	
	Clear w/breeze		Looking for	No large nests	
08MAR17	(43 – 72 F)		existing nests	located	
	Clear w/breeze	0707 Sunrise	0710 – 1000 hrs		
23MAR17	(40 – 64 F)	1924 Sunset	1600 – 1925 hrs	None	
	Clear w/breeze	0659 Sunrise	0655 – 1000 hrs		
28MAR17	(45 – 78 F)	1928 Sunset	1600 – 1930 hrs	None	
	Clear and Calm	0650 Sunrise	0650 – 1000 hrs		
03APR17	(45 – 80 F)	1934 Sunset	1600 – 1935 hrs	Soaring SWHA	
	Cloudy w/breeze	0644 Sunrise	0644 – 1200 hrs		
07APR17	(48 – 64 F)	1938 Sunset	1630 – 1938 hrs	SWHA	
	Clear w/breeze	0633 Sunrise	0633 – 1200 hrs		
15APR17	(40 – 70 F)	1945 Sunset	1630 – 1945 hrs	None	
	Ptly Cloudy w/lt				
20APR17	breeze	0626 Sunrise	0626 – 1200 hrs	Soaring SWHA	
	(50 – 70 F)	1950 Sunset	1630 – 1950 hrs		

Swainson's Hawk Nests Identified: None

Swainson's Hawks Identified: A Swainson's Hawk was identified during three different surveys. They were never identified on the west side of Highway 29/12 nor near the Project Area or historic nest site within the eucalyptus trees (Attachment #2 for mapped location of SWHAs).

- A SWHA was identified on 03APR17 soaring over the open areas on the east side of Highway 29/12. Attempts were made to identify where the hawk may land, but each time the surveyor lost sight of the hawk prior to its landing. The SWHA was never identified on the west side of Highway 29/12 nor near the Project Area or historic nest site within the eucalyptus trees.
- A SWHA was identified on 07APR17. The hawk was observed landing within a tree where it sat for approximately 15 minutes before taking off and soaring again. The SWHA was never identified on the west side of Highway 29/12 nor near the Project Area or historic nest site within the eucalyptus trees.
- A SWHA was identified on 20APR17 soaring over the open areas on the east side of Highway 29/12. Attempts were made to identify where the hawk may land, but each time the surveyor lost sight of the hawk prior to its landing. The SWHA was never identified on the west side of Highway 29/12 nor near the Project Area or historic nest site within the eucalyptus trees.

Other Species Identified:

The other wildlife species identified during surveys include: Red-Winged Blackbirds, American Robin, Common Raven, Blackbirds, Turkey Vulture, Red-Tailed Hawk (pair), Swallows, Pigeons, Finch, Great-Blue Heron, Egret, and Sparrows.

Project Effect on Swainson's Hawk Habitat:

As there are no trees within the Project area, Swainson's hawks would not nest on the Project site. Given the extensive foraging habitat in the region, size of the Project (less than 4 acres) and low-quality foraging habitat; adverse effects to this species are considered unlikely due to this Project. When considered in terms of foraging habitat loss relative to the availability of surrounding habitats, this impact is negligible and would not significantly contribute to an overall cumulative loss of regional foraging habitat loss.

The Project Area does intend on landscaping, including the planting of trees and shrubs along the edge of the lot. Although this will not improve the foraging habitat, eventually as the trees mature, they provide future nest or roost trees for Swainson's hawks and other wildlife species.

Conclusion:

In summary, the range of the Swainson's hawk to access foraging habitat is extensive in this area; therefore, the loss of the small amount (less than 4 acres) of non-native grasses/weeds on the project site is less than significant. Due to the lack of trees on the Project Site, nesting habitat will not be affected. The lot adjacent to the Project does have small trees along the lot edges, however, due to their existing size it is unlikely Swainson's hawks will establish a nest within these trees in the near future.

No Swainson's Hawks were identified nesting within the Eucalyptus trees to the north of the Project Area in a small grove they have historically nested. No nesting structures were identified on poles or other trees in the area immediately surrounding the Del Dotto Winery Distribution Facility Project.

Due to a lack of active nests and poor foraging quality of the Project Area, it is unlikely that there would be a net adverse effect on Swainson's Hawks due to this Proposed Project.

References Used:

California Natural Diversity Database. 2016. Managed by California Department of Fish & Wildlife.

California Partners in Flight Riparian Bird Conservation Plan. Swainson's Hawk. Prepared by Brian Woodbridge @ USFWS on Klamath National Forest. http://www.prbo.org/calpif/htmldocs/species/riparian/swainsons_hawk.htm

California Wildlife Habitat Relationships System. 2016. Managed by California Department of Fish & Wildlife, California Interagency Wildlife Task Group. Filtered by Species of Interest.

Fisher, Kevin; Mary Anne Flett, Seth Bunnell, and Jules Evens. 2013. Swainson's Hawk (Buteo swainsoni) Expands its Breeding Territory in the Napa Valley. 2013 State of San Francisco Estuary Conference.

Hensel, Human. 2006. Birds of Napa County. Hayday Books, Berkely, CA.

Napa Vault Storage Facility Use Permit. September 20, 2016. Report completed by First Carbon Solutions on Napa Vault Swainson's Hawk Focused Assessment, Napa County, California.

Peterson, Roger Tory. 2010. Peterson Field Guide to Birds of Western North America. Fourth Edition. The Marital Trust B u/w Roger Tory Peterson. Printed in China. 493 pages.

State of California. June 2, 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles

and Kern Counties, California. State of California – California Energy Commission and Department of Fish & Game.

Swainson's Hawk Technical Advisory Committee. May 31, 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.

Wildlife Society – California North Coast Chapter. October 24 – 26, 2000. Falconiformes of Northern California: Natural History and Management.

Attachments:

Attachment #1 – Topographical Map of Project Area Attachment #2 – Location of SWHA identified during Surveys

Questions or Comments from this Biological Assessment should be addressed to:

Forest Ecosystem Management, PLLC Pamela Town, Consulting Wildlife Biologist PO Box 455 Potomac, MT 59823 (406) 490-7427 cptown@blackfoot.net

Attachment #

DELORME











Attachment #2

Forest Ecosystem Management, PLLC PO Box 455 * Potomac, MT 59823 (406) 490-7427 * cptown@blackfoot.net

March 18, 2016

Guadalupe S. Chavarria, PE, QSD/QSP PO Box 1782 Windsor, CA 95492 gschavarria1@yahoo.com

RE: Devlin Road Project – Del Dotto Winery Distribution Facility Section 1 T4N, R4W, MDB&M - Napa County

Mr. Chavarria,

Per your request, I have completed an assessment for Ferruginous Hawk's for the Devlin Road Project in Napa, CA. I have worked on other projects in Napa County where northern spotted owls had to be addressed, so I have included them within this report so as not to potentially delay your project.

There are no listed species on or immediately adjacent to this project. Due to the commercial nature of the area, many wildlife species, particularly listed species, would not be attracted to the area. If you are interested in attracting common species (i.e. robins, jays, sparrows, blackbirds); I would encourage the planting of native small trees and shrubs as landscaping around the newly constructed building/parking lot. A local nursery or landscaper could help you select appropriate species.

If you have any other questions, feel free to contact me.

Sincerely,

RECEIVEL MAY 09 2016 Napa County Hanning, Building & Environmental Services

Pamela J. Town, / Consulting Wildlife Biologist

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March 18, 2016

Project Description:

The project proposes converting a small open commercial lot (Parcel #057-250-006) to a two story building with a parking lot. Guadalupe S. Chavarria requested a Biological Review of the project site, with a primary interest in Ferruginous Hawk habitat. In addition, I reviewed California Department of Fish & Wildlife's Northern Spotted Owl Database and California Natural Diversity Database (CNDDB), and addressed listed species within ½ mile of the Project Area.

The Project Area is located between Devlin Road and State Highway 29 north of Middleton, CA in Napa County. The project site is on flat ground located around 60 feet in elevation. The project area is within the Sheehy Creek local drainage, within the Napa River watershed. The legal description is Section 1 of T04N, R04W; MDB&M.

The Project is proposing:

- Build a 2 story building to be used as office space, warehouse, and storage.
- Construct a parking lot to hold 70 stalls.

The purpose of this report is to identify habitat on and immediately adjacent to the Project Area, determine if there is a need for additional protocol-level wildlife surveys, determine the presence of or potential for special-status species, and the effects of the proposed project on any on-site biological resources.

Site Description:

The Project Area is located between Devlin Road and State Highway 29 north of the Highway 29 and Highway 12 intersection (Attachment #1). The Project Area is a commercial lot with commercial buildings/parking lots on adjacent parcels. Surrounding the Project Area are commercial properties, both existing and commercial lots for sale. Highway 29 is an extensively used route between Napa Valley and the San Francisco Area. Traffic during the site visit was heavy with cars, trucks, and RVs. The Project Area is currently vegetated with grasses and weeds.

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Picture of Project Area – Commercial lot consisting of grasses and weeds.





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Due to the commercial nature and amount of traffic, the Project Area is highly undesirable for many wildlife species, particularly for species with unique habitat requirements (as many listed species have).

On the landscape level, there are commercial and residential properties and towns, the Napa County Airport, agricultural property (vineyards and cattle ranches), the Napa River, and some open grassland (Attachment #2). The landscape to the north, near the Napa River, does provide more suitable habitat for many wildlife species due to water source, grasslands, and cattle ranches.

Picture is north of Project Area – Looking at the Napa River



Threatened, Endangered, Proposed or Candidate Species within the Project Area:

The present conditions and location of the Project Area is such that there is little reason to expect the occurrence of any special-status species within the footprint of the project. Our review found that no special status species occur within or immediately adjacent to the Project Area.

The only special-status species' habitat that could possibly be impacted by the proposed project would be the Burrowing Owl habitat. The habitat within the Project Area is very marginal and the area impacted by the proposed project is such that there is little reason to expect any long term impacts to the species or population.

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Methodology:

Project Scoping:

The scoping of the project considered location, type of habitat and/or vegetation types present on and surrounding the Project Area. Only Federal and State listed species are addressed. Information on target species was gathered from the following sources:

- Spotted Owl Database. Report Generation Date: 15MAR16. Filtered by the criteria of 1.3 Miles around Project Area (Attachment #3).
- California Natural Diversity Database. California Department of Fish & Wildlife. Filtered by the criteria of Cuttings Wharf and Cordelia USGS Quads (Attachment #4).

Field Survey Methodology:

Surveys were made by walking around the Project Area and examining the surrounding area. The fieldwork focused on locating target species or suitable habitat for target species or indications that such habitat exists on the site. Habitat is a key characteristic for consideration of special-status species in a study area. Many special-status species are rare in nature because of their specific, often narrow habitat or environmental requirement.

Animals were identified in the field by sight, sign, or call. The area was surveyed with binoculars and walking through the project footprint.

Survey Date:

Field work was conducted by Forest Ecosystem Management, PLLC on March 5, 2016 and March 17, 2016.

Qualifications of Investigator:

Pamela J. Town, Consulting Wildlife Biologist – Forest Ecosystem Management, PLLC. University of Vermont – BS in Wildlife Management and University of Idaho – MS in Forest Resources. Pam has over 15 years of professional experience working as a Consulting Wildlife Biologist assessing projects for Federal and California State listed and sensitive species and has worked with private landowners on improving wildlife habitat in Montana and Idaho.

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Experience includes conducting special-status species surveys, general biological surveys, determination of species habitat, offering wildlife habitat improvement options, and determining mitigation measures, in consultation with state and federal agencies, acceptable for habitat alteration for listed and sensitive species.

Analysis of Special-Status Species:

The species listed below provides a summary for potential "target" special-status species.

Ferruginous Hawks (FEHA)

According to the County of Napa and the CNDDB, the Project Area is located within Ferruginous Hawk habitat. The Ferruginous Hawk is listed under the Watch List (WL) by California Department of Fish & Wildlife. The Ferruginous Hawk is a fairly common winter resident of grasslands and agricultural areas in southwestern California. Migration includes generally arriving in California in September and departing by mid-April.

Winter habitat requirements for Ferruginous Hawks includes large, open tracts of grasslands, sparse shrub, or desert habitats with elevated structures for perching (i.e.: telephone poles, high mound perch, or lone tree). They will eat rabbits, ground squirrels, mice, birds, reptiles, and amphibians.

The state of California reports urban development may contribute to loss of suitable wintering habitat in California. There are no breeding records from California.

Devlin Project Area: The Devlin Project Area is a small lot located within an existing commercial area next to a busy state highway, therefore, does not provide suitable winter habitat for the Ferruginous Hawk. Suitable winter habitat does exist further north around the Napa River; however, this project will have no significant impact on that habitat.

Burrowing Owl (BUOW)

According to the CNDDB, the Project Area is located within ½ mile of a presumed extant Burrowing Owl site. The Burrowing Owl is listed as Species of Special Concern (SSC) under the California Department of Fish & Wildlife. The Burrowing Owl is a year-round resident of California, with seasonal elevational migrations in some areas. Breeding generally occurs in March through August.

The Burrowing Owl is primarily a grassland species, but can persist in some landscapes highly altered by humans. Suitable habitat appears to be burrows for roosting and nesting with

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relatively short vegetation with only sparse shrubs and taller vegetation. Owls in agricultural environments nest along roadsides and water conveyance structures (ditches, drains) surrounded by crops. The nest and roost burrows of the Burrowing Owl are most commonly dug by ground squirrels, but they may use badger, coyote, and fox dens. The diet of Burrowing Owls is bugs, rodents, birds, amphibians, reptiles, and carrion. Burrowing Owls appear to show strong site fidelity to their nest site year to year (nest in same area).

The state of California reports habitat loss and degradation from rapid urbanization of farmland, changes in agricultural practices, and eradication of ground squirrels as threats to Burrowing Owls.

Devlin Project Area: The Devlin Project Area is located on a small lot within an existing commercial area, buildings on adjacent lots; next to a busy highway. Increased commercial construction in the area poses a substantial risk to Burrowing Owls from mortality caused by traffic, although owls are known to forage along roads. The site indicated within the CNDDB is located to the west of the Project Area (to the west of Devlin Road). No Burrowing Owls, probable nest sites, or ground squirrels were observed during the field visit.

Swainson's Hawk (SWHA)

According to the CNDDB, the Project Area is located within ½ mile of a Swainson's Hawk site. The Swainson's Hawk is listed as a State Threatened Species. The Swainson's Hawk is an uncommon breeding resident and migrant of California. Breeding generally occurs in late March through July.

The basic requirements for Swainson's Hawks are open desert, grassland, or cropland containing scattered, large trees or small groves. Nests are usually on a platform of sticks, bark, and leaves in a tree, bush, or on a power pole. Often nests are located in open riparian habitat or sparsely vegetated flatlands. Swainson's Hawks eat rodents, bats, squirrels, rabbits, bugs, amphibians, reptiles, birds, and occasionally fish.

The state of California reports loss of nesting habitat as a threat to this species.

Devlin Project Area: The Devlin Project Area is located on a small lot within an existing commercial area next to a busy state highway with no potential nest sites available, therefore, does not provide suitable habitat for the Swainson's Hawk.

Northern Spotted Owl (NSO)

According to the NSO Database, there are no known Northern Spotted Owls within 1.3 miles of the Project Area. The 1.3 mile assessment area was created by USFWS for a Take Avoidance of

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northern spotted owls within the California Interior (outside the redwood zone). Although Napa County does have redwoods, the environmental conditions in the area are hotter/drier than the coastal redwood zone; therefore, the 1.3 mile assessment area was used for this Project.

The attributes for northern spotted owl habitat includes a forest with a dense, multi-layered canopy of several trees species; trees of varying sizes and ages; abundant logs, snags/cavity trees, and trees with broken tops or platform-like substrates (i.e. broken tops, mistletoe, debris piles, or old raptor/squirrel nests); and open spaces among lower branches to allow flight under the canopy.

Devlin Project Area: The Devlin Project Area is not forest and located within an existing commercial area; therefore, does not provide suitable habitat for the Northern Spotted Owl.

Unique or Limited Wildlife Habitats Present

There were no unique habitats associated with the proposed project. Unique habitats would include caves, mines, talus slopes, cliffs, snags, large woody debris, and water bodies.

Wildlife Species Identified

Wildlife Species identified adjacent to the Project Area include:

Sparrow Species Brewer's Blackbirds American Kestrel Red-Winged Blackbird Turkey Vulture Song Sparrow Common Crow Egret

Measures that will Reduce/Eliminate Adverse Impacts to Listed Species:

No listed species or raptor nest sites were observed.

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Burrowing Owl Habitat: As this Project is located next to existing business structures, within very marginal habitat, and no owls were observed; as long as the proposed operations are scheduled to commence prior to March 1, 2017 then no other surveys should be required. If operations don't occur until after March 1, 2017, a qualified avian biologist should survey the site for nesting owls, prior to commencement of the activities.

Cumulative Effect on Wildlife Populations: No cumulative impacts to wildlife populations are expected by the proposed project. The impact to local wildlife will be undetectable on a regional scale.

This is a general assessment of listed species for the Devlin Road Project Area. This is not a complete Biological Assessment for all listed species for an EIR/EIA.

References Used:

California Natural Diversity Database. 2016. Managed by California Department of Fish & Wildlife. Filtered by Cuttings Wharf and Cordelia USGS Quads.

California Wildlife Habitat Relationships System. 2016. Managed by California Department of Fish & Wildlife, California Interagency Wildlife Task Group. Filtered by Species of Interest.

Hensel, Human. 2006. Birds of Napa County. Hayday Books, Berkely, CA.

Peterson, Roger Tory. 2010. Peterson Field Guide to Birds of Western North America. Fourth Edition. The Marital Trust B u/w Roger Tory Peterson. Printed in China. 493 pages.

Shuford, W.David; Thomas Gardali. 2008. California Bird Species of Special Concern. A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Western Field Ornithologists, Camarillo, CA and California Department of Fish & Game, Sacramento, CA. 450 pages.

Spotted Owl Database. 2016. Managed by California Department of Fish & Wildlife. Filtered by Section *#*, Township and Range.

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Attachments:

Attachment #1 – Topographical Map of Project Area Attachment #2 – Aerial Photo (Goggle Earth) of Project Area Attachment #3 – Spotted Owl Database Report Attachment #4 – CA Natural Diversity Database Report & Map

Questions or Comments from this Biological Assessment should be addressed to:

Forest Ecosystem Management, PLLC Pamela Town, Consulting Wildlife Biologist PO Box 455 Potomac, MT 59823 (406) 490-7427 cptown@blackfoot.net

Attachment #1



Attachment #2



Google earth

Attachment #3

Data Version Date: 02/29/2016

Report Generation Date: 3/15/2016

Report #1 - Spotted Owl Sites Found Known Spotted Owl sites having observations within the search area.



Meridian, Township, Range, Section (MTRS) searched: M_05N_04W Sections(34,35,36); M_04N_04W Sections(01,02,03,10,11,12,13,14,15); M_04N_03W Sections(06,07,18); M_05N_03W Sections(31);

Masterowl

Subspecies

LatDD NAD83 LonDD NAD83

MTRS

AC Coordinate Source

No Spotted Owl Sites found.



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IMAPS Print Preview

CNDDB Quad Species List 57 records.

		5. A										
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a lesso	Animals - Birds	Buteo regalis	ferrugino hawk	ABNKC191	120 None	None	WL		- 3812	223 Cuttin Wharf	gs Mapped	Animals - Birds - Accipitridae - Buteo regalis
	Animals - Birds	Buteo swainso	oni Swainsor hawk	n's ABNKC190	70 None	Threaten	ied -		3812	223 Cutting Wharf	gs Mapped a Unprocess	nd Animals - Birds - Accipitridae - Buteo swainsoni
	Animals - Birds	Circus cyaneu	s northern harrier	ABNKC110	10 None	None	SS	с.	38122	223 Cutting Wharf	s Mapped a Unprocess	Animals - Birds -
	Animals - Birds	Elanus leucuru	is white-taile kite	ABNKC060	10 None	None	FP	-	38122	23 Cutting Wharf	^{IS} Unprocess	Animals - Birds -
	Animals - Birds	Ardea alba	great egre	at ABNGA0404	10 None	None	-	-	38122	23 Cutting Wharf	^S Unprocess	Animals - Birds -
	Animals - Birds	Ardea herodias	great blue heron	ABNGA0401	10 None	None	-	-	38122	23 Cutting Wharf	s Unprocesse	Animals - Birds - ed Ardeidae - Ardea herodias
	Animals - Birds	Egretta thula	snowy egr	et ABNGA0603	0 None	None	-	-	38122	23 Cuttings Wharf	³ Unprocesse	Animals - Birds - d Ardeidae - Egretta thula
	Animals - Birds	Nycticorax nycticorax	black- crowned night heror	ABNGA1101	0 None	None	-	-	381222	3 Cuttings Wharf	Unprocesse	Animals - Birds - Ardeidae - Nycticorax nycticorax
	Animals - Birds	Charadrius alexandrinus nivosus	western snowy plov	ABNNB03031	1 Threatene	ed None	SSC	-	381222	3 Cuttings Wharf	Mapped and Unprocessed	Animals - Birds - Charadriidae - Charadrius alexandrinus nivosus
	Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	381222	3 Cuttings Wharf	Unprocessed	Animals - Birds - Charadriidae - Charadrius montanus
	Animals - Birds	Melospiza melodia samuelis	San Pablo song sparrow	ABPBXA301W	/ None	None	SSC	-	3812223	Cuttings Wharf	Mapped and Unprocessed	Animals - Birds - Emberizidae -
	Animals - Birds	Passerculus sandwichensis beldingi	Belding's savannah sparrow	ABPBX99015	None	Endangered	-	-	3812223	Cuttings Wharf	Unprocessed	Animals - Birds - Emberizidae - Passerculus sandwichensis
	Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812223	Cuttings Wharf	Mapped	beldingi Animals - Birds - Hirundinidae - Riparia riparia
	Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	None	SSC	-	3812223	Cuttings Wharf	Mapped	Animals - Birds - Icteridae - Agelaius tricolor
E	nimals - lirds		Caspian tern	ABNNM08020	None	None	-	-	3812223	Cuttings Wharf		Animals - Birds - Laridae - Hydroprogne caspia
	nimals - irds	Sternula antillarum browni	California least tern	ABNNM08103	Endangered	Endangered	FP	-	3812223	Cuttings Wharf	Inprocessed	Animals - Birds - Laridae - Sternula antillarum browni
		trichas sinuosa	saltmarsh common yellowthroat	ABPBX1201A	None	None	SSC	-	3812223	Cuttings N Wharf U	apped and inprocessed	Animals - Birds - Parulidae - Geothlypis trichas sinuosa
Bi	ds a	auritus	cormorant	ABNFD01020	None	None	WL -	-	3812223	Cuttings Wharf U	nprocessed -	Animals - Birds - Phalacrocoracidae Phalacrocorax uritus

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Animals - Birds		California black rail	ABNME03041	None	Threatened	FP	-			Mapped and Unprocessed	Animals - Birds - Rallidae - Laterallus jamaicensis coturniculus
Animals - Birds	langiroctric	California dapper rail	ABNME05016	Endangered	Endangered	FP	-1		Cuttings Wharf	Mapped and Unprocessed	Animals - Birds - Rallidae - Rallus longirostris obsoletus
Animals - Birds	Athene cunicularia	burrowing owl	ABNSB10010	None	None	SSC	-	3812223		Mapped and Unprocessed	Animals - Birds - Strigidae - Athen cunicularia
Animals - Crustaceans	Syncaris pacifica	California freshwater shrimp	ICMAL27010	Endangered	Endangered	-	-	3812223	Cuttings Wharf	Mapped	Animals - Crustaceans - Atyidae - Syncar pacifica
Animals - Crustaceans	Branchinecta lynchi	vernal pool fairy shrimp	ICBRA03030	Threatened	None	-	-	3812223	Cuttings Wharf	Mapped	Animals - Crustaceans - Branchinectidae Branchinecta Iynchi
Animals - Fish	Acipenser transmontanus	white sturgeon	AFCAA01050	None	None	SSC	-	3812223	Cuttings Wharf	Unprocessed	Animals - Fish - Acipenseridae - Acipenser transmontanus
Animals - Fish	Pogonichthys macrolepidotus	Sacramento splittail	AFCJB34020	None	None	SSC	-	3812223	Cuttings Wharf	Mapped and Unprocessed	Animals - Fish - Cyprinidae - Pogonichthys macrolepidotus
Animals - Fish	Hysterocarpus traski traski	Sacramento- San Joaquin tule perch	AFCQK02012	None	None	-	-	3812223	Cuttings Wharf	Unprocessed	Animals - Fish - Embiotocidae - Hysterocarpus traski traski
Animals - Fish	Hypomesus transpacificus	Delta smelt	AFCHB01040	Threatened	Endangered	-	-	3812223	Cuttings Wharf	Mapped and Unprocessed	Animals - Fish - Osmeridae - Hypomesus transpacificus
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	SSC	-	3812223	Cuttings Wharf	Mapped	Animals - Fish - Osmeridae - Spirinchus thaleichthys
Animals - Fish	Lampetra ayresii	river lamprey	AFBAA02030	None	None	SSC	•3	3812223	Cuttings Wharf	Unprocessed	Animals - Fish - Petromyzontida Lampetra ayres
Animals - Fish	Oncorhynchus mykiss irideus	steelhead - central California coast DPS	AFCHA0209G	Threatened	None	-		3812223	Cuttings Wharf	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus
Animals - Fish	Oncorhynchus tshawytscha	chinook salmon - Central Valley fall / late fall-run ESU	AFCHA0205N	None	None	SSC	-	3812223	Cuttings Wharf	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus tshawytscha
Animals - Insects	Speyeria callippe callippe	callippe silverspot butterfly	IILEPJ6091	Endangered	i None	-		3812223	Cuttings Wharf	Mapped	Animals - Insec Nymphalidae - Speyeria callipp callippe
Animals - Mammals	Reithrodontomys raviventris	salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	I FP	-	3812223	Cuttings Wharf	Mapped and Unprocessed	
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812223	Cuttings Wharf	Mapped	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Sorex ornatus sinuosus	Suisun shrew	AMABA01103	None	None	SSC	-	3812223	Guttings Wharf	Mapped and Unprocesse	
Animals - Mammals	Antrozous pallidus	pallid bat	AMACC10010) None	None	SSC	-	3812223	3 Cuttings Wharf	s Mapped and Unprocesse	

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Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812223	Cuttings Wharf	Mapped	Animals - Reptiles - Emydidae - Emys marmorata
Community - Terrestrial	Coastal Brackish Marsh	Coastal Brackish Marsh	CTT52200CA	None	None	-	-	3812223	Cuttings Wharf	Mapped	Community - Terrestrial - Coastal Brackish Marsh
Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	3812223	Cuttings Wharf	Mapped	Community - Terrestrial - Northern Coastal Salt Marsh
Community - Terrestrial	Northern Vernal Pool	Northern Vernal Pool	CTT44100CA	None	None	-	-	3812223	Cuttings Wharf	Mapped	Community - Terrestrial - Northern Vernal Pool
Plants - Vascular	Lilaeopsis masonii	Mason's lilaeopsis	PDAPI19030	None	Rare	-	1B.1	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Apiaceae - Lilaeopsis masonii
Plants - Vascular	Lasthenia conjugens	Contra Costa goldfields	PDAST5L040	Endangered	None	-	1B.1	381 <mark>2223</mark>	Cuttings Wharf	Mapped	Plants - Vascular - Asteraceae - Lasthenia conjugens
Plants - Vascular	Symphyotrichum Ientum	Suisun Marsh aster	PDASTE8470	None	None	-	1B.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Asteraceae - Symphyotrichum lentum
Plants - Vascular	Downingia pusilla	dwarf downingia	PDCAM060C0	None	None	-	2B.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Campanulaceae - Downingia pusilla
Plants - Vascular	Legenere limosa	legenere	PDCAM0C010	None	None	-	1B.1	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Campanulaceae - Legenere limosa
Plants - Vascular	Extriplex joaquinana	San Joaquin spearscale	PDCHE041F3	None	None	-	1B.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Chenopodiaceae - Extriplex joaquinana
Plants - Vascular	Carex lyngbyei	Lyngbye's sedge	PMCYP037Y0	None	None		2B.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Cyperaceae - Carex lyngbyei
Plants - Vascular	Eleocharis parvula	small spikerush	PMCYP091G0	None	None	-	4.3	3812223	Cuttings Wharf	Unprocessed	Plants - Vascular - Cyperaceae - Eleocharis parvula
Plants - Vascular	Astragalus tener var. tener	alkali milk- vetch	PDFAB0F8R1	None	None	-	1B.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Fabaceae - Astragalus tener var. tener
Plants - Vascular	Lathyrus jepsonii var. jepsonii	Deita tule pea	PDFAB250D2	None	None	-	1B.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Fabaceae - Lathyrus jepsonii var. jepsonii
Plants - Vascular	Trifolium amoenum	two-fork clover	PDFAB40040	Endangered	None	-	1B.1	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Fabaceae - Trifolium amoenum
Plants - Vascular	Trifolium hydrophilum	saline clover	PDFAB400R5	None	None	-	18.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Fabaceae - Trifolium hydrophilum
Plants - Vascular	Castilleja ambigua var. ambigua	johnny-nip	PDSCR0D401	None	None	-	4.2	3812223	Cuttings Wharf	Unprocessed	Plants - Vascular - Orobanchaceae - Castilleja ambigua var. ambigua
Plants - Vascular	Chloropyron molle ssp. molle	soft salty bird's-beak	PDSCR0J0D2	Endangered	Rare	-	1B.2	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Orobanchaceae - Chloropyron molle ssp. molle
Plants - Vascular	Polygonum marinense	Marin knotweed	PDPGN0L1C0	None	None	-	3.1	3812223	Cuttings Wharf	Mapped	Plants - Vascular - Polygonaceae - Polygonum marinense
Plants - Vascular	Ranunculus lobbii ca.gov/bios/printTa	Lobb's aquatic	PDRAN0L1J0	None	None	-	4.2	3812223	Cuttings Wharf	Unprocessed	Plants - Vascular - Ranunculaceae - 3

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CNDDB Quad Species List 30 records.

Animals- Anegalsame Rana drayon Callonia Regregation AAABH01022 Tirestend None SSC - 3912222 Cordalia Managadian Managadian Animals- Animals- Animals- Animals- Animals- and AAAAP02032 None None SSC - 3912222 Cordalia Managadian Managadian Animals- Animals- Animals- Bros Animals- anitalia Animals													
Ammals Taricha torces Coast Anyabilisma- sever AAAA-F02032 Name None SSC - 3812222 Cordels Mapped and Acceptable - Carbonic torces Ammals Aquin galden diage ABNKC22010 None None FP - 3812222 Cordels Mapped and Acceptable - Unprocesses Animals - torces Ammals Halsecturs white-tailed ABNKC22010 None None FP - 3812222 Cordels Mapped and Acceptable - Cordorida - Elanus leucocephalus Acceptable - Mapped and Acceptable - Elanus leucocephalus Ammals - Erics Ammals Halsecturs great agret ABNGA0400 None None - 3812222 Cordels Unprocesses Acceptable - Acceptable - Brds Acceptable - Acceptable - Acceptabl			Rana draytonii	red-legged	AAABH01022	Threatened	None	SSC	-	3812222	Cordelia		Amphibians - Ranidae - Rana
Animals- Binds Aquila (hypertexts) egilar egilar ABNKC22010 None None FP FP FP FP - 3812222 Cordeal Cordeal Cordeal Fragments Mapped and Accipitities - Accipitities - Ennantes- Ennates- Ennantes- Ennantes- Ennates- Ennantes- Ennantes- Enna			Taricha torosa	Range	AAAAF02032	None	None	SSC	-	3812222	Cordelia	Unprocessed	Amphibians - Salamandridae -
Animals - BirdsElanus leucurusMinimals - MaleBANKC 10010NoneNoneFP-3812222CordeliaMinipuedania Minimals - Minimals - Min					ABNKC22010	None	None		-	3812222	Cordelia		Accipitridae - Aquila
Animals- Birds HeliaceLus leucocephalus bald eagle ABNKC10010 Delisted Endangered FP - 3812222 Cordelia Unprocessed Accipitinge - Accipitinge - Birds Animals- Birds Ardea alba great egret ABNGA04040 None None - - 3812222 Cordelia Unprocessed Accipitinge - Ardea aba Ardea aba Animals- Birds Ardea iberodias great blue egret ABNGA04010 None None - - 3812222 Cordelia Unprocessed Animals - Birds Ardea aba Animals- Birds Egretta thula anovy egret ABNGA06030 None None - - 3812222 Cordelia Unprocessed Animals - Birds Ardea bar - Ardea bar - Ardea bar - Birds Birds Animals - Birds - Ardea bar - Sector ar nycticorax Animals - Birds - Mirds - Birds ABNGA11010 None None - 3812222 Cordelia Unprocessed Ardeabar - Ardeabar - Sector ar Nycticorax Animals - Birds Palos peregrinus Animals - Birds Amirals - Birds ABNKD06071 Delisted FP - 3812222 Cordelia Mapped Arimals - Birds - Birds - Birds An			Elanus leucurus		ABNKC06010	None	None	FP	-	3812222	Cordelia		Accipitridae -
Animals BrdsArdea alba Ardea albagreat egretABNGA04040NoneNone3812222Cordelia Ardea albaUnprocessed Ardea albaArdea alba Ardea albaAnimals- BrdsArdea heradias grest talua Brdsgreat blue egretABNGA04010NoneNone3812222Cordelia CordeliaUnprocessed Ardea heradias Ardea heradias Egretia Egretia HuradsABNGA06030NoneNone3812222Cordelia CordeliaUnprocessed Ardea heradias Ardea heradias Egretia HuradsABNGA06030NoneNone3812222Cordelia UnprocessedAnimals- BrdsBrds Egretia HuradsAnimals- BrdsBrds Egretia HuradsAnimals- BrdsBrds Egretia HuradsAnimals- BrdsBrds Egretia HuradsAnimals- BrdsBrds Egretia HuradsAnimals- BrdsBrds Egretia HuradsAnimals- BrdsBrds Egretia HuradsAnimals- BrdsBrds Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia BrdsBrds Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egretia HuradsAnimals- Egre				bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812222	Cordelia	Unprocessed	Accipitridae - Haliaeetus
Animals BirdsArdea herodias heronAnimals herodiasAnimals ergetAno herodiasNone3812222CordeliaUnprocessol Ardea herodiasAnimals- BirdsEgretta thulasnowy egretABNGA06030NoneNone3812222CordeliaUnprocessolArimals - Birds - Arida herodiasAnimals- BirdsNycticorax nycticoraxbirds- crowned night heronABNGA06030NoneNone3812222CordeliaUnprocessolArimals - Birds - Arimals - Birds - Arimals - Birds - mediainAnimals- BirdsMelospiza mesidainSuisun song song song song peregrineABPBXA301KNoneNoneSSC-3812222CordeliaUnprocessolArimals - Birds - Erds - mesidaisAnimals- BirdsFalco peregrines anatumAmerican peregrine anatumABPBXA0010NoneNoneSSC-3812222CordeliaMapped Animals - Birds - Falco processolAnimals - Birds - Falco nicale - Falco nicale - Falco nicale - Falco nicale - Falco nicale - CondeliaAnimals - Birds - Falco nicale - CondeliaAnimals - Birds - Falco nicale - Falco nicale - CondeliaAnimals - Birds - Falco nicale - Falco nicale - CondeliaAnimals - Birds - Falco nicale - CondeliaAnimals - Animals - BirdsAnimals - BirdsAnimals - BirdsAnimals - BirdsAnimals - BirdsAnimals - BirdsAnimals - BirdsAnimals - BirdsAnimals - <td>•</td> <td></td> <td>Ardea alba</td> <td>great egret</td> <td>ABNGA04040</td> <td>None</td> <td>None</td> <td>-</td> <td>-</td> <td>3812222</td> <td>Cordelia</td> <td>Unprocessed</td> <td>Ardeidae -</td>	•		Ardea alba	great egret	ABNGA04040	None	None	-	-	3812222	Cordelia	Unprocessed	Ardeidae -
Animals - Egretta thula snowy egret ABINGA06030 None None - - 3812222 Cordella Unprocessed Ardicitae - Ardicitae - Ardicitae - Mediospiza Animals - Nycticorax mycticorax black- crowned mediofla ABINGA11010 None None - - 3812222 Cordella Unprocessed Ardicitae - Ardicitae - Mediospiza Animals - Melospiza maxillaris Sulsun sparrow ABINGA00071 None None - - 3812222 Cordella Mapped Animals - Birds - Emberzitate - Melospiza Animals - Falco paregrinus anatum American peregrine anatum ABINKD06071 Delisted FP - 3812222 Cordella Unprocessed Animals - Birds - Falco peregrinus anatum Arimals - Birds - falco peregrinus anatum Animals - Birds - falco peregrinus Amimals - Micros Amimals - M	•		Ardea herodias		ABNGA04010	None	None	-	-	3812222	Cordelia	Unprocessed	Ardeidae -
Animals - Birds Nyclicorax nyclicorax None None - 3812222 Cordelia Unprocessa Mapped Animals - Embersizationa Animals - Birds Melospiza melodia Birds Suisun melodia sparrow ABPBXA301K None None SSC - 3812222 Cordelia Mapped Animals - Birds - Embersizationa Animals - Birds Falco peregrinus anatum American peregrinus American peregrinus American peregrinus American peregrinus American peregrinus American peregrinus American peregrinus Amimals - Birds - falco peregrinus Animals - Birds Agelaius tricolor tricolored blackbird ABPBXB0020 None None SSC - 3812222 Cordelia Mapped Animals - Birds - falco peregrinus anatum Animals - Birds - falconidae - falco Animals - Insects Animals - Birds Agelaius tricolor tricolored blackbird ABPBXB0020 None None SSC - 3812222 Cordelia Mapped Animals - Insects - Cordelia Insocion Animals - Birds Bombus cocidentalis western burbelee IIHYM24250 None None - 3812222 Cordelia Mapped			Egretta thula		ABNGA06030	None	None	-	-	3812222	Cordelia	Unprocessed	Ardeidae -
Animals- Birds Melospiza maxilaris Suisun sparrow ABPBXA301K None None SSC - 3812222 Cordelia Mapped Emberzidae - melodia maxilaris Animals- Birds Falco peregrinus anatum American peregrinus falcon ABNKD06071 Delisted Delisted FP - 3812222 Cordelia Mapped Emberzidae - melodia maxilaris Animals - Birds Agelatus tricolor tricolored blackbird ABPBXB0020 None None SSC - 3812222 Cordelia Mapped Animals - Birds - tacicol peregrinus anatum Animals - Birds Agelatus tricolor tricolored blackbird ABPSB0020 None None SSC - 3812222 Cordelia Mapped Animals - Birds - tacicol peregrinus anatum Animals - Birds Athene cunicularia burrowing owl ABPSB10010 None None SSC - 3812222 Cordelia Mapped Animals - Insects - Apidae - Strictae - Apidae - Strictae - Apidae - Strictae - Apidae - Strictae - Strictae - Apidae - Strictae - Animals - Animals - Animals - Animals - Insects Desmocerus californicus dimorphus Maimals - Insects None - - 3812222 Cordelia				crowned	ABNGA11010	None	None	-	-	3812222	Cordelia	Unprocessed	Ardeidae - Nycticorax
Animals - Birds Falco peregrinu anatum Amencan falcon ABNKD06071 Delisted PP - 3812222 Cordelia Unprocesse Falco pregrinus falcon Animals - Birds Agelaius tricolor tricolored blackbird ABPBXB0020 None None SSC - 3812222 Cordelia Mapped Animals - Birds - Agelaius tricolor Animals - Birds Athene burrowing outcutria ABNSB10010 None None SSC - 3812222 Cordelia Mapped and Strigidae - Agelaius tricolor Animals - Birds - Strigidae - Agelaius tricolor Animals - Birds Athene burrowing outcutria ABNSB10010 None None SSC - 3812222 Cordelia Mapped and Strigidae - Agelaius tricolor Animals - Insects cocidentalis western IIHYM24250 None None - 3812222 Cordelia Mapped Animals - Insects - Corabycidee - Desmocerus outcutria Animals - Insects			melodia	song	ABPBXA301K	None	None	SSC	-	3812222	Cordelia	Mapped	Emberizidae - Melospiza melodia
Animals - Birds Agelaius tricolor tricolored blackbird ABPBXB0020 None None SSC - 3812222 Cordelia Mapped Interview- Agelaius tricolor Animals - Birds Athene cunicularia burrowing owl ABNSB10010 None None SSC - 3812222 Cordelia Mapped and Unprocessed Animals - Birds - Strigidae - Athene cunicularia Animals - Insects Bombus occidentalis western burnble bee IIHYM24250 None None - - 3812222 Cordelia Mapped and Unprocessed Animals - Insects - Apidae - Bombus occidentalis Animals - Insects Desmocerus californicus dimorphus valley elderberry longhorn beetle IICOL48011 Threatened None - - 3812222 Cordelia Mapped Animals - Insects - Cerambycidae - Desmocerus californicus dimorphus - - 3812222 Cordelia Mapped and Unprocessed - - Speyeria callippe callippe Animals - Insects - Cerambycidae - - 3812222 Cordelia Mapped and Unprocessed - - Speyeria callippe callippe - Nomals - Insects - Nymphalfade - - - 3812222				peregrine	ABNKD06071	Delisted	Delisted	FP	-	3812222	Cordelia	Unprocessed	Falconidae - Falco peregrinus
Animals - Birds Athene cunicularia burrowing owl ABNSB10010 None None SSC - 3812222 Cordelia Mapped and Unprocessed Atimene cunicularia Animals - Insects Bombus occidentalis Bombus occidentalis IIHYM24250 None None - - 3812222 Cordelia Mapped and Unprocessed Animals - Insects - Apidae - Bombus occidentalis Animals - Insects Desmocerus californicus alifornicus dimorphus Valley elderberry longhorn beetle IICOL48011 Threatened None - - 3812222 Cordelia Mapped Animals - Insects - Cerambycidae - Desmocerus californicus alimorphus - - 3812222 Cordelia Mapped Animals - Insects - Cerambycidae - Desmocerus californicus alimorphus - - 3812222 Cordelia Mapped Animals - Insects - Cerambycidae - Desmocerus californicus alimorphus Animals - Insects Speyeria callippe IILEPJ6091 Endangered None - - 3812222 Cordelia Mapped Animals - Insects - Speyeria callippe callippe alimorphus - - 3812222 Cordelia Mapped - - - - - -	Ì		Agelaius tricolor		ABPBXB0020	None	None	SSC	-	3812222	Cordelia	Mapped	Icteridae -
Animals InsectsBombus occidentaliswestern bumble beeIIHYM24250NoneNone3812222CordeliaMappedApidae - Bombus occidentalisAnimals - InsectsDesmocerus californicus dimorphusvalley elderberry loghorn beetleIICOL48011ThreatenedNone3812222CordeliaMapped	>				ABNSB10010	None	None	SSC	-	3812222	Cordelia		Strigidae - Athene
Animals - InsectsDesmocerus californicus dimorphusValley elderberry longhorn beetleIICOL48011ThreatenedNone3812222CordeliaMapped Cerambycidae - Desmocerus californicus dimorphusAnimals - InsectsSpeyeria callippecallippecallippeIILEPJ6091EndangeredNone3812222CordeliaMappedAnimals - InsectsNomals - InsectsAnimals - InsectsSpeyeria callippecallippeIILEPJ6091EndangeredNone3812222CordeliaMapped and UnprocessedAnimals - Insects Speyeria callippeAnimals - Mammals - Mammals - raviventrisReithrodontomys raviventrissalt-marsh harvest mouseAMAFF02040EndangeredFP-3812222CordeliaMappedAnimals - Mapped and UnprocessedAnimals - Marmals - Marmals - Marmals - Marmals - Animals - MarvestAniAFF02040EndangeredFP-3812222CordeliaMappedAnimals - Marmals - Marmals - Marmals - Marvest					IIHYM24250	None	None	-	-	3812222	Cordelia	Mapped	- Apidae - Bombus
Animals - InsectsSpeyeria callippe callippeIILEPJ6091 silverspot butterflyEndangered NoneNone-3812222Cordelia UnprocessedMapped and Unprocessed-Nymphalidae - Speyeria callippe callippeAnimals - MammalsReithrodontomys raviventrissalt-marsh harvest mouseAMAFF02040EndangeredEndangeredFP-3812222CordeliaMapped Mapped-Nymphalidae - Speyeria callippe callippeAnimals - MammalsReithrodontomys raviventrissalt-marsh harvest mouseAMAFF02040EndangeredEndangeredFP-3812222CordeliaMappedMapped Mapped-Nimals - Marmals - Muridae - Reithrodontomys raviventrisAnimals - Marmals -			californicus	elderberry longhorn	IICOL48011	Threatened	None	-	-	3812222	Cordelia	Mapped	 Cerambycidae Desmocerus californicus
Animals - Reithrodontomys Mammals raviventris salt-marsh harvest AMAFF02040 Endangered Endangered FP - 3812222 Cordelia Mapped Muridae - Reithrodontomys raviventris Animals -				silverspot	IILEPJ6091	Endangered	None	-	-	3812222	Cordelia		- Nymphalidae - Speyeria callippe
				harvest	AMAFF02040	Endangered	Endangered	FP	-	3812222	Cordelia	Mapped	Mammals - Muridae - Reithrodontomys
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IMAPS Print Preview

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Animals - Mammals	Sorex ornalus sinuosus	Suisun shrew	AMABA01103	None	None	SSC	-	3812222	Cordelia	Mapped	Mammals - Soricidae - Sorex ornatus sinuosus
Animals - Mammals	Myotis yumanensis	Yuma myotis	AMACC01020	None	None	-	-	3812222	Cordelia	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis yumanensis
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812222	Cordelia	Mapped	Animals - Reptiles - Emydidae - Emys marmorata
Community - Terrestrial	Serpentine Bunchgrass	Serpentine Bunchgrass	CTT42130CA	None	None	-	-	3812222	Cordelia	Mapped	Community - Terrestrial - Serpentine Bunchgrass
Plants - Vascular	Balsamorhiza macrolepis	big-scale balsamroot	PDAST11061	None	None	-	1B.2	3812222	Cordelia	Mapped	Plants - Vascular - Asteraceae - Balsamorhiza macrolepis
Plants - Vascular	Centromadia parryi ssp. parryi	pappose tarplant	PDAST4R0P2	None	None	-	1B.2	3812222	Cordelia	Mapped	Plants - Vascular - Asteraceae - Centromadia parryi ssp. parryi
Plants - Vascular	Erigeron biolettii	streamside daisy	PDAST3M5H0	None	None	-	3	3812222	Cordelia	Unprocessed	Plants - Vascular - Asteraceae - Erigeron biolettii
Plants - Vascular	Isocoma arguta	Carquinez goldenbush	PDAST57050	None	None	-	1B.1	3812222	Cordelia	Mapped	Plants - Vascular - Asteraceae - Isocoma arguta
Plants - Vascular	Symphyotrichum lentum	Suisun Marsh aster	PDASTE8470	None	None	-	1B.2	3812222	Cordelia	Mapped	Plants - Vascular - Asteraceae - Symphyotrichum lentum
Plants - Vascular	Trifolium amoenum	two-fork clover	PDFAB40040	Endangered	None	- ,	1B.1	3812222	Cordelia	Mapped	Plants - Vascular - Fabaceae - Trifolium amoenum
Plants - Vascular	Trifolium hydrophilum	saline clover	PDFAB400R5	None	None	- 1	1B.2	3812222	Cordelia	Mapped	Plants - Vascular - Fabaceae - Trifolium hydrophilum
Plants - Vascular	Iris longipetala	coast iris	PMIRI092E0	None	None	-	4.2	381222 <mark>2</mark>	Cordelia	Unprocessed	Plants - Vascular - Iridaceae - Iris longipetala
Dianta	Castillais officia	Tiburon								Mannad and	Plants - Vascular -
Plants - Vascular	Castilleja affinis var. neglecta	Tiburon paintbrush	PDSCR0D013	Endangered	Threatened	-	1B.2	3812222	Cordelia	Mapped and Unprocessed	Orobanchaceae - Castilleja affinis var. neglecta