

# California Native Plant Society

East Bay Chapter

P O Box 5597, Elmwood Station. Berkeley, CA 94705

May 13, 2013

Ms. Holly Costa  
US Army Corps of Engineers  
1455 Market Street  
San Francisco, CA 94103

Mr. Scott Wilson  
Acting Regional Manager  
Bay Delta Region  
California Department of Fish and Wildlife  
7329 Silverado Trail  
Napa, CA 94558

Dear Ms. Costa and Mr. Wilson:

The purpose of this letter is to provide additional important information to the California Department of Fish and Wildlife (CDFW), the US Fish and Wildlife Service (USFWS), and the US Army Corps of Engineers (USACE) regarding the California Trails project of the Oakland Zoo in Knowland Park. This letter is a more detailed discussion of the issues we raised in our letter to the agencies on April 2, 2013 (see Attachments A1-A4). In March 2013, we learned through a Freedom of Information Act request that the zoo submitted its revised Biological Assessment to USACE, asking that USFWS initiate formal consultation under Section 7. The zoo's submittal is incomplete and inaccurate. There is confirmed evidence that rare and sensitive native plant resources, the Brittleleaf Manzanita Shrubland Alliance (*Arctostaphylos crustacea* maritime chaparral), will be significantly impacted by the project. This information has been systematically omitted from the revised Biological Assessment despite the fact that CDFW requested that it be included in the Joint Aquatic Resources Permit Application (JARPA) Biological Assessment a year ago (see Attachment A2). **Accordingly, we ask that initiation of permit application review be suspended until an accurate Biological Assessment is submitted as part of the application. We wish to emphasize that this letter is time-sensitive, given the move to initiate formal consultation. We respectfully request that each regulatory agency, including those copied, notify us immediately of the receipt of this letter so that we may know the agency's disposition to the information that we have provided.**

Further, we affirm that the omitted information qualifies as "new information" under the California Environmental Quality Act (CEQA), requiring supplemental CEQA review. A letter to that effect from our attorney--Shute, Mihaly, and Weinberger--is being sent under separate cover.

Finally, USACE and USFWS must consider this information in any Section 7 consultation with respect to the Alameda whipsnake for this project, since the species was



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trapped within the rare chaparral on site, and any consideration of management for whipsnake habitat must be done taking into consideration how the maritime chaparral will be impacted as well.

At present, there is direct conflict among the goals of appropriate management of the AWS, appropriate fuels management, and appropriate management of this rare plant community--all prompted by an ill-chosen site for the project which makes avoidance of unmitigable impacts impossible. Accordingly, we also include a report prepared by wildlife biologist Dr. Shawn Smallwood that analyzes the zoo's revised Biological Assessment regarding impacts and mitigation to the Alameda whipsnake on site (see Attachment B). Dr. Smallwood concludes that the zoo's proposed mitigation is wholly insufficient to mitigate impacts to the whipsnake, and that the project will appreciably diminish the whipsnake's chances of survival and recovery.

## **Discovery of New Information**

The new information consists of the discovery at the project site of an old-growth stand of a rare plant community, *Arctostaphylos crustacea* ssp. *crustacea* Shrubland Alliance or Brittleleaf Manzanita Alliance, an example of Central Coast maritime chaparral, ranked as rare and imperiled by the California Department of Fish and Wildlife (see Sawyer, Keeler-Wolf, and Evens, 2009). California vegetation is mapped, classified and ranked by a program in CDFW's Biogeographic Data Branch called Veg CAMP (Vegetation Classification and Mapping Project) in keeping with the National Vegetation Classification System. The purpose of the program is to produce high quality data which are critical for the preservation, management, and risk assessment of California's ecosystems.

The discovery of the maritime chaparral was made by the East Bay Chapter of the California Native Plant Society (EBCNPS) in August, 2011 shortly after the close of the City of Oakland's CEQA process in June 2011. The occurrence was mapped and classified, and a record submitted to the California Natural Diversity Database (CNDDDB) (see Attachment C). The proposed project will have significant unmitigable impacts to the integrity of the plant community as a result of its proposed location in, near, and above the plant community.

This discovery is a case of a rare plant community hiding in plain sight because it had been re-classified from a former common classification (ordinary chamise chaparral). During the City's CEQA process, the new classification was missed by all involved (the zoo management and consultants, the regulatory agencies, and the general public, including the EBCNPS). The reasons for this are complex but can be summarized as follows:

1. The CNDDDB houses the state's vegetation data. When a CEQA consultant or any other member of the public seeks to determine the vegetation types at a project site, he or she consults the CNDDDB. The zoo's consultants followed this procedure during the City's CEQA process.



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2. However, the data in the CNDDDB is only as good as what is inputted in the system. Before the development of VegCAMP, the vegetation classification system used was a partially completed system called the Holland system. Occurrence data under the Holland system was entered into the CNDDDB and remains there. The Holland system does not include a classification for the rare Brittleleaf Manzanita Alliance.

With the advent of VegCAMP, the new MCV2 types (found in the Manual of California Vegetation, 2nd edition) produced from mapping have been entered into the CNDDDB but only for the portion of the state that has been mapped under VegCAMP, about 1/3 of the state's natural communities. Given the immensity of the state, the program to map all of its natural communities is a long-term undertaking. In the interim, a hybrid system for logging the occurrence data in the CNDDDB has been developed.

For the 2/3 of the state that has not yet been mapped, the CNDDDB is being handled differently regarding new classifications produced under the second edition of the Manual of California Vegetation (Diana Hickson, CDFW, pers. comm.).

3. The East Bay as a whole has not yet been mapped so only the older Holland classifications can be found by querying the CNDDDB. Even if MCV2 type occurrence records are submitted, they will be filed but not entered into the CNDDDB until that geographic area is fully mapped. Thus, it would have been impossible to identify the Brittleleaf Alliance at the project site using CNDDDB data.

## **How EBCNPS Discovered the Correct Classification and How the Information Was Shared**

In August 2011, EBCNPS requested that Erin McDermott, a professional vegetation ecologist, visit the project site to inspect the chaparral. Her first impression was that it was chamise chaparral, based on her familiarity with Holland classifications. But after consulting the MCV2, she realized that it fit the criteria for the new classification, Brittleleaf Manzanita Alliance, a maritime chaparral vegetation alliance. She confirmed the classification by contacting Dr. Keeler-Wolf, co-author of the Manual of California Vegetation, 2nd edition. Dr. Keeler-Wolf is also a Senior Vegetation Ecologist with the Vegetation, Classification, and Mapping Project (Veg CAMP) in the Biogeographic Data Branch of CDFW. The Biogeographic Data Branch is the highest authority on vegetation classification types in California. She also sent him the CNDDDB record of the occurrence.

EBCNPS requested that she send a letter to USFWS (see Attachment D) to inform them, and we contacted Ms. Marcia Grefsrud by phone to alert the Regional Branch of CDFW to the presence of the maritime chaparral. USACE was not yet involved as a regulatory agency, so they were not contacted.

We also immediately sent an e-mail to one of the zoo's environmental consultants (Ms. Karen Swaim) requesting that she pass the information on to Mr. Jim Martin, the lead



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consultant, since we had no contact information for him. These notifications all took place within a week of our learning of the proper classification.

**It is important that we fully document the full transparency of how this information was shared with the project applicant and the appropriate regulatory agencies, since in the year and a half since it was discovered, the response of the project applicant to this information has been one of attempting to dispute, deny, and "disappear" it at every opportunity. We believe that the applicant's conduct with respect to how it has handled this information is the single best indication of how it will handle the management of the sensitive resources in its keeping going forward, should the project be permitted. The profound lack of good faith on the part of the East Bay Zoological Society should be a stern warning to the regulatory agencies of how difficult it will be to get required information from the project proponent regarding future monitoring requirements which are the foundation of all of its mitigations for this project.** It should be noted that there is a second rare plant community at the site: *Stipa pulchra* (formerly *Nassella pulchra*) Herbaceous Alliance, or Purple Needlegrass grassland alliance, ranked S3, G3. This sensitive resource will also be heavily impacted by the project.

## **The Project Applicant's Response to the New Information**

Multiple Public Record Act (PRA) and Freedom of Information Act (FOIA) requests to the regulatory agencies conducted over the past year by EBCNPS have revealed that, despite repeated communications to the applicant about the existence of the rare maritime chaparral on site, the project applicant continues to omit any mention of this rare resource in any documentation submitted to the agencies regarding the project.

CDFW specifically informed the zoo via letter (Attachment A2) a year ago that it had omitted the rare maritime chaparral from its Biological Assessment in the JARPA. The letter also included the suggestion that the applicant move the Interpretive Center 200 yards to the south to avoid impacts, use open land at the existing zoo footprint, or face further CEQA analysis.

Rather than rectify its omission, the zoo chose, instead, to dispute the accuracy of the classification (see Attachment E), despite the fact that it had already been verified by Dr. Todd Keeler-Wolf.

Nearly a year later, in March 2013, the applicant apparently still doubted the veracity of CDFW personnel regarding the rare maritime chaparral and requested a site visit with Dr. Keeler-Wolf and Ms. Marcia Grefsrud of the Bay Delta Regional Branch of CDFW. The zoo's environmental consultant, and zoo management personnel, including the Executive Director, were also present. Dr. Keeler-Wolf reaffirmed that the chaparral in the project site is indeed a form of maritime chaparral, Brittleleaf Manzanita Alliance, and it is ranked G2S2, or rare and imperiled.



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Regardless of these repeated clear communications between CDFW and the applicant, the zoo submitted its revised Biological Assessment to USACE omitting any mention of the rare maritime chaparral. Furthermore, the Project Consultation History has been doctored to remove any of the letters (Attachments A2 and E) and reference to the March 2013 site visit in which the subject of rare maritime chaparral has been discussed (see pp.4-6 of the revised BA). As the result of our most recent PRA request to CDFW regarding this project shows, the applicant is still avoiding all mention of the rare maritime chaparral, even after repeated questioning by the Regional Branch (see Attachment F).

Beyond the zoo's obvious disrespect for the authority of the agencies, there is a clear pattern of obfuscation in dealing with the regulatory agencies that violates the requirement for full accurate reporting of any sensitive resources at a project site. The Executive Director of the Zoo signed and certified in the JARPA that the information submitted to the agencies was accurate and complete to the best of his knowledge. There is a warning with the signature line that states to the effect that intentional misrepresentation of the information submitted by the applicant can result in civil or criminal penalties and permitting may be suspended. We suggest that the pattern of misrepresentation demonstrated by zoo management has reached that threshold.

## Significance of the Omissions by the Project Applicant

By ignoring the proper classification and rarity ranking of the maritime chaparral, the applicant is attempting to avoid having to do an analysis of impacts of the project to the maritime chaparral. Instead, it has made adjustments to the design that do little to alter the main impacts which are:

- Impacts from the wolf enclosure which is located in part within the chaparral;
- Impacts from the aerial gondola which requires removal of chaparral near the terminus;
- Impacts from the overnight experience which is being built, in part, on top of the chaparral;
- Impacts from fuels management that will be required because of the proximity of roads and structures to the chaparral (the Interpretive Center/Gondola terminus, Overnight Experience) see below;
- Impacts from the perimeter fence and any associated construction roads/trails which will be built through the chaparral;
- Impacts to the chaparral from the installation of the temporary exclusion fencing.



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Further, no measurement has been made of what proportion of "taking" the project's impacts will have on the total size of the existing chaparral stand. Nor has there been any comparison with how much of the stand has already been lost. There has been considerable "taking" of the chaparral with the construction of the fire roads on the southern and eastern sides of the stand, the building of the cell phone tower, the goat grazing of the strip of chaparral on the south side of the road, and the weed invasions. The loss of chaparral to shading out, a natural process, has also decreased the stand.

In summary, this remnant stand has already been significantly reduced. As a general principle of ecology, remnant stands of rare plant communities can reach a threshold below which the community is no longer viable. This critical issue has never been addressed. Instead, the zoo's assumption is that it can take more chaparral without considering the issue of sustainability.

## **The Issue of Fuels Management**

One of the greatest liabilities of the project site is its location within a Local Agency Designated Very High Fire Hazard Severity Zone (see Alameda County Map for VHFHSZ in LRA [http://frap.cdf.ca.gov/webdata/maps/alameda/fhszl\\_map.1.pdf](http://frap.cdf.ca.gov/webdata/maps/alameda/fhszl_map.1.pdf) ). Structures and roads located in close proximity to the chaparral--a highly flammable plant community--are required by state law and local ordinance to be protected by fuels management activities for defensible space. This constitutes an impact to this rare and sensitive resource not yet fully analyzed under CEQA since fuels management requirements were added and detailed after the SMND/A was certified. In addition, the applicant is attempting to present fuels management as improvement to AWS habitat, not as impacts.

State fire codes for defensible space are found in Government Code Section 51175-51189. Under state law, defensible space must be maintained 100 feet from buildings and structures in VHFHSZ. Defensible space is further defined in terms of standards of fuels modifications depending upon the conditions. Since the maritime chaparral stand at Knowland Park is one of the most flammable vegetation types and is located on a steep slope, standards for fuels management are stringent in terms of the amount of vegetation removed. State law provides that local fire departments can alter the distance, and it appears that the Oakland Fire Department has done this by reducing the management zone to within 30 feet of buildings and structures. However, this waiver violates Oakland's own compliance *requirement* (not recommendation) which states:

*"If property is greater than 1/2 acre, maintain a 100-ft defensible space/fuel reduction zone from all buildings and neighboring structures; more may be required."* (See Oakland Fire Department's Fire Prevention Bureau, "Compliance and Inspections." [www.Oakland.net.com/WildfirePrevention](http://www.Oakland.net.com/WildfirePrevention) )

Oakland Fire Department's Wildfire Assessment District's program currently operates outside the bounds of CEQA review--no Environmental Impact Report has ever been conducted on its vegetation management program. Therefore, none of the decisions and



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agreements that OFD makes with respect to fuels management at Knowland Park, including both the goat grazing and the fuels management requirement for the Oakland Zoo expansion project, have been subjected to CEQA review.

Additionally, other relevant new information has emerged in the form of a Draft Programmatic Environmental Impact Report for the Vegetation Treatment Program of the California State Board of Forestry and Fire Protection (SCH#2005082054) which was recently released.

([http://bofdata.fire.ca.gov/board\\_committees/resource\\_protection\\_committee/current\\_projects/vegetaion](http://bofdata.fire.ca.gov/board_committees/resource_protection_committee/current_projects/vegetaion)). This massive PEIR proposes to streamline future CEQA review of additional fuels management activities throughout the state. Therefore, the chaparral, if the zoo's project is built as currently designed and if the PEIR is certified, could undergo even more substantial reductions which would constitute cumulative impacts without further CEQA review.

Any regulatory consideration of permitting for this project must consider this new information. Unless the applicant is willing to avoid impacts through amending the siting of the project, the project should undergo further CEQA review.

**The upshot of all of this is that the applicant has pressured all the regulatory agencies, including the Oakland Fire Department, into enormous compromises of its most fundamental standards, guidelines, principles and mandates by insisting on locating its project in the most hazardous and most sensitive site possible.**

## **The Challenge of Mitigation**

The zoo's suggestion that it cut down the invading coast live oaks that are shading out the chaparral may be one form of management, but it does not constitute mitigation for impacts caused by the project (see Section 7.1 of Revised BA, Conservation Measures of the Project). The revised Biological Assessment attempts to skirt the need for mitigation by failing to acknowledge that it is the presence of the rare alliance at the site not the species itself that requires mitigation. Similarly, the zoo refuses also to acknowledge that its project will have impacts, and therefore it refuses to acknowledge the need for mitigation. Instead, it is attempting to call management, such as removing oaks, "conservation measures." This does not wash since without an impacts analysis, there is no way of accounting for how much chaparral needs to be protected.

Removing oaks also does not help with managing fuels. The previous opening of the southern and eastern edges of the chaparral with the construction of the fire road has changed the ecology of the stand by subjecting it to the composite forces of disturbance and resulting cascading impacts: soil compaction, desiccation from sun and exposure, penetration by weeds and coyote brush, acceleration of oak recruitment by fragmenting the habitat and making it more accessible to scrub jays which plant the acorns under the chaparral shrubs which then act as nurse plants for the seedling oaks.



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The Revised Biological Assessment also continues to promote the notion that "habitat enhancement" through removal of invasive weeds such as french broom is a form of mitigation. While this is a dubious premise at best, the mitigation potential (created by the zoo's allowing the proliferation of french broom at the site) has since been considerably decreased. Community volunteers, tired of watching the broom population spiral out of control while the zoo waits to cash in on it as a source of mitigation, have removed enormous amounts of french broom from the southern and eastern edges of the chaparral. While a viable feedback remains (and will remain for years to come), the population of mature seeding plants has been dramatically reduced. This has reduced the potential for mitigation to be extracted from this situation.

Another factor that has not been considered in the mitigation issue is that the Brittleleaf Manzanita Alliance is unique, making appropriate mitigation impossible. Dr. Michael Vasey of San Francisco State University has been studying individual stands of central coast maritime chaparral and describes them as islands of speciation in a terrestrial archipelago he calls the "Galapagos of the California Coast." He likens the diversity found in them to the diversity found in tropical rain forests, and they are individually distinct (<http://nrs.ucop.edu/media/transect/>). The Oakland Hills are considered a hotspot for maritime chaparral, and in fact, of the dozen or so stands found there, the only one that is not currently protected is the one at Knowland Park. Thus there is no mitigation bank potential for maritime chaparral.

As old-growth stands of maritime chaparral are being studied, more information has emerged about their ecology. The closed canopy of old-growth chaparral helps maintain higher humidity which in turn fosters the growth of mosses and lichens which form an important component of the cryptogamic soil crusts. The heavy growth of lichens in old-growth chaparral regulates the flow of nitrogen, water, and nutrients and the chaparral in turn functions as a refuge for lichens that are disappearing with human encroachment (see Magney and Knudsen, 2006; and [www.californiachaparralinstitute.org](http://www.californiachaparralinstitute.org) for a bibliography of articles on lichens in chaparral compiled by the California Chaparral Institute.)

Opening the canopy is likely to destroy the ecology of the old-growth chaparral. Therefore, there is an inherent conflict between the mitigation proposal put forth by the zoo's AWS consultant and protection of the maritime chaparral. Since the zoo's AWS consultant claims that opening the canopy by reducing it up to 75% will be favorable to the snake, there is an obvious conflict with protecting the chaparral community (See Attachment B).

## **US Fish and Wildlife Service Considerations**

Another challenge to establishing effective mitigation other than avoidance is the fact that USFWS does not have a legal mandate to protect this rare plant community. Thus far, it has considered impacts only to AWS and its habitat. However, there is very good reason for USFWS to examine impacts to the chaparral. The Alameda whipsnake is known to be closely associated with chaparral. Indeed the AWS trapped at the project site was found on three separate occasions within the chaparral. It is obvious that USFWS has



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intermingled responsibilities with CDFW about how best to address the rare snake and its habitat, which in this instance is a rare form of chaparral.

Further justification for USFWS to consider both the AWS and the maritime chaparral community together comes from the Memorandum of Understanding For Cooperative Vegetation Habitat Mapping and Classification which was signed in 2000 (see Attachment A3 and A4) by multiple agencies responsible for resource oversight in California, including both USFWS and CDFW. The Preamble to the MOU states,

*"In keeping with the policies and principles of the California Biodiversity Council, the signatories mutually agree by the Memorandum of Understanding (MOU) to establish a cooperative vegetation and habitat mapping initiative which will facilitate statewide joint data collection and processing, establish common mapping and classification standards across all ownership, and provide timely response to both State and Federal information and analytical requirements."*

The MOU further states,

*"The goals of this MOU are to establish and maintain statewide vegetation and habitat data layers of known accuracy in compliance with the National Vegetation Classification System (NVCS)." In so doing, the agencies establish critical crosswalks between their different mandates that are aimed at protecting the biodiversity at the state and national level."*

The zoo continues to use the Wildlife Habitat Relationships (WHR) system to describe the vegetation communities utilized by the Alameda whipsnake at the project site. However, the WHR system is silent on the subject of rare vegetation since it focuses only upon the animal species utilizing the habitat. Clearly, to review the zoo's application for its Incidental Take Statement based solely upon the WHR system is to ignore the intent of the MOU and the wisdom of the policies and principles of the California Biodiversity Council.

The obvious solution to protecting this rare and imperiled resource is to locate the project far enough away from it to avoid the triple threats: impacts to Alameda whipsnake, maritime chaparral, and public safety, a suggestion made by CDFW in its letter a year ago (see Attachment A2). Indeed there is an excellent regulatory model for how to address potential impacts to rare maritime chaparral found within the California Coastal Commission.

## **Coastal Commission Protection of Maritime Chaparral**

The California Coastal Commission (CCC) requires protection of maritime chaparral as an Environmentally Sensitive Habitat Area (ESHA) under Section 30240 of the Coastal Act. An ESHA is described as,



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*"Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."*

Protection of ESHAs is achieved by avoidance of impact: forbidding any development, including roads and structures, within the ESHA and within a buffer zone of 50-100 feet from any development (John Dixon, California Coastal Commission, pers.com)

Depending upon individual circumstances, the CCC may also calculate any previous loss of chaparral habitat at a project site due to roads or other development and can require that these areas be counted in the total impacts. It can also require restoration where appropriate because of previous "taking". Staff biologists undertake extensive reviews of every development proposal, and decisions whether and what to permit are based on a firm understanding of the ecology of the ESHA.

Maritime chaparral occurs within upland areas of maritime influence.

Central coast maritime chaparral occurs along the shore of the open ocean as well as in Morro, Monterey, and San Francisco Bays. Unlike the previous two bays which fall under the jurisdiction of the CCC, San Francisco Bay is under the jurisdiction of the Bay Conservation and Development Commission, which extends its influence only to the first 100 feet above the shoreline, not to the full spectrum of maritime habitats within the Bay Area. Therefore, even though the East Bay hills are a hotspot for maritime chaparral, occurrences there receive no protection from the Coastal Act. However, every stand of maritime chaparral in the East Bay Hills is protected from development by virtue of occurring either within East Bay Regional Park District land or within East Bay Municipal Utility District Land with the exception of one.

**The only maritime chaparral stand in the East Bay hills not protected from development is the stand at Knowland Park.**

The CCC's experience in reviewing projects that have potential impacts to maritime chaparral serves as the single best model of how to protect this rare natural resource. In effect, it sets the standard.

## Summary

In preparation for the opening of the Oakland Museum's new natural history wing, Dr. Keeler-Wolf has been mapping native plant communities in the East Bay for the Oakland Museum as part of its natural history program for the public. He describes the maritime chaparral as being among the rarest of the remnant plant communities found in the East Bay hills. This map, which includes the stand of maritime chaparral in Knowland Park, will be unveiled as part of the opening of the new wing of the museum in May. In stark contrast, the zoo has justified the destructive siting of the California Trails exhibit in the exact same sensitive habitat under the dubious claim that a higher conservation education interest will be served by displaying animals on top of what is currently viable wildlife habitat. It would be the greatest irony if the Oakland Zoo were permitted to damage and



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destroy this fine example of local natural heritage even as the community is being offered its first official opportunity to learn about it.

In closing, we wish to re-emphasize that this letter is time-sensitive, given the move to initiate formal consultation. We respectfully request that each regulatory agency, including those copied, notify us immediately of the receipt of this letter so that we may know the agency's disposition to the information that we have provided.

Thank you.

Sincerely,



Laura Baker, East Bay Chapter of the California Native Plant Society (EBCNPS)



Mack Casterman, Conservation Analyst, EBCNPS



Brett Hall, President, California Native Plant Society

Greg Suba, Conservation Program Director, California Native Plant Society

Ruth Malone, Friends of Knowland Park

cc: Jane Hicks, US Army Corps of Engineers.

Kim Squires, US Fish and Wildlife Service

Ryan Olah, US Fish and Wildlife Service

Todd Keeler-Wolf, California Department of Fish and Wildlife

Marcia Grefsrud, California Department of Fish and Wildlife



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