

**APPENDIX C**

**ADDITIONAL BIOLOGICAL  
RESOURCES INFORMATION**



**Evaluation of Potential California Red-Legged Frog (*Rana aurora draytonii*)  
Habitat on the Dixon Ranch Subdivision Project  
El Dorado County, California**



Prepared by:

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For:

**Dixon Ranch Partners, LLC**  
949 Tuscan Lane  
Sacramento, California 95864

September 9, 2013

# **Evaluation of Potential California Red-Legged Frog (*Rana aurora draytonii*) Habitat on the Dixon Ranch Subdivision Project, El Dorado County, California**

## **INTRODUCTION**

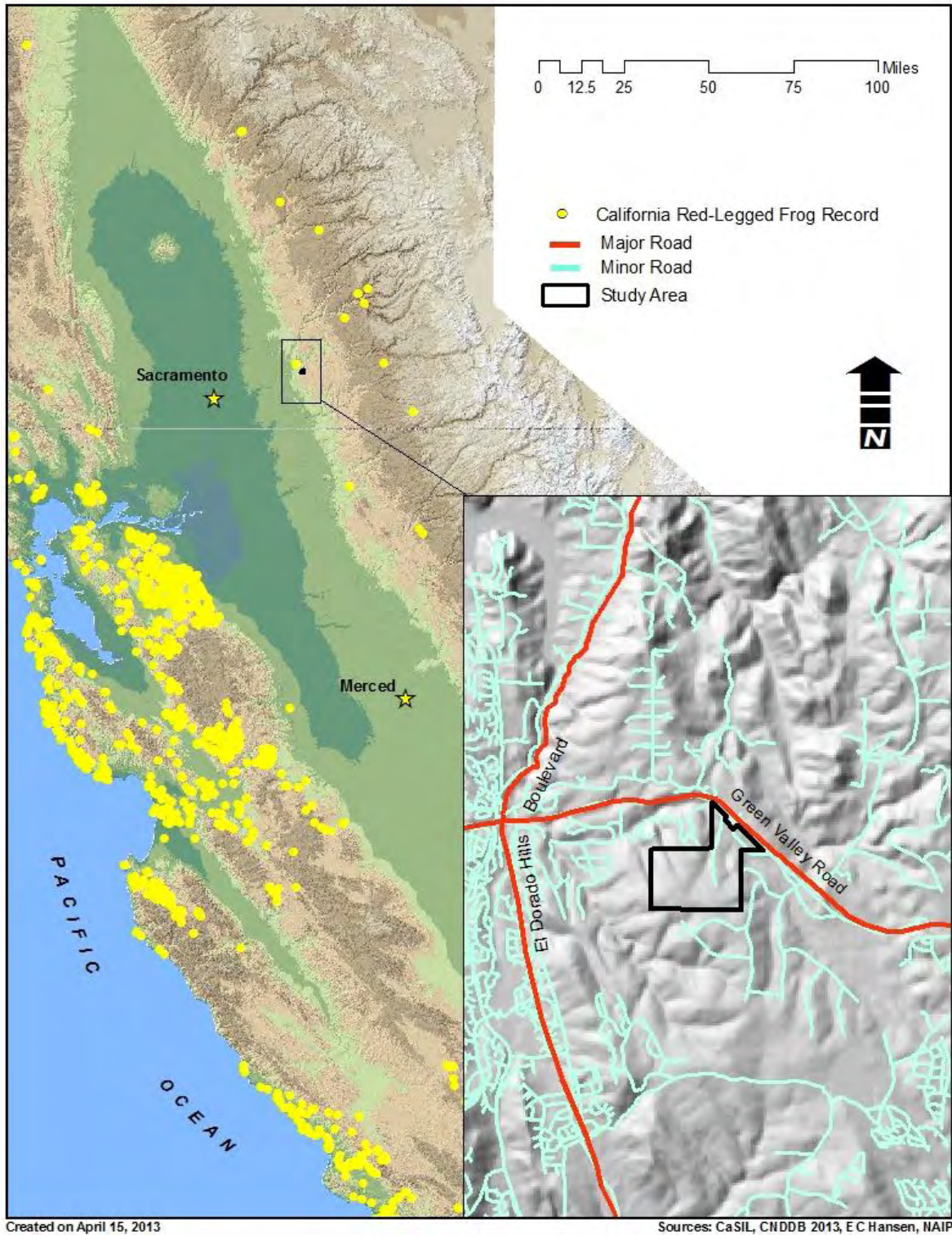
This report provides the results of California red-legged frog (*Rana aurora draytonii*) habitat suitability assessments on the Dixon Ranch Subdivision Project site (project site), located south of Green Valley Road in El Dorado County, California. A site visit was conducted for this purpose on 22 April 2013. The Louie Ponds consist of two contiguous impoundments situated in the Green Springs Creek corridor totaling approximately 3.8 acres in combined surface area. In order to provide an adequate regional perspective, an approximately 301-acre study area established during prior wetland delineations and rare plant species assessments (Gibson & Skordal 2011, 2012) were used to complete the assessment. The study area is located in Section 24, township 10 North, Range 8 East; Section 19, Township 10 North, Range 9 East, MDB&M, El Dorado County, California. The study area ranges from approximately 950-feet to 1240 feet in elevation, can be found at UTM 670,016 M E; 4,285,698 M N (Zone 10 North), and is portrayed on the Clarksville, California 7.5-Minute Series Topographic Quadrangle. Locator, vicinity, and detail maps are included in Figure 1 and Figure 2.

To access the site from Sacramento, drive east on Highway 50 into El Dorado County and exit to the north onto El Dorado Hills Boulevard, travel north on El Dorado Hills Boulevard, and then turn right onto Green Valley Road. Continue east on Green Valley Road until reaching West Green Springs Drive. The study area is located southeast of the West Green Springs Drive-Green Valley Road intersection. Existing or approved adjacent subdivisions include Green Springs Ranch to the east and southeast, Serrano to the southwest, and Highland View to the west.

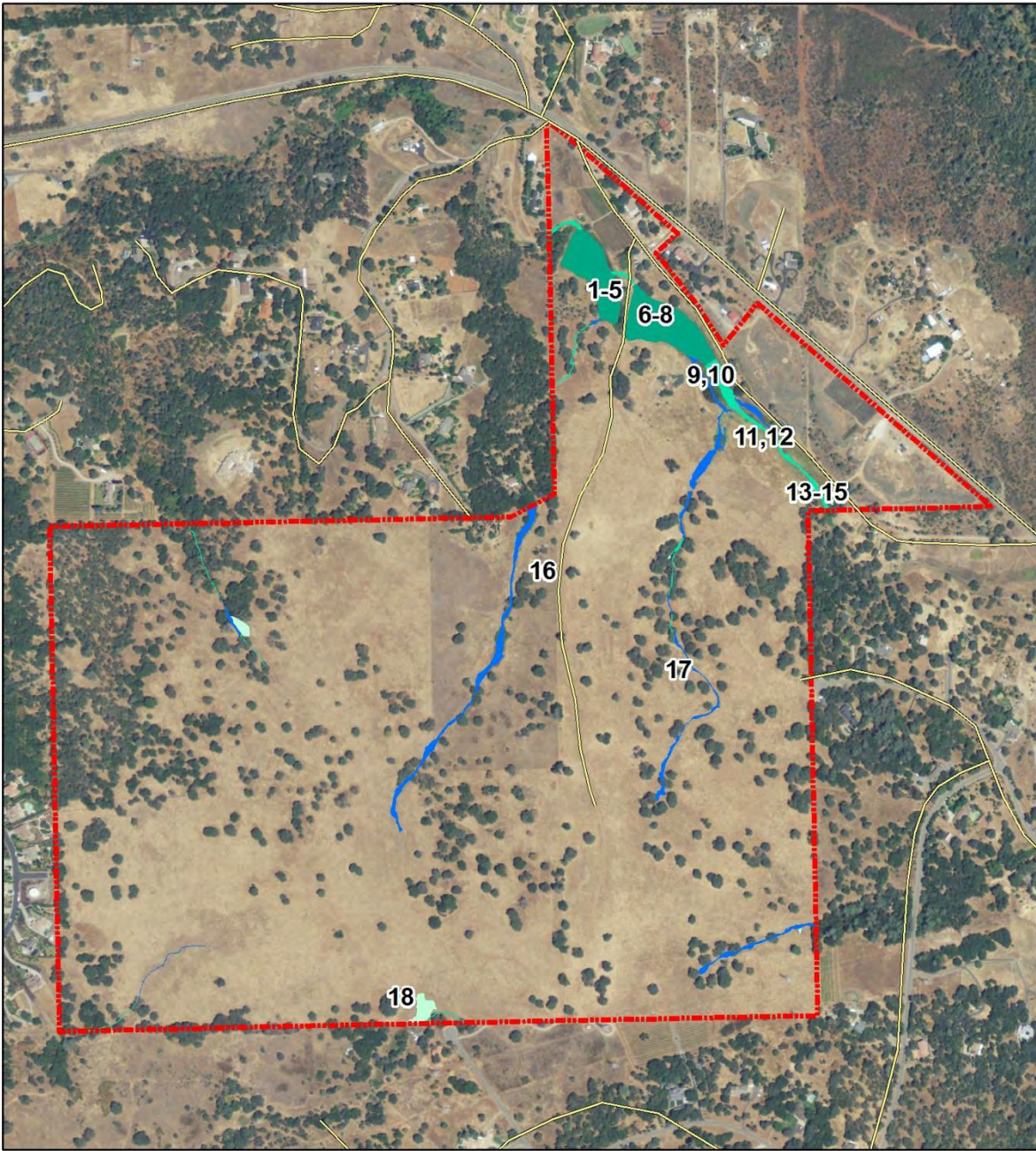
The project site contains habitats suitable for California red-legged frogs, possessing both the aquatic and upland terrestrial habitats required by the species; however, the number of reported California red-legged frog occurrences in El Dorado County is low. No California red-legged frog locality records fall within one mile (1.6 km) of the project site. Only one California red-legged frog locality record, consisting of one unverified juvenile frog (California Natural Diversity Database [CNDDDB] Occurrence Number 814) falls within 2.8 miles (4.5 km) of the project site (CNDDDB 2013). With the exception of the unverified juvenile frog reported near Folsom Lake, all California red-legged frogs recorded in this region of the Sierra Nevada occur above 2,000 feet, well above the approximately 1,050-foot mean elevation of the project site. While the project site contains habitat suitable for red-legged frogs, the presence of bullfrogs and predatory gamefish, distance from verified populations of red-legged frogs, and low site elevation relative to regional frog populations reduce the likelihood that red-legged frogs occur on the project site. The methodologies used to complete this assessment are presented below, and maps of regional species distribution are included as figures. Photographs of pertinent features and completed habitat assessment forms are included as Appendices A and B, respectively.



FIGURE 1. VICINITY MAP



**FIGURE 2. STUDY AREA DETAIL AND KEY TO PHOTOGRAPHS**

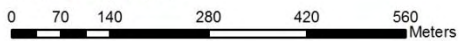


- |   |  |  |
|---|--|--|
|  Study Area Boundary |  Seep               |  Intermittent Channel           |
|  Roadway             |  Seasonal Wet Swale |  Ephemeral Channels             |
|  Channel             |  Pond               |  Depressional Seasonal Wetlands |
- XX Photo No.



Created May 10, 2013

Source: CNDDDB 2013; Gibson & Skordal, LLC; NAIP



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## HABITAT ASSESSMENT

### Legal Status

The California red-legged frog was federally listed as Threatened on June 24, 1996 and is designated as a California Species of Special Concern.

### Life History

This species is a lowland and foothill frog inhabiting moist environments from sea level to 2,440 meters (8,000 feet) (Stebbins 2003). It frequents the permanent cool waters of ponds, lakes, reservoirs, and streams offering dense shrubbery and emergent vegetation, such as cattails (*Typha* sp.), that provide cover and protection from predators. Red-legged frogs may disperse far from water to moist wooded areas following breeding. Individuals may engage in overland movements of up to 3.2 kilometers (2 miles) (Stebbins 2003).

The breeding period is short, often lasting only 1 to 2 weeks, usually from January to April, depending upon the locality and seasonal weather conditions. Larvae generally require 4 to 5 months to attain metamorphosis. Exotic species such as bullfrogs (*Lithobates catesbeianus*) and green sunfish (*Lepomis cyanellus*) compete with and prey upon red-legged frogs.

### Proposed Action

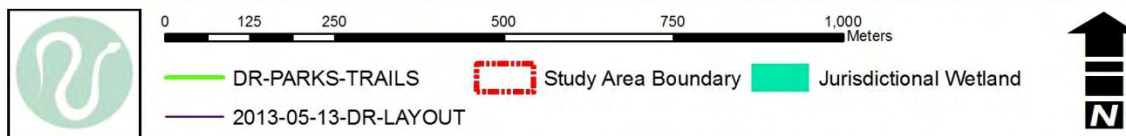
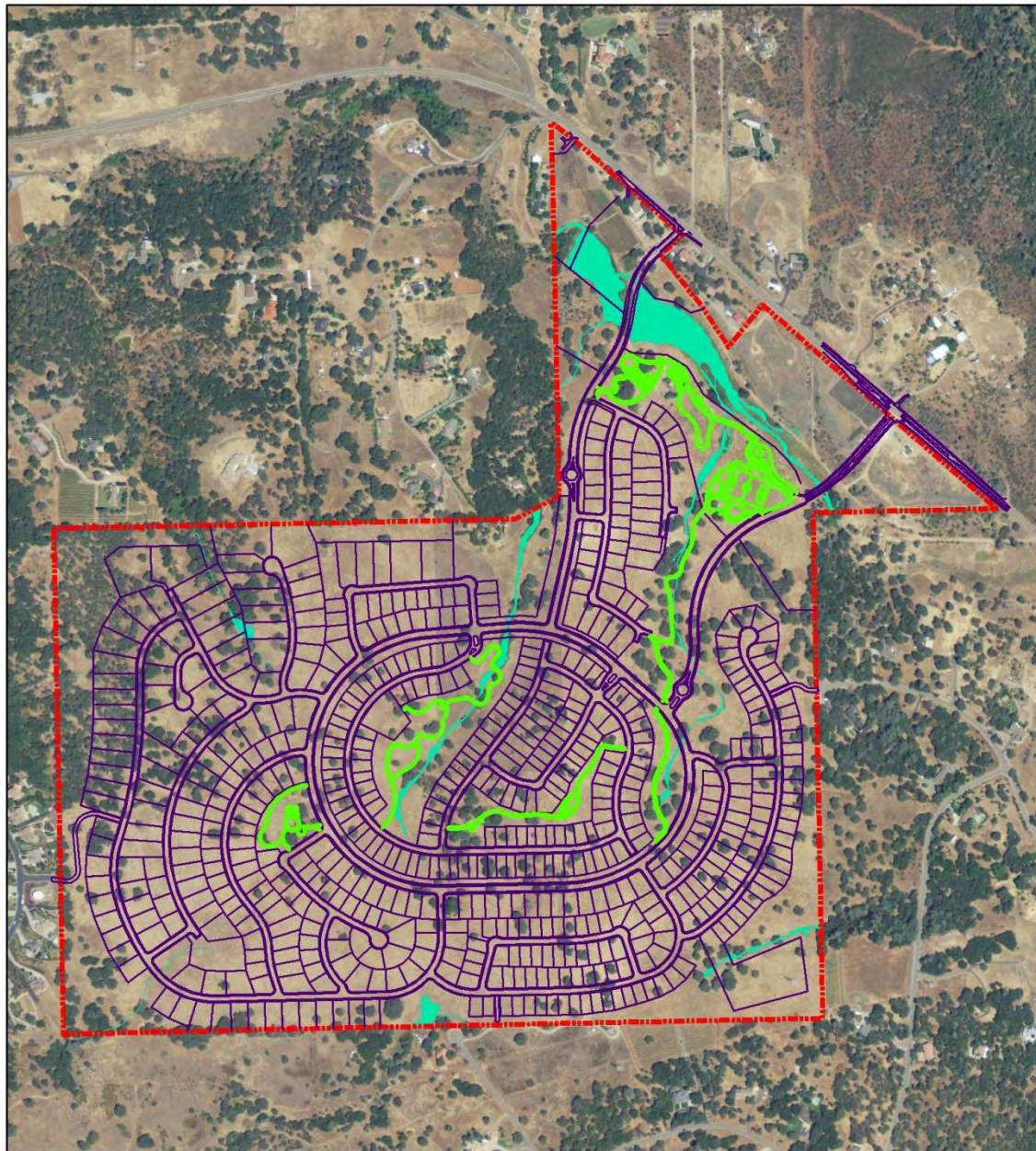
#### *Project Description*

The Dixon Ranch Project proposes to subdivide 280+/- acres into 444 single family detached residential units, 160 age-restricted single family detached units (age restricted to older adults), and includes retention of one existing single family residence for a total of 604 new units and one existing unit. The project includes preservation or creation of 84.1+/- acres (30%) of open space including parks, trails, landscaped lots, and native open spaces. The project includes on-site and off-site infrastructure to serve the development. Construction of a clubhouse for the age-restricted units is also proposed. Build-out will likely occur over many years, but ultimately will be dictated by market demands. The proposed development plan is shown in Figure 3.

Required project approvals include: a General Plan Amendment (File No. A11-0006); Zone Change (File No. Z11-0008); Planned Development (File No. PD11-0006); Tentative Map (File No. TM11-1505); annexation into the El Dorado Irrigation District; annexation into the El Dorado Hills Community Service District; and annexation into the El Dorado Hills County Water District (El Dorado Hills Fire Department).



**FIGURE 3. PROPOSED DEVELOPMENT PLAN**



Created September 13, 2013

Source: CNDDDB 2013; Gibson & Skordal, LLC; CTA Engineering; NAIP



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## ***General Plan Amendment Description***

The project is currently located entirely within the General Plan Community Region (urban limit line) of El Dorado Hills and is designated as Low Density Residential (LDR) land use, with the exception of 1.5+/- acres at the southeast corner of the property that is designated as Open Space (OS) and associated with the existing SMUD power transmission corridor. LDR allows for a maximum density of 1 dwelling unit per 5 acres. The proposed project is applying for a change in the land use designations on the site to High Density Residential (HDR) allowing for a density range of 1 to 5 units per acre; Medium Density Residential (MDR) allowing for a maximum of 1 dwelling unit per acre; and Open Space (OS). The proposed project is retaining the existing Low Density Residential (LDR) land use designation for the existing residence to remain.

## ***Planned Development Description***

The project is a planned development. Proposed uses within the project are as follows:

- 1) 444 single family detached residential units with lot sizes ranging from 5,775 sf to 3.32 ac

<u>Product Type</u>	<u>Qty</u>	<u>Land Use</u>
Village Small Lot	149	HDR
Village Large Lot	173	HDR
Hillside	54	HDR
Hillside Custom	58	HDR
Estate Residential	5	MDR
Estate Residential Large Lot	<u>5</u>	MDR
	444	

- 2) 160 age-restricted single family detached residential units with lot sizes ranging from 4,725 sf to 12,685 sf

<u>Product Type</u>	<u>Qty</u>	<u>Land Use</u>
Age-Restricted Small Lot	80	HDR
Age-Restricted Large Lot	<u>80</u>	HDR
	160	

- 3) One existing Low Density Residential (LDR) unit to remain.
- 4) One Clubhouse lot (Lot C)
- 5) One EID lot for a proposed pump station
- 6) Public and private roadways
- 7) 84.1+/- acres or 30% total open space, including native open space, parks and landscape lots.
  - a. Includes 11.14 acres of Parks including:
    - One Village Park (Lot A)
    - One Neighborhood Park (Lot B)



## ***Lighting***

Outdoor lighting in conformance with Section 17.14.170 of the County Ordinance Code is anticipated to be provided at major intersections, mid-block pedestrian crossings, along sag vertical curves where needed to establish adequate sight distance and as appropriate for public safety. Limited safety and security lighting and indirect shielded lighting will also be provided at park sites, gates and clubhouse including but not limited to parking areas, play areas, and walkways where appropriate. The project does not propose to use lighted ball fields or other light intensive uses at the proposed park sites.

## **Existing Field Conditions**

The project site is situated in the foothills of the Sierra Nevada on rolling to relatively flat terrain at an average elevation of about 1,050 feet. The project site is primarily used as pasturage and currently contains two habitable structures. Newer residential developments are located to the west while ranchettes occupy lands to the north and east. The site was very lightly grazed by cattle and horses at the time of field surveys.

The majority of the site generally drains to the north/northeast into Green Spring Creek. Green Spring Creek, which traverses the northern portion of the study area from east to west, is tributary to Folsom Reservoir by way of New York Creek. The southwestern corner of the parcel appears to drain to the south towards Allegheny Creek which is located outside of the study area boundary. Allegheny Creek is also tributary to Folsom Reservoir by way of Green Spring Creek and New York Creek, respectively.

## **Methods**

A field assessment was conducted on 22 April 2013 according to U.S. Fish and Wildlife Service (USFWS) guidelines (April 4, 1997 Memorandum 1-1-97-TA-1093 Dissemination of Interim Guidance on Site Assessment and Field Surveys for California Red-Legged Frogs; August 2005 Revised Guidance on Site Assessment and Field Surveys for California Red-Legged Frogs). These guidelines require that in assessing the likelihood that California red-legged frogs may occur at a given locale, information satisfying the following elements should be compiled and submitted to USFWS for further evaluation and guidance:

- Element 1. Is the project within the current or historic range of the California red-legged frog?
- Element 2. What are the known localities of California red-legged frog within the project site and within 1 mile (1.6 kilometers) (km) of the project boundaries? This is to place the project in regional perspective.
- Element 3. What are the habitats within the project site and within 1 mile (1.6 km) of the project boundaries?



To satisfy these elements, first, California red-legged frog locality records were obtained by conducting a computer search of the most recent version of the CNDDDB (2013). Next, to place the project in regional perspective, records falling within 1- and 30-mile (1.6 and 48.3-kilometer) radii of the project site were identified using the Geographic Information Systems (GIS) program ArcMap 9.2. GIS-generated maps are used to illustrate red-legged frog distribution relative to the project site (see Figure 1, Figure 3). Finally, habitats within and surrounding the project site were identified using a combination of site plans, field surveys, and GIS analysis using digitized USGS 7.5-minute topographic maps and digital orthographic quarter quadrangle (DOQQ) maps (digitized aerial maps) from the California Spatial Information Library (<http://gis.ca.gov/>).

While specific protocol level field surveys for California red-legged frogs were not conducted as part of this assessment, cursory field surveys for other special-status reptiles and amphibians were conducted incidental to this assessment, particularly for those species frequently associated with habitats favored by California red-legged frogs. Results are provided below.

## Results

**Element 1** — The project site is situated at the edge of the easterly extent of the California red-legged frog's historical range along the western slopes of the Sierra Nevada, which extends from Plumas County south to Tuolumne County (Jennings and Hayes 1994, CNDDDB 2013).

**Element 2** — The project site lies approximately 2.8 mile (4.5 km) from the (unverified) juvenile frog reported on the east side of Folsom Lake, southwest of Iron Mountain, 17.7 miles (28.5 km) from undisclosed localities in El Dorado County (Georgetown Quad), and 23.6 miles (40.0 km) from the other two verified populations of California red-legged frogs extant in this portion of the Sierra Nevada (Michigan Bluff area and Weber Creek) (CNDDDB 2013). All other records documented within El Dorado County and adjacent Placer County fall more than 25 miles (40.2 km) from the project site; records are reported in Table 1 and are depicted in Figure 1 and Figure 4.

**Element 3** — Habitats associated with Green Springs Creek possess both aquatic and upland characteristics suitable for California red-legged frogs. Aquatic habitats consist of interconnected streams, swales, and associated wetlands. Terrestrial habitats consist mostly of foothill oak woodland. Habitats are described in detail below. Photographs of selected site features are included in Appendix A.



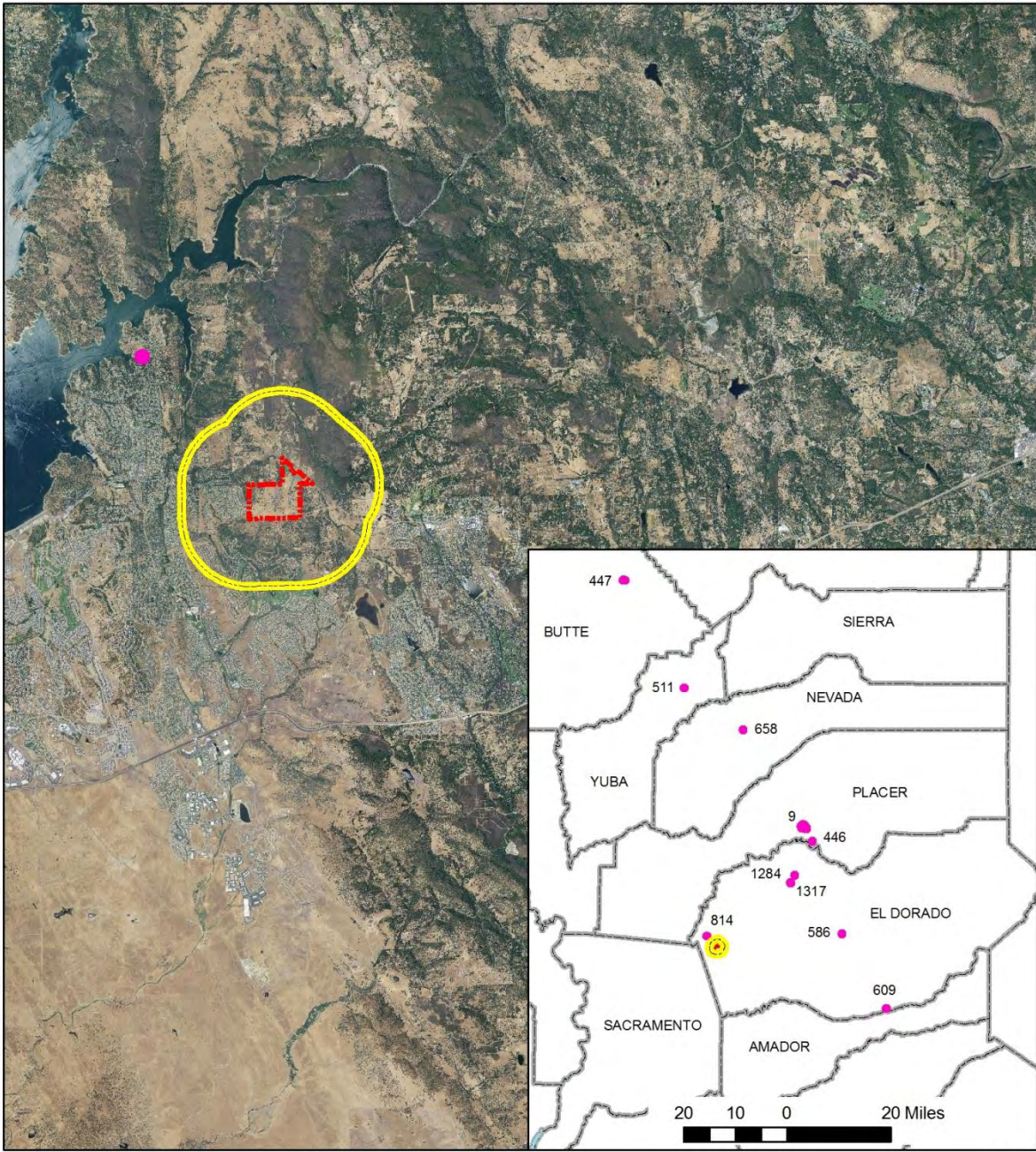
**Table 1. CNDDDB occurrence records within approximately 50 miles (80.5 km) of the project site**

Occ. No.	USGS 7.5' Topographic Quadrangle	Township	Range	Section	County	Year Last Seen	Approx.Distance from Project Site	Elevation
9	Michigan Bluff	14N	11E	21	Placer	Pre-1951	28.6 mi	3,400 ft
446	Michigan Bluff	13N	11E	01	Placer	2001	26.7 mi	3,200 ft
511	Challenge	18N	07E	10	Yuba	2003	50.4 mi	2,100 ft
586	Sly Park	10N	12E	01	El Dorado	2002	23.6 mi	3,200 ft
609	Caldor	18N	14E	21	El Dorado	2002	34.4 mi	4,200 ft
658	North Bloomfield	17N	09E	27	Nevada	2007	42.3 mi	3,050 ft
814	Clarksville	10N	08E	10	El Dorado	2005	2.8 mi	800 ft
890*	Michigan Bluff	--	--	--	Placer	2006	28.9 mi	--
1284	Georgetown	--	--	--	El Dorado	2009	19.3 mi	--
1317	Georgetown	--	--	--	El Dorado	2009	17.7 mi	--

\*Details for records displayed in red are suppressed in the commercial version of the CNDDDB



**FIGURE 4. PROJECT SITE RELATIVE TO CNDDDB OCCURRENCE RECORDS**



CRLF



Study Area Boundary



StudyAreaBoundary\_1 Mi Buffer



Created May 10, 2013

Source: CNDDDB 2013; NAIP



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## Habitats within 1 mile (1.6 km) of the Project Site

### *Plant Communities*

Plant communities are described by Gibson & Skordal (2011). The study area encompasses several habitat types including non-native annual grasslands, foothill oak savannah/woodland, and numerous water features including agricultural ponds, intermittent and ephemeral drainages, seasonal wetlands, and seeps. The majority of the site supports oak savannah/woodland composed of valley oaks (*Quercus lobata*), live oaks (*Quercus wislizenii*), and blue oaks (*Quercus douglasii*).

The understory consists of dogtail (*Cynosurus echinatus*), wild oats (*Avena fatua*), rip-gut brome (*Bromus diandrus*), medusa head (*Taeniatherum caput-medusae*), and soft chess (*Bromus hordeaceus*). Interspersed between the oak woodlands/savannah are areas of non-native annual grasslands characterized by wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), and medusa-head (*Taeniatherum caput-medusae*). Other common species include yellow start-thistle (*Centaurea solstitialis*), perennial rye grass (*Lolium perenne*), little quacking grass (*Briza minor*), soft chess (*Bromus hordeaceus*), prickly lettuce (*Lactuca serriola*), and split-leaf geranium (*Geranium dissectum*).

### *Hydrology*

Wetland components are described by Gibson & Skordal (2012). Green Springs Creek and two in-channel impoundments referred to as the Louie Ponds represent the largest water features within the study area. Green Springs Creek and its associated ponds contained several inches of flowing water and supported thick growths of hardstem bulrush (*Scirpus acutus*), creeping spike rush (*Eleocharis macrostachya*), and narrow-leaf cattails (*Typha angustifolia*). Woody vegetation consisted of cottonwoods (*Populus fremontii*) and narrow-leaf willow (*Salix exigua*). Several wetland swale-seep complexes are located within the hillier southern portion of study area. Seeps are most often associated with sloping terrain and derived primarily from groundwater seepage in the winter and spring, while seasonal wetland swales represent vegetated linear sloping drainages that lack a defined bed and bank. Common species included Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), curly dock (*Rumex crispus*), perennial rye grass (*Lolium perenne*), water cress (*Rorippa nasturtium-aquaticum*), tall flat sedge (*Cyperus eragrostis*), and spiny-fruited buttercup (*Ranunculus muricatus*). Photographs of the individual features are provided in Appendix A.

### *Soils*

According to the April 1974, “**Soil Survey of El Dorado Area, California**,” four soil map units occur within the study area: Auburn very rocky silt loam, 2-30 percent slopes (AxD), Auburn silt loam, 2-30 percent slopes (AwD), Placer diggings (PrD), and Serpentine Rock Land (SaF).



## ***Observed Species***

Adult bullfrogs and juvenile Centrarchid fishes (*Lepomis* spp.) were observed within Green Springs Creek and the Louie Ponds; both species can compete with and prey upon red-legged frogs. Larval Western toad (*Bufo boreas*) and Sierran treefrog (Formerly *Pseudacris regilla* - Pacific Treefrog) were also observed, but neither are known to adversely affect red-legged frogs.

## **SUMMARY**

Permanent, suitable red-legged frog habitat is present on the project site within Green Springs Creek and the associated impoundment referred to as the Louie Ponds. Although drainage features on-site are characterized as ephemeral or intermittent, they also provide potential habitat for dispersing red-legged frogs when they are flowing or when they possess pooled water following winter and spring rains. Although no red-legged frogs were observed during the field surveys, there is ample supporting habitat on the project site.

Adult bullfrogs and juvenile Centrarchid fishes (*Lepomis* spp.) were observed within Green Springs Creek and Louie Pond, both of which can compete with and prey upon red-legged frogs. Larval Western toad (*Bufo boreas*) and Sierran treefrog (Formerly *Pseudacris regilla* - Pacific Treefrog) were also observed, but neither are known to adversely affect red-legged frogs.

The regional presence of California red-legged frogs remains unverified. A juvenile (unverified) California red-legged frog was reported in 2005 within 2.8 miles (4.5 km) of the Proposed Project from a drainage at the end of Fitch Way, on the east side of Folsom Lake, southwest of Iron Mountain and north of Highway 50 (CNDDDB 2013), but no others are reported from the immediate vicinity. California red-legged frogs have been verified in recent years in El Dorado County in Weber Creek, near Placerville (early 1990s) (Miriam Green Associates 1996, CNDDDB 2013), in southern Placer County near Georgetown, and in Placer County near Michigan Bluff, but no verified populations are reported within 17.7 miles (28.5 km) of the project site. With the exception of the unverified juvenile frog reported near Folsom Lake, all California red-legged frogs recorded in this region of the Sierra Nevada occur above 2,000 feet, well above the approximately 1,050-foot mean elevation of the project site.

In closing, while the project site contains habitat suitable for red-legged frogs, the presence of bullfrogs and predatory gamefish, distance from verified populations of red-legged frogs, and low site elevation relative to regional frog populations reduce the likelihood that red-legged frogs occur on the project site.



## REFERENCES

- California Natural Diversity Database (CNDDDB). Commercial Version, April 2013. Geographic Information Systems (GIS) data and computer printout of sensitive species records in California. California Department of Fish and Game, Natural Heritage Division, Sacramento, CA.
- Jennings, R.M. and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final report submitted to the California Department of Fish and Game Inland Fisheries Division, Rancho Cordova, CA: Contract 8023. 255 pp.
- Gibson & Skordal, LLC. 2011. Special Status Plant Species Evaluation, Dixon Ranch, El Dorado County, California. Prepared for Dixon Ranch Partners, LLC. Prepared August, 2011.
- Gibson & Skordal, LLC. 2012. Jurisdictional Delineation and Special Status Species Evaluation, Dixon Ranch, El Dorado County, California. Prepared for Dixon Ranch Partners, LLC. Prepared August, 2011 and revised May, 2012.
- Stebbins, R.C. 2003. A field guide to western reptiles and amphibians. 3rd edition. Houghton Mifflin Co.





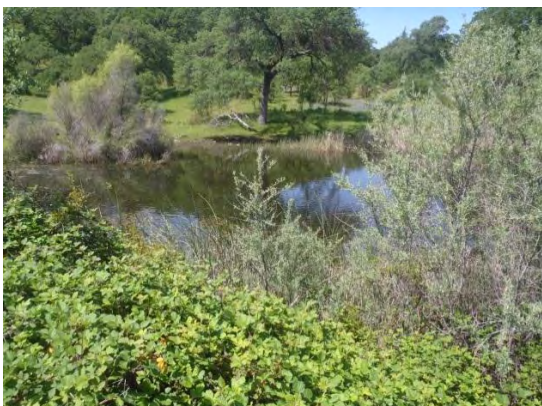
## Appendix A: Photographs



1. Outflow to lower pond (NW).



2. Lower pond (WNW).



3. Lower pond showing vegetation at center crossing (NW).



4. S side lower pond showing edge characteristics - center crossing in background (NNE).



5. S side of lower pond showing edge characteristics - center crossing in background (NW).



6. One of many adult bullfrogs observed in upper pond (east end).



## Appendix A: Photographs



7. Outflow from upper pond (E end) (SE).



8. Lower pond showing vegetation at center crossing (SE).



9. Gravel-bottomed channel of Green Springs Creek flowing into upper pond (NW). Hardstem bulrush in background.



10. Gravel-bottomed channel of Green Springs Creek flowing into upper pond (SE). Hardstem bulrush in background.



11. Overhanging vegetation (*Rubus* spp.) along the margin of Green Springs Creek (W).



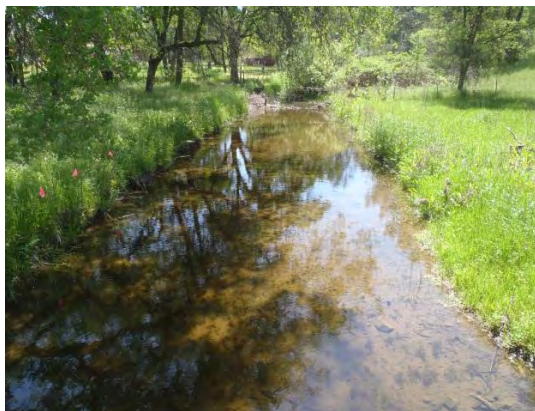
12. Intermittent riffles along Greens Creek (ESE).



## Appendix A: Photographs



13. Green Springs Creek at the E end of the project site (WNW).



14. Green Springs Creek upstream of the E end of the project site (SE).



15. Western toad larvae in Green Springs Creek at the E end of the project site.



16. Seasonal wet swale at the W center of the project site (see Figure 2).



17. Seasonal wet swale at the E center of the project site (see Figure 2).



18. Depressional seeps at the southern edge of the project site (see Figure 2).



Appendix B

**California Red-legged Frog Habitat Site Assessment Data Sheet**

Site Assessment reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 04/22/2013  
(mm/dd/yyyy)

Site Assessment Biologists: Hansen, Eric  
(Last name) (first name) \_\_\_\_\_  
(Last name) (first name)  
\_\_\_\_\_  
(Last name) (first name) \_\_\_\_\_  
(Last name) (first name)

Site Location: El Dorado County, Dixon Ranch Project, UTM 670,016 E; 4,285,698 N (Zone 10 N)  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

**Proposed project name:** Dixon Ranch Subdivision Project  
**Brief description of proposed action:** The Dixon Ranch Project proposes to subdivide 280+/- acres into 444 single family detached residential units, 160 age-restricted single family detached units (age restricted to older adults), and includes retention of one existing single family residence for a total of 604 new units and one existing unit. The project includes preservation or creation of 84.1+/- acres (30%) of open space including parks, trails, landscaped lots, and native open spaces. The project includes on-site and off-site infrastructure to serve the development. Construction of a clubhouse for the age-restricted units is also proposed. Build-out will likely occur over many years, but ultimately will be dictated by market demands.

1) Is this site within the current or historic range of the CRF (circle one)? **YES** NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES **NO**

If yes, attach a list of all known CRF records with a map showing all locations.

**GENERAL AQUATIC HABITAT CHARACTERIZATION**

*(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)*

**POND:**

Size: 3.8 acres (2.1 acre and 1.7 acres per pond section) Maximum depth: < 4m

Vegetation: Green Springs Creek and its associated ponds contained several inches of flowing water and supported thick growths of hardstem bulrush (*Scirpus acutus*), creeping spike rush (*Eleocharis macrostachya*), and narrow-leaf cattails (*Typha angustifolia*). Woody vegetation consisted of cottonwoods (*Populus fremontii*) and narrow-leaf willow (*Salix exigua*).

Substrate: sand, rock, and cobble

**Perennial** or **Ephemeral** (*circle one*). If ephemeral, date it goes dry: \_\_\_\_\_

**Ponds**

**California Red-legged Frog Habitat Site Assessment Data Sheet**

**STREAM:**

Bank full width: N/A  
Depth at bank full: N/A  
Stream gradient: \_\_\_\_\_

Are there pools (circle one)? YES NO (dry at time of site visit)

If yes,

Size of stream pools: \_\_\_\_\_

Maximum depth of stream pools: \_\_\_\_\_

Characterize non-pool habitat: run, riffle, glide, other: \_\_\_\_\_

\_\_\_\_\_

Vegetation: emergent, overhanging, dominant species: \_\_\_\_\_

\_\_\_\_\_

Substrate: \_\_\_\_\_

Bank description: \_\_\_\_\_

\_\_\_\_\_

**Perennial or Ephemeral** (*circle one*). If ephemeral, date it goes dry: \_\_\_\_\_

Other aquatic habitat characteristics, species observations, drawings, or comments:

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs (see Appendix A, photos 1-8)
3. Maps with important habitat features and species location (see Figure 2)

Appendix B

**California Red-legged Frog Habitat Site Assessment Data Sheet**

Site Assessment reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 04/22/2013  
(mm/dd/yyyy)

Site Assessment Biologists: Hansen, Eric  
(Last name) (first name) \_\_\_\_\_  
(Last name) (first name)

\_\_\_\_\_  
(Last name) (first name) \_\_\_\_\_  
(Last name) (first name)

Site Location: El Dorado County, Dixon Ranch Project, UTM 670,016 E; 4,285,698 N (Zone 10 N)  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

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1) Is this site within the current or historic range of the CRF (circle one)? **YES** NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? **YES**  
**NO**

If yes, attach a list of all known CRF records with a map showing all locations.

**GENERAL AQUATIC HABITAT CHARACTERIZATION**

*(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)*

**POND:**

Size: N/A Maximum depth: N/A

Vegetation: \_\_\_\_\_

Substrate: \_\_\_\_\_

**Perennial or Ephemeral** (*circle one*). If ephemeral, date it goes dry: \_\_\_\_\_

Appendix B

**California Red-legged Frog Habitat Site Assessment Data Sheet**

**STREAM:**

Bank full width:  $\pm$  4 meters \_\_\_\_\_

Depth at bank full:  $<$  0.5 meter \_\_\_\_\_

Stream gradient:  $<$ 1% \_\_\_\_\_

Are there pools (circle one)? **YES** NO

If yes,

Size of stream pools:  $\pm$  100 meters<sup>2</sup> \_\_\_\_\_

Maximum depth of stream pools:  $<$ 0.5 meter \_\_\_\_\_

Characterize non-pool habitat: **run, riffle, glide**, other: \_\_\_\_\_

Vegetation: Green Springs Creek and its associated ponds contained several inches of flowing water and supported thick growths of hardstem bulrush (*Scirpus acutus*), creeping spike rush (*Eleocharis macrostachya*), and narrow-leaf cattails (*Typha angustifolia*). Woody vegetation consisted of cottonwoods (*Populus fremontii*) and narrow-leaf willow (*Salix exigua*). \_\_\_\_\_

Substrate: mixed soil and cobble \_\_\_\_\_

Bank description: mixed slope to undercut with open sand and gravel as well as well as woody and herbaceous vegetation \_\_\_\_\_

**Perennial or Ephemeral** (circle one). If ephemeral, date it goes dry: Unknown

Other aquatic habitat characteristics, species observations, drawings, or comments:

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs (see Appendix A, photos 9-15)
3. Maps with important habitat features and species location (see Figure 2)

Appendix B

**California Red-legged Frog Habitat Site Assessment Data Sheet**

Site Assessment reviewed by \_\_\_\_\_  
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 04/22/2013  
(mm/dd/yyyy)

Site Assessment Biologists: Hansen, Eric \_\_\_\_\_  
(Last name) (first name) (Last name) (first name)  
\_\_\_\_\_  
(Last name) (first name) (Last name) (first name)

Site Location: El Dorado County, Dixon Ranch Project, UTM 670,016 E; 4,285,698 N (Zone 10 N)  
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S ).

**\*\*ATTACH A MAP** (include habitat types, important features, and species locations)\*\*

**Proposed project name:** Dixon Ranch Subdivision Project

**Brief description of proposed action:** The Dixon Ranch Project proposes to subdivide 280+/- acres into 444 single family detached residential units, 160 age-restricted single family detached units (age restricted to older adults), and includes retention of one existing single family residence for a total of 604 new units and one existing unit. The project includes preservation or creation of 84.1+/- acres (30%) of open space including parks, trails, landscaped lots, and native open spaces. The project includes on-site and off-site infrastructure to serve the development. Construction of a clubhouse for the age-restricted units is also proposed. Build-out will likely occur over many years, but ultimately will be dictated by market demands.

1) Is this site within the current or historic range of the CRF (circle one)? **YES** NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES **NO**

If yes, attach a list of all known CRF records with a map showing all locations.

**GENERAL AQUATIC HABITAT CHARACTERIZATION**

*(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)*

**POND:**

Size: \_\_\_\_\_ Maximum depth: \_\_\_\_\_

Vegetation: \_\_\_\_\_

Substrate: \_\_\_\_\_

**Perennial or Ephemeral** (*circle one*). If ephemeral, date it goes dry: \_\_\_\_\_

**Seasonal Wetland Swales**



Appendix B

**California Red-legged Frog Habitat Site Assessment Data Sheet**

**STREAM:**

Bank full width: <2 meters

Depth at bank full: N/A

Stream gradient: <5%

Are there pools (circle one)? YES **NO** (dry at time of site visit)

If yes,

Size of stream pools: \_\_\_\_\_

Maximum depth of stream pools: \_\_\_\_\_

Characterize non-pool habitat: run, riffle, glide, other: \_\_\_\_\_

Vegetation: observed seasonal wetland swales represent vegetated linear sloping drainages that lack a defined bed and bank. Common species included Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), curly dock (*Rumex crispus*), perennial rye grass (*Lolium perenne*), water cress (*Rorippa nasturtium-aquaticum*), tall flat sedge (*Cyperus eragrostis*), and spiny-fruited buttercup (*Ranunculus muricatus*).

Substrate: \_\_\_\_\_

Bank description: \_\_\_\_\_

**Perennial or **Ephemeral**** (*circle one*). If ephemeral, date it goes dry: Unknown

Other aquatic habitat characteristics, species observations, drawings, or comments:

Dry at reaches viewed during this 22 April 2013 field visit. Described by Gibson & Skordal (2012) as ephemeral features.

**Necessary Attachments:**

1. All field notes and other supporting documents
2. Site photographs (see Appendix A, photos 16-18)
3. Maps with important habitat features and species location (see Figure 2)



#### Years of Experience

This Firm/Other Firms or Agencies:  
16/2

#### Education

2008 MS, Biological Sciences, California State University, Chico, CA

2001 BS, Evolution and Ecology, University of California, Davis, CA

#### Professional Affiliations

American Society of Ichthyologists and Herpetologists

Society for the Study of Amphibians and Reptiles

The Wildlife Society

Herpetologists League

#### General Experience & Qualifications

Eric is an environmental consultant with 14 years of experience including research, NEPA/CEQA studies, environmental compliance and monitoring, and conceptual designs. Eric is considered a leading expert in the biology and management of the threatened giant garter snake. He is also an experienced contract manager and interfaces with contracting officers, clients, and subcontractors. He has managed contracts and grants valued from \$2K to more than \$500K and has the skills to integrate multiple subcontractors and disciplines and execute projects efficiently.

#### Representative Project Experience

Volta Wasteway Level 2 Diversification/Incremental Level 4 Development Pilot Project, Merced County, CA. On behalf of USBR and in conjunction with the San Luis and Delta Mendota Water Authority and Grasslands Water District, Eric assembled an interdisciplinary team of institutional veterinarians, toxicologists, and biostatisticians to monitor the effects of potential water quality degradation on the

Volta Wildlife Area giant garter snake population. Eric is responsible for contract and project management and for executing the monitoring program developed in conformance of the project's Biological Opinion, and oversees all other components of environmental compliance relating to giant garter snake for the project. (2010-ongoing)

Hansen, E.C, R. Wack, R. Poppenga, K. Strohm, C. Johnson, D. Bunn, and R. Scherer. 2011. Comparative pathology, health, and contaminant exposure within San Joaquin Valley and Sacramento Valley giant garter snake (*Thamnophis gigas*) populations. Report prepared for the Bureau of Reclamation (BOR) pursuant to BOR Agreement No. 08FG200042. March 31, 2011. - This study evaluated health, pathology (hematology, plasma biochemistry, parasitology, and bacterial flora) and contaminant exposure (selenium, total mercury, methyl mercury, boron, PCBs, and organophosphate (OP) and organochlorine (OC) pesticides directly in snakes, through diet, and in the environment) in giant garter snakes and a non-threatened congener within both declining and stable populations, providing the baseline data needed for more focused research directing species recovery. (2008-2013)

Hansen, E.C., H. McQuillen, S. Sweet, S. Gala, and J. Marty. 2010. Response of the Giant Garter Snake (*Thamnophis gigas*) to Water Primrose (*Ludwigia hexapetala*) Removal at the Cosumnes River Preserve. Report prepared for the Central Valley Habitat Improvement Act Conservation Program. December 29, 2010. - Producing positive results, this study tested whether restoration of open-water foraging habitat would result in the return of giant garter snakes to previously occupied areas of Snake Marsh. Combined with detailed hydrologic and vegetation reports, this study provided valuable recommendations for long-term management at the Preserve. (2009-2010)

Hansen, E.C. 2008. Implementation of Priority 1, Priority 2, and Priority 3 Recovery Tasks for Giant Garter Snake (*Thamnophis gigas*) - continuing Surveys in Merced County, California, with an Expansion to Northern Fresno County. Report prepared for the U.S. Fish and Wildlife Service pursuant to FWS Agreement No. 802707G112, April 15, 2008. - Resulting in the most comprehensive description of giant garter snake distribution in the San Joaquin Valley since the 1990's, this study examined the distribution of giant garter snakes north and east of the San Joaquin River and the current status of declining historical populations south and east of the San Joaquin River in the Grassland Ecological Area in Merced County, California. We also sampled and characterized historical populations at Mendota Wildlife Area in Fresno County, California. (2006-2008)

Department of Water Resources Cherokee Canal Corridor Management Strategy Pilot Project, Butte County, CA - As a subcontractor to EDAW-AECOM, Eric provided extensive support for the California Department of Water Resources Cherokee Canal Corridor Management Strategy (CMS) Pilot Project: Phase I Sediment Removal, culminating in the preparation of the Giant Garter Snake (*Thamnophis gigas*) Habitat Assessment for the Cherokee Canal (2008-2011).

Department of Water Resources Giant Garter Snake Technical Review Committee - As a subcontractor to EDAW-AECOM, Eric has been invited to serve the Flood Maintenance Office on the Technical Review Committee (TRC) as a giant garter snake expert. Eric has been asked to advise on developing information regarding the ecology of the giant garter snake and their environment. Developing this information is critical to identifying impacts and potential mitigation measures with regards to the potential interactions of DWR activities in the Sacramento Valley, including water transfer programs and floodway maintenance (2014-present).

Department of Water Resources Rodent Damage Repair Program, Sacramento, Sutter, Yolo, Butte, and Colusa Counties, CA - As a subcontractor to EDAW-AECOM, Eric has served as a technical advisor for the California Department of Water Resources Rodent Damage Repair Program, providing technical guidance in support of ongoing program development for the Flood Maintenance Office (2013-present).

In-Delta Storage Program, Sacramento, San Joaquin, and Contra Costa Counties, CA - As a subcontractor to CH2MHILL, Eric designed, executed, and trained DWR staff in conducting habitat evaluations and intensive giant garter snake field studies for the Department of Water Resources In-Delta Storage Program, conducting work on Webb Tract, Bacon Island, Holland Tract, and Bouldin Island in the Sacramento/San Joaquin River Delta (2002-2005).

## Professional Training

California Tiger Salamander Workshop--Special Emphasis on Sampling/Surveying Upland Habitats, Carmel Valley, CA, June, 2010 - Sponsored by the Elkhorn Slough Coastal Training Program, administered by Dr. Pete Trenham

California Red-Legged Frog Workshop, April 2010 - Sponsored by the Elkhorn Slough Coastal Training Program, administered by Galen Rathbun and Norman Scott

California Tiger Salamander Workshop, Watsonville, CA, March, 2010 - Sponsored by the Elkhorn Slough Coastal Training Program, Administered by Dr. Pete Trenham

Rare Pond Species Survey Techniques Workshop, Rohnert Park, CA, March, 2008 - Sponsored by the Leguna de Santa Rosa Foundation and The Wildlife Project, administered by Dr. Jeff Alvarez and Dr. David Cook

California Tiger Salamander Workshop--Special Emphasis on Sampling/Surveying Upland Habitats, Carmel Valley, CA, June, 2010 - Sponsored by the Elkhorn Slough Coastal Training Program, administered by Dr. Pete Trenham

## Representative Work Products

Hansen, E.C., K.H Strohm, M.B. Partin and C. Howard. 2011. A twelve-fold difference in giant garter snake (*Thamnophis gigas*) capture rates favoring galvanized funnel traps over vinyl-coated funnel traps: Results from a two-year study. Poster presented at the Wildlife Society Giant Garter Snake Workshop, U.C Davis. February 16, 2011.

Hansen, E.C., M.B. Partin and M. Starkey. 2011. The efficacy of heat branding giant garter snakes (*Thamnophis gigas*) with medical cautery units to complement passive integrated transponder tags in multi-year, mark-recapture studies. Poster presented at the Wildlife Society Giant Garter Snake Workshop, U.C Davis. February 16, 2011.

Hansen, E.C., K.H Strohm, B.G. Dickson, and M.B. Partin. 2011. An improved trapping strategy to facilitate statistically rigorous spatial and habitat occupancy analyses for the giant garter snake (*Thamnophis gigas*). Poster presented at the Wildlife Society Giant Garter Snake Workshop, U.C Davis. February 16, 2011.

- Hansen, E.C. 2011 Implementation of Priority 1, Priority 2, and Priority 3 Recovery Tasks for Giant Garter Snake (*Thamnophis gigas*) - Status and distribution of giant garter snakes at the eastern Delta's White Slough Wildlife Area, San Joaquin County, CA. Draft report prepared for the U.S. Fish and Wildlife Service pursuant to FWS Agreement No. 802709G514, January 28, 2011.
- Hansen, E.C, R. Wack, R. Poppenga, K. Strohm, C. Johnson, D. Bunn, and R. Scherer. 2011. Comparative pathology, health, and contaminant exposure within San Joaquin Valley and Sacramento Valley giant garter snake (*Thamnophis gigas*) populations. Report prepared for the Bureau of Reclamation (BOR) pursuant to BOR Agreement No. 08FG200042. March 31, 2011.
- Hansen, E.C. 2011 Implementation of Priority 1, Priority 2, and Priority 3 Recovery Tasks for Giant Garter Snake (*Thamnophis gigas*) - Status and distribution of giant garter snakes at the eastern Delta's White Slough Wildlife Area, San Joaquin County, CA. Draft report prepared for the U.S. Fish and Wildlife Service pursuant to FWS Agreement No. 802709G514, January 28, 2011.
- Hansen, E.C., H. McQuillen, S. Sweet, S. Gala, and J. Marty. 2010. Response of the Giant Garter Snake (*Thamnophis gigas*) to Water Primrose (*Ludwigia hexapetala*) Removal at the Cosumnes River Preserve. Report prepared for the Central Valley Habitat Improvement Act Conservation Program. December 29, 2010.
- Hansen, E.C. Giant Garter Snake (*Thamnophis gigas*) Presence/Absence and Distribution Surveys at the Conaway Ranch, Yolo County, California. Report completed for the Comaway Preservation Group. December 31, 2009.
- Hansen, E.C. 2008. Implementation of Priority 1, Priority 2, and Priority 3 Recovery Tasks for Giant Garter Snake (*Thamnophis gigas*) - continuing Surveys in Merced County, California, with an Expansion to Northern Fresno County. Report prepared for the U.S. Fish and Wildlife Service pursuant to FWS Agreement No. 802707G112, April 15, 2008.
- Hansen, Eric C. 2008. Results of year 2007 giant garter snake (*Thamnophis gigas*) surveys, Yolo County, CA. Letter to David Kelley, U.S. Fish and Wildlife Service, dated February 12, 2008.
- Hansen, E.C. 2007. Results of Year 2006 Giant Garter Snake (*Thamnophis gigas*) Surveys at the Proposed Sutter Basin Conservation Bank, Sutter County County, CA. Technical memorandum prepared for Westervelt Ecological Services, October 15, 2007. 3pp + appendices.
- Jones & Stokes. 2007. Biological Effectiveness Monitoring for the Natomas Basin Habitat Conservation Plan Area 2006 Annual Survey Results (Agency Version). Prepared for the Natomas Basin Conservancy. April 2007. 41pp + appendices.
- Hansen, E.C. 2007. Evaluation of potential Giant Garter Snake (*Thamnophis gigas*) Habitat at Spud Island; San Joaquin County, California. Technical memorandum prepared for Mr. Ben Hulse, California Delta Habitat and Education Foundation, March 7, 2007. 2 pp + appendices.
- Hansen, E.C. 2007. Results of Year 2006 Giant Garter Snake (*Thamnophis gigas*) Surveys, Yolo County, CA. Technical memorandum prepared for Mr. Eric Tattersall, Chief, Conservation Branch, Sacramento Fish and Wildlife Service, U.S. Fish and Wildlife Service, January 30, 2007. 2 pp + appendices.
- Hansen, E.C. 2007. Results of Giant Garter Snake (*Thamnophis gigas*) Surveys at the Proposed Richter Giant Garter Snake Mitigation Bank: Butte County, CA. Technical memorandum prepared for Paul Richter, Aguas Frias Rancho, LLC. July 22, 2007.
- Hansen, E.C. 2007. Implementation of Priority 1 Recovery Tasks for the Giant Garter Snake (*Thamnophis gigas*) in Merced County, California. Report prepared for the U.S. Fish and Wildlife Service pursuant to FWS Agreement No. 802706G120, April 15, 2007.
- Jones & Stokes. 2006. Biological Effectiveness Monitoring for the Natomas Basin Habitat Conservation Plan Area 2005 Annual Survey Results (Agency Version). Prepared for the Natomas Basin Conservancy. April 2006.
- Hansen, E.C. 2006. Results of Year 2005 Giant Garter Snake (*Thamnophis gigas*) Surveys, Yolo County, CA. Technical memorandum prepared for Mr. Eric Tattersall, Chief, Conservation Branch, Sacramento Fish and Wildlife Service, U.S. Fish and Wildlife Service, April 5, 2006. 2 pp + appendices.
- Hansen, E.C. 2006. Habitat Assessment for the California Red-legged Frog at the Proposed Clark-Claudon Vineyards Winery, Napa County, California. Report prepared for Calrk-Claudon Vineyards, March 7, 2006. 7 pp + appendices.

- Hansen, E.C. 2005. Evaluations of Giant Garter Snake (*Thamnophis gigas*) habitat and consideration of potential species impacts for the Contra Costa Water District (CCWD) Alternative Intake Project at Victoria Island, Contra Costa County, California. Technical memorandum prepared for EDAW, Inc. , November 10, 2005. 19 pp + appendices.
- Hansen, E. C. 2005. Giant Garter Snake (*Thamnophis gigas*) Habitat and Impacts Assessment at Sherman, West and Donlon Islands in Solano County, California. Technical memorandum prepared for Pacific Gas and Electric, July 14, 2005. Unpublished. 14pp.
- Hansen, E. C. 2005. Giant Garter Snake (*Thamnophis gigas*) Surveys at Beale Air Force Base: Yuba County, California. Prepared for Beale Air Force Base. November 20, 2005. Unpublished. 12pp.
- Hansen, E. C. 2005. Year 2004 Investigations of the Giant Garter Snake (*Thamnophis gigas*) in the Middle American Basin: Sutter County, California. Prepared for Sacramento Area Flood Control Agency, February 28, 2005. Contract No. 381. Unpublished. 33 pp.
- Jones & Stokes. 2005. Biological Effectiveness Monitoring for the Natomas Basin Habitat Conservation Plan Area 2004 Annual Survey Results (Agency Version). Prepared for the Natomas Basin Conservancy. April 2005.
- Hansen, E. C. 2004. Summary of Year 2004 Surveys for Giant Garter Snakes (*Thamnophis gigas*) at Lost Slough and Associated Wetlands within the Cosumnes River Preserve. Prepared for the Nature Conservancy. September 15, 2004. Unpublished. 9pp.
- Hansen, E. C. 2004. Giant Garter Snake (*Thamnophis gigas*) Monitoring at the Prichard Lake Restoration Project Site: Sacramento County, California: Year 2004 Progress Report. Prepared for Sacramento County Airport System. November 10, 2004. Unpublished. 7pp.
- Hansen, E. C. 2004. Year 2003 Investigations of the Giant Garter Snake (*Thamnophis gigas*) in the Middle American Basin: Sutter County, California. Prepared for Sacramento Area Flood Control Agency, March 10, 2004. Contract No. 381. Unpublished. 40 pp.
- Hansen, E. C. 2003. Results of Surveys for giant garter snakes (*Thamnophis gigas*) at the Natomas Basin Conservancy's Atkinson Parcel Highline Ditch and North Drainage Canal, Sutter County, CA. Prepared for the Natomas Basin Conservancy, December 5, 2003. Unpublished. 6pp.
- Hansen, E. C. 2003. Baseline Surveys for Giant Garter Snakes (*Thamnophis gigas*) at the Prichard Lake Restoration Project Site. Prepared for Sacramento County Airport System. December 22, 2003. Unpublished. 7pp.
- Hansen, E. C. 2003. Year 2002 Investigations of the Giant Garter Snake (*Thamnophis gigas*) at the Cosumnes River Preserve. March 15, 2002. Report prepared for the Nature Conservancy. Unpublished. 39 pp.
- Hansen, E. C. 2003. Year 2002 Investigations of the Giant Garter Snake (*Thamnophis gigas*) in the Middle American Basin: Sutter County, California. Final report for Sacramento Area Flood Control Agency, February 14, 2003. Contract No. 381. Unpublished. 34 pp.
- Hansen, E. C.. 2002. Evaluation of Giant Garter Snake (*Thamnophis gigas*) Habitat within the California Department of Boating and Waterways Aquatic Weed Control Division's Water Hyacinth and *Egeria densa* Control Program Service Areas. Prepared for California Department of Boating and Waterways Aquatic Pest Control Division, June 1, 2002. Contract No. 01-105-062. Unpublished. 8 pp. + Appendices.
- Hansen, E.C. 2001. Year 2001 investigations of the giant garter snake (*Thamnophis gigas*) in the greater American Basin: Sutter County, California. Report prepared for the Sacramento Area Flood Control Agency, January 30, 2002. Contract No. 381. Unpublished. 18 pp. plus figures.
- Hansen, E. C. 2001. Year 2001 Investigations of the Giant Garter Snake (*Thamnophis gigas*) at Badger Creek, Cosumnes River Preserve, December 20, 2001. Report prepared for the Nature Conservancy. Unpublished. 16 pp. plus figures.
- Wylie, Glenn D. and Casazza, Michael L.; Martin, L; Hansen, E. 2000. Investigations of Giant Garter Snakes in the Natomas Basin: 2000 Field Season. Dixon Field Station; U.S. Geological Survey Western Ecological Research Center; 6924 Tremont Road; Dixon, CA 95620.



# Gibson & Skordal, LLC

WETLAND CONSULTANTS

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## RESUME OF SAMUEL R. GARCIA

### *SUMMARY*

Mr. Garcia has more than 14 years of experience with wetland regulatory projects, wetland delineations, and wildlife and botanical surveys. His expertise includes a thorough understanding of wetland permitting requirements, ecology of wetland systems, and wetland restoration planning. His education and experience as a consultant has provided him with a solid understanding of environmental laws and regulations including Section 10 of the Rivers and Harbors Act; Section 404 and Section 401 of the Clean Water Act; Section 7 and Section 10 of the Endangered Species Act; Section 106 of the National Historical Preservation Act; the National Environmental Policy Act; Section 1600 of the California Fish and Game Code; and the California Environmental Quality Act.

Mr. Garcia has served as a project principal and project manager for a wide variety of projects requiring regulatory review and or authorization in California. He has been responsible for conducting jurisdictional delineations, developing strategies and implementation plans for permitting requirements, including development of the Clean Water Act Section 404(b)(1) alternatives analysis and the development of mitigation and monitoring plans. Mr. Garcia also conducted formal training courses through the UC Davis Extension programs related to the regulation of waters under Section 404 and 401 of the Clean Water Act and Section 1602 of the California Fish and Game Code.

In addition, Mr. Garcia has conducted rare plant surveys, tree surveys, and floristic surveys; as well as, small mammal trapping, spotlight surveys, and vernal pool surveys for listed wildlife species throughout the Central Valley. He is currently authorized to collect federally listed branchiopods under Federal Fish and Wildlife Service Permit TE-795935-4. While authorized under this permit, Mr. Garcia has conducted multiple protocol level surveys throughout the Sacramento/San Joaquin Valley.

### *RELEVANT PROJECT EXPERIENCE*

As a consultant, Mr. Garcia has conducted habitat assessments, wetland delineations, threatened and endangered species surveys, and environmental permitting for multiple linear utility projects throughout California, Texas, Louisiana, Tennessee, Missouri, and Kansas. Clients include Pacific Gas & Electric, Williams Communications, Level III Communications, AT&T, Sacramento Regional County Sanitation District, Duke Energy/Pan Energy/Panhandle Eastern Transmission, Enron, Union Pacific Resources, Texas Utilities, Trunkline Oil and Gas. Specific projects include (but are not limited to) the following:

- Pacific Gas & Electric Company PG&E's Gas Line Vegetation Clearing PUC Leak Survey Effort.
- AT&T's Coaxial Cable Removal Project in Lassen County, CA – conducted wetland delineations and rare plant surveys along the project alignment.
- AT&T's Fiber Optic Installation Project City of Mojave to Santa Clarita, CA – conducted wetland delineations and rare plant inventories along the project alignment.

- Williams Communications Reno to Sacramento Fiber Optic Installation Project – Clean Water Act permitting, DFG permitting, conducted wetland delineations along project alignment.
- Williams Communications Point Arena to Sacramento Fiber Optic Installation project – Clean Water Act permitting, DFG permitting, and conducted wetland delineations along the project alignment.
- Sacramento Regional County Sanitation District’s Lower Northwest Interceptor Project (Sacramento County, Yolo County) - Clean Water Act permitting, DFG permitting, endangered species surveys, wetland delineations, and habitat assessments along the project alignment.

**EXPERIENCE**

<b>Gibson &amp; Skordal, LLC</b> ..... <i>Principal/Wetland Consultant</i>	<b>November 2004 - Present</b> 2277 Fair Oaks Blvd., Suite 105 Sacramento, California 95825
<b>Jones &amp; Stokes</b> ..... <i>Senior Regulatory Compliance Specialist</i> <i>Planning Team Manager</i>	<b>January 2000 - October 2004</b> 2600 V Street Sacramento, California 95818
<b>EIP Associates</b> ..... <i>Wetland Biologist</i>	<b>August 1998 - December 1999</b> 1200 Second Street Sacramento, California 95814
<b>Espey Huston &amp; Associates, Inc.</b> ..... <i>Wetland Biologist</i>	<b>March 1997 - July 1998</b> 13800 Montfort Drive #230 Dallas, Texas 75340
<b>Massachusetts Office of Coastal Zone Management</b> ..... <i>Wetland Ecologist</i>	<b>Summer 1995 &amp; Summer 1996</b> 251 Causeway Street, Suite 800 Boston, Massachusetts 02114

**EDUCATION**

<b>University of California, Santa Cruz</b> ..... <i>B.A., Environmental Studies</i>	<b>1996</b>
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# Gibson & Skordal, LLC

WETLAND CONSULTANTS

## RESUME OF JAMES C. GIBSON

### SUMMARY

Mr. Gibson has in-depth experience in and knowledge of environmental planning and regulatory fields. His experience as a wetlands consultant since 1988, and 18 years as an Environmental Resource Planner and Environmental Specialist with the U.S. Army Corps of Engineers (Corps) have provided him with solid working knowledge of environmental resource laws and regulations including Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, National Environmental Policy Act, Fish and Wildlife Coordination Act, Endangered Species Act, and California Environmental Quality Act.

As a consultant, Mr. Gibson has served as project manager for a wide range of wetland related projects throughout the west. He has been responsible for conducting jurisdictional delineations and special status species surveys, providing project planning assistance, obtaining governmental approvals, preparation of mitigation and monitoring plans, supervision of mitigation construction, and mitigation monitoring. He has also provided expert and factual testimony for litigation.

During Mr. Gibson's 11 years as an Environmental Specialist for the Sacramento District Corps, Regulatory Section, he was responsible for providing technical expertise in environmental matters, including delineation of wetlands subject to Corps regulatory jurisdiction; management and preparation of environmental impact statements and environmental assessments for complex and controversial permit actions; review of other agencies' environmental documents; coordination with resource agencies, applicants, and others with respect to regulatory actions, mitigation plans, permit conditions, and violations; and providing assistance to regulatory personnel and applicants on environmental matters. He was the Sacramento District Regulatory Wetlands Expert for Northern California, Nevada, and portions of Utah and Colorado. He also served 7 years as an Environmental Resource Planner for the Sacramento District Corps, Environmental Resources Section. He was responsible for planning, coordinating, and preparing Environmental Assessments and Environmental Impact Statements for Corps' Civil Works projects.

Mr. Gibson has conducted formal technical training in the delineation of wetlands utilizing the Corps' Wetland Delineation Manual and "Federal Manual for Identifying and Delineating Jurisdictional Wetlands".

### EXPERIENCE

- |   |   |
|---|---|
| <b>Gibson &amp; Skordal, LLC</b> .....<br><i>Principal, Wetland Consultant</i>  | <b>January 2002 - Present</b><br>2277 Fair Oaks Blvd., Suite 105<br>Sacramento, California 95825      |
| <b>Gibson &amp; Skordal</b> .....<br><i>Principal, Wetland Consultant</i>   | <b>August 1992 - December 2001</b><br>2277 Fair Oaks Blvd., Suite 395<br>Sacramento, California 95825 |
| <b>Huffman &amp; Associates, Inc.</b> .....<br><i>Vice President and Principal</i><br><i>Senior Wetland Regulatory Specialist and Manager</i> | <b>March 1990 - July 1992</b><br>4204 Power Inn Road<br>Sacramento, California 95826                  |



<b>Private Consultant</b> ..... <i>Wetland Regulatory Consultant</i> <i>Wetland Regulatory Consulting</i>	<b>August 1988 -March 1990</b> 8291 Caribbean Way Sacramento, California 95826
<b>U.S. Army Corps of Engineers</b> ..... <i>Environmental Specialist</i> <i>Responsible for environmental aspects of Corps of Engineers'</i> <i>Regulatory Program in California, Nevada, Utah,</i> <i>and Colorado</i>	<b>March 1977 - August 1988</b> 1325 J Street Sacramento, California 95814
<b>U.S. Army Corps of Engineers</b> ..... <i>Environmental Resource Planner (Lieutenant 1970-1972)</i> <i>Responsible for environmental aspects of Corps of Engineers'</i> <i>Civil Works projects primarily in California</i>	<b>March 1970 - March 1977</b> Sacramento District 1325 J Street Sacramento, California 95814
<b>U.S. Army Corps of Engineers</b> ..... <i>Second Lieutenant</i> <i>Combat Engineer</i>	<b>December 1969 - March 1970</b> Ft. Belvoir, Virginia

**EDUCATION**

<b>Texas A&amp;M University</b> ..... <i>B.S., Wildlife Science</i>	<b>1969</b> College Station, Texas
<b>U.S. Army Engineer Officer Training Course</b> ..... <i>Combat Engineer</i>	<b>1970</b> Ft. Belvoir, Virginia

**SPECIAL COURSES**

<b>Wetland Training Institute</b> ..... <i>Wetland Delineation Refresher</i>	<b>1994</b> Ontario, California
<b>Corps of Engineers' Training</b> ..... <i>Wetlands Development and Restoration</i>	<b>1988</b> Tiburon, California
<b>Corps of Engineers' Training</b> ..... <i>Wetland Methodologies</i>	<b>1987</b> Olympia, Washington
<b>Corps of Engineers' Training</b> ..... <i>Wetlands Specialist</i>	<b>1985</b> Pocomoke City, Maryland
<b>Corps of Engineers' Training</b> ..... <i>Wetland Soils and Hydrology</i>	<b>1985</b> Hickory Corner, Michigan
<b>University of Alabama</b> ..... <i>Environmental Laws and Regulations</i>	<b>1984</b> Huntsville, Alabama
<b>Corps of Engineers' Training</b> ..... <i>Public Involvement</i>	<b>1983</b> St. Louis, Missouri
<b>Department of Army</b> ..... <i>Effective Briefing Techniques</i>	<b>1983</b> Sacramento, California
<b>Oregon State University</b> ..... <i>Wetland Science and Technology</i>	<b>1977</b> Otter Rock, Oregon
<b>Corps of Engineers</b> ..... <i>Introduction to Water Resource Planning</i>	<b>1976</b> Sacramento, California

<b>California State University</b> ..... <i>Environmental Impact Reporting and Evaluation</i>	<b>1974</b> Sacramento, California
<b>University of California Extension</b> ..... <i>Environmental Law for the Layman</i>	<b>1972</b> Sacramento, California
<b>University of California Extension</b> ..... <i>Aquatic Biology</i>	<b>1970</b> Weed, California

### ***PROFESSIONAL CERTIFICATIONS***

- Certified Professional Wetland Scientist
- Certified Wildlife Biologist

### ***PROFESSIONAL AFFILIATIONS***

- Association of State Wetland Managers
- The Wildlife Society
- Society of Wetland Scientists

### ***APPOINTMENTS AND HONORS***

<b>Sacramento District Chief of Regulatory Section</b> ..... <i>Letter of Commendation for support in executing a successful regulatory program in Sacramento District</i>	<b>1987</b>
<b>South Pacific Division Engineer</b> ..... <i>Nominee for the Office of the Chief of Engineers Don Lawyer Outstanding Regulator Award for exceptional performance in regulatory functions</i>	<b>1986</b>
<b>South Pacific Division Engineer</b> ..... <i>Special Act Award for personal dedication and technical expertise associated with a highly complex permit action in the San Francisco Bay area</i>	<b>1986</b>
<b>Sacramento District Engineer</b> ..... <i>Special Act Award for being instrumental in obtaining favorable judgment by the Federal District Court in a regulatory case in Northern California</i>	<b>1985</b>
<b>Sacramento District Chief of Construction - Operations Division</b> ..... <i>Letter of Appreciation for outstanding contribution to the success of Sacramento District's regulatory program in Utah</i>	<b>1982</b>
<b>Sacramento District Engineer</b> ..... <i>Sustained Superior Performance Award for environmental planning efforts associated with civil works activities</i>	<b>1976</b>
<b>Sacramento District Engineer</b> ..... <i>Special Act Award for involvement in Sacramento River Wild and Scenic River Study/Report</i>	<b>1975</b>
<b>Sacramento District Chief of Environmental Planning Section</b> ..... <i>Letter of Appreciation for wildlife mitigation plan development</i>	<b>1973</b>
<b>Sacramento District Engineer</b> ..... <i>Letter of Commendation for contribution to civil works projects of the District</i>	<b>1972</b>

**LITIGATION INVOLVEMENT**

**Citizens for Glenwood Canyon Scenic Corridor v. United States Army Corps of Engineers**, *United States District Court, District of Colorado*

**City of Sparks v. L. David Kiley**, *Second Judicial District Court, State of Nevada, County of Washoe*

**Concerned Citizens of Eagle County, Colorado v. Richard E. Woodrow**, *United States District Court, District of Colorado*

**Grantline Investments, LLC v. Pulte Homes Corporation et al.**, *Superior Court of the State of California in and for the County of Sacramento*

**Great Salt Lake Minerals and Chemical Corporation v. Marsh**, *United States District Court, District of Utah, Central Division*

**Kramer Ranch v. Zentner & Zentner, et al.**, *Superior Court of California in and for the County of Sacramento*

**Pacific Shores Subdivision California Water District et al., v. California Department of Fish and Game, et al.**, *Superior Court of the State of California in and for the County of Sacramento*

**People v. Marsh**, *United States District Court, Northern District of California*

**Prudential Development Co. v. Stanford Ranch Inc. et al.**, *Superior Court of the State of California in and for the County of Placer*

**Robert W. Akers v. United States of America**, *United States District Court, Eastern District of California*

**United States of America v. Robert W. Akers**, *United States District Court, Eastern District of California*

**William S. Stryker, M.D. v. Musick, Peeler & Garrett**, *Superior Court of the State of California for the County of Los Angeles Central District*



**Gibson & Skordal, LLC**  
**WETLAND CONSULTANTS**

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**RESUME OF MATT HIRKALA**

***SUMMARY***

Mr. Hirkala has approximately ten years of experience with complex wetland regulatory projects. His expertise includes a thorough understanding of wetland permitting requirements and ecology of wetland systems.

Mr. Hirkala has four years of experience as a Regulatory Project Manager in the Regulatory Branch of the Corps of Engineers in Sacramento, California and Bountiful, Utah. He completed a 60 day assignment with the Corps' Walla Walla, Washington Regulatory Office, which is responsible for Clean Water Act compliance in several counties in northern Idaho. His tasks as a regulator included evaluating permit applications to determine the appropriate permit process; verifying wetland delineations; conducting pre-application consultations; processing permit applications including ensuring compliance with all related laws in consultation with other regulatory agencies; conducting project-specific public interest reviews; and designating appropriate mitigation for unavoidable impacts to waters of the United States. Mr. Hirkala was responsible for managing a variety of complex projects including urban development, habitat restoration, linear transportation and utility lines, seismic prospecting, and flood control projects.

As a consultant, Mr. Hirkala has participated in numerous wetland delineations and special status species habitat assessments of a wide range of projects including residential development, commercial development, solar projects, and linear transportation and energy projects. He presently conducts field surveys for special status species and jurisdictional waters of the United States, prepares technical reports, and prepares maps and figures documenting survey findings.

Mr. Hirkala has five years of experience in conducting protocol-level listed branchiopod surveys and is named on Gibson & Skordal's Section 10(a)(1)A permit from U.S. Fish & Wildlife Service to survey for listed branchiopods.

Mr. Hirkala has over five years of experience conducting special status plant surveys in various geographic areas of California including locations throughout the Central Valley, Solano County, and the Sierra foothills.

In addition to his B.S. in biology, Mr. Hirkala has completed several recent college courses at Sacramento City College, Cosumnes River College, and American River College in Environmental Laws and Regulations, Ecology, Botany, and GIS technology.

***EXPERIENCE***

<b>Gibson &amp; Skordal, LLC</b> ..... <i>Biologist</i> <i>GIS Specialist</i>	<b>November 2004 - Present</b> 2277 Fair Oaks Blvd., Suite 105 Sacramento, California 95825
<b>U.S. Army Corps of Engineers</b> ..... <i>Regulatory Project Manager</i>	<b>April 2004 - November 2004</b> Intermountain Region Main Office 533 West 2600 South, Suite 150 Bountiful, Utah 84010

<b>U.S. Army Corps of Engineers</b> ..... <i>Regulatory Project Manager</i>	<b>April 2001 - April 2004</b> Sacramento District 1325 J Street Sacramento, California 95814
<b>Envisage Environmental Incorporated</b> ..... <i>Environmental Technician/Air Section</i>	<b>April 1999 - April 2001</b> 6940 Miller Road Brecksville, Ohio 44141
<b>Kent State University</b> ..... <i>Program II Assistant/Performed DNA purification, isolation, and sequencing</i>	<b>July 1998 - July 1999</b> Department of Biological Sciences Kent, Ohio 44242
<b>U.S. Army</b> ..... <i>Communications Specialist/Sergeant</i>	<b>February 1986 - November 1991</b> West Germany Ft. Lewis, Washington Panama; Honduras
<b>Kibbutz Yagur</b> ..... <i>Volunteer Laborer</i>	<b>September 1984 - August 1985</b> Yagur, Israel 300-65

**EDUCATION**

<b>Kent State University</b> ..... <i>B.S. in Biology</i>	<b>1996</b> Kent, Ohio
<b>U.S. Army Noncommissioned Officer Academy</b> ..... <i>Primary Leadership Development Course</i>	<b>February 1990</b> Fort Lewis, Washington

**SPECIAL COURSES**

<b>Jones &amp; Stokes</b> ..... <i>NEPA Review</i>	<b>2003</b> Sacramento, California
<b>Corps of Engineers</b> ..... <i>Regulatory IIB (Regulatory Program - Advanced)</i>	<b>2003</b> San Francisco, California
<b>Corps of Engineers</b> ..... <i>Cultural Resources: Identification, Analysis, and Evaluation</i>	<b>2003</b> Sacramento, California
<b>USDA Natural Resources Conservation Service</b> ..... <i>Bioengineering Techniques for Stream Restoration</i>	<b>2002</b> Carson City, Nevada
<b>Corps of Engineers</b> ..... <i>Regulatory III (Section 404 Enforcement)</i>	<b>2002</b> Phoenix, Arizona
<b>Corps of Engineers</b> ..... <i>Regulatory I (Regulatory Program)</i>	<b>2002</b> San Francisco, California
<b>Corps of Engineers</b> ..... <i>Regulatory IV (Delineating Wetlands)</i>	<b>2002</b> Ventura, California
<b>Corps of Engineers</b> ..... <i>Regulatory IIA (Regulatory Program - Advanced)</i>	<b>2001</b> Las Vegas, Nevada
<b>United States Department of Agriculture</b> ..... <i>Hydric Soils</i>	<b>2001</b> Sacramento, California

**University of Cincinnati**..... **1999**  
*Source Sampling for Particulate Pollutants*  
Cincinnati, Ohio

**PROFESSIONAL AFFILIATIONS**

- Society of Wetland Scientists

**APPOINTMENTS AND HONORS**

**Sacramento District Engineer**..... **2004**  
*Performance Award for various projects*

**Corps of Engineers, Walla Walla District Regulatory Branch**..... **2003**  
*Letter of Commendation for numerous permit actions while on a temporary 60 day assignment*



HOME    HYDROLOGY    WEATHER    CLIMATE    RESEARCH / OUTREACH    LINKS    SEARCH    ABOUT US

### Monthly Precipitation Summary Water Year 2011

Updated: Thu Oct 13 03:00:02 2011

The following is data from National Weather Service cooperative observers as of the end of last month. The water year starts on October 1 and ends on September 30. Precipitation data is provided for each month of the most recent water year, total precipitation for the water year, the percent of normal for the water year to date, and the percent of the entire water year we have received to date.

M stands for Missing Data. WY means Water Year. NA means that 30 year averages do not exist for this station. The units of the precipitation is Inches.

If a station has any missing data, it's WY to Date total will also be missing. In addition the percent normal will not be calculated.

Any questions about this product should be directed to the CNRFC.

SOUTHERN OREGON COASTAL																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
4BK	BROOKINGS	M	M	M	M	M	M	M	M	M	M	M	M	M		
ASHO3	ASHLAND	1.88	2.15	4.03	1.52	1.19	4.55	3.75	3.03	1.90	0.34	0.00	0.05	24.39	123	123
CVJO3	CAVE JUNCTION	6.09	6.62	15.92	2.75	7.19	13.73	3.88	2.65	0.99	0.59	0.00	0.05	60.46	97	97
GOLO3	GOLD BEACH	5.89	11.78	16.28	6.22	7.48	23.11	8.93	5.55	1.13	0.13	0.00	0.61	87.11	110	110
GPSO3	GRANTS PASS KAJO	3.34	4.25	10.17	1.97	3.90	8.43	2.86	2.08	1.63	1.48	0.01	0.01	40.13	129	129
GSPO3	GREEN SPRINGS PP	2.65	3.69	4.24	1.42	2.19	5.93	2.09	2.94	1.87	0.77	0.00	0.08	27.87	121	121
LEMO3	LEMOLO LAKE	7.96	10.12	16.50	7.78	5.75	13.10	9.07	4.94	2.64	1.71	0.03	0.20	79.80	122	122
MFR	MEDFORD	2.06	1.95	4.31	1.73	1.23	4.26	2.12	2.20	0.69	0.60	0.00	0.01	21.16	115	115
OTH	NORTH BEND	4.73	7.51	10.20	3.73	6.25	8.85	5.17	2.66	1.17	0.15	0.00	0.20	50.62	79	79
PRSO3	PROSPECT 2SW	4.43	5.14	10.19	4.94	3.29	9.77	7.14	3.67	1.79	0.23	0.00	0.12	50.71	120	120
RIDO3	RIDDLE	3.09	3.80	7.01	1.89	3.72	6.65	3.64	2.52	1.43	1.48	0.01	0.00	35.24	112	112
ROGO3	ROSEBURG	3.23	5.25	7.84	2.30	4.27	7.12	4.62	3.21	1.74	1.91	0.00	0.05	41.54	123	123
SXT	SEXTON SUMMIT	4.35	6.08	4.79	2.78	5.41	11.44	4.20	2.74	1.55	0.78	0.07	0.50	44.69	135	135
TKFO3	TOKETEE FALLS	5.01	5.87	11.34	4.81	4.61	10.35	7.29	4.90	1.78	1.63	0.01	0.10	57.70	118	118
WINO3	WINCHESTER DAM	3.40	5.93	7.74	2.20	4.05	6.69	4.28	3.59	1.54	1.46	0.00	0.00	40.88	114	114
WLMO3	WILLIAMS	3.89	3.47	8.64	2.12	3.41	7.90	2.36	1.79	0.80	0.57	0.00	0.01	34.96	107	107
OREGON CLOSED BASINS																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
HMRO3	HART MOUNTAIN REF	1.60	2.01	1.65	0.66	1.57	2.63	3.12	2.49	0.93	0.14	0.00	0.00	16.80	132	132
PASO3	PAISLEY	1.70	0.48	2.32	0.11	0.98	1.88	1.46	1.15	0.50	0.10	0.82	0.24	11.74	109	109
SMMO3	SUMMER LAKE	2.15	1.34	3.52	0.38	1.29	3.10	2.13	1.17	0.50	0.13	0.11	0.01	15.83	124	124
SVLO3	SILVER LAKE	0.92	1.04	1.47	0.41	0.98	1.72	0.74	1.29	0.48	0.17	0.05	0.04	9.31	95	95
NORTHERN CALIFORNIA COASTAL																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
CEC	CRESCENT CITY ASOS	6.59	8.33	13.59	3.65	5.31	14.36	5.68	4.67	1.33	0.44	0.04	0.04	64.03	NA	NA
CECC1	CRESCENT CITY 3NNW	7.70	9.68	18.17	4.69	6.14	19.00	7.24	4.85	1.37	0.34	0.05	0.46	79.69	119	119
CVLC1	COVELO	8.45	4.36	10.52	2.20	3.90	12.12	M	3.36	1.19	0.02	0.00	0.10	M		
EKA	EUREKA	4.26	4.69	10.08	2.23	3.62	11.88	4.07	1.43	1.29	0.17	0.04	0.37	44.13	116	116
FORC1	FORT ROSS	5.86	4.22	M	0.91	4.51	5.55	1.06	2.38	1.94	M	M	0.15	M		
FRBC1	FT BRAGG 5N	7.66	4.29	11.59	1.88	4.40	13.55	2.05	2.08	1.24	0.35	0.02	0.30	49.41	121	121
GASC1	GASQUET RS	8.40	12.42	25.00	4.91	9.53	26.47	10.25	4.67	1.62	0.39	0.00	0.34	104.00	113	113
GCSC1	GRIZZLY CREEK SP	M	M	M	M	M	16.40	M	3.30	M	M	0.07	M	M		
OPCC1	PRAIRIE CREEK SP	5.23	9.05	16.48	4.51	5.31	14.37	6.13	3.74	3.99	0.88	M	M	M		
RIHC1	RICHARDSON GROVE SP	2.92	6.38	16.07	3.36	9.33	17.25	M	M	M	M	M	M	M		
SCOC1	SCOTIA	4.16	4.94	14.02	1.73	5.70	15.08	3.89	2.34	1.11	0.24	0.01	0.19	53.41	110	110
WTSC1	WLLITS 1NE	10.14	6.12	12.24	2.42	6.32	13.99	1.66	2.67	2.45	0.00	0.02	0.07	58.10	117	117
UPPER KLAMATH																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
BLIO3	BLY 4SE	1.84	1.61	3.22	0.49	0.95	2.67	2.25	1.45	0.90	0.13	0.00	0.13	15.64	NA	NA
CHEO3	CHEMULT	4.19	3.03	8.42	2.08	2.75	5.90	1.52	1.26	0.94	1.00	0.28	0.37	31.74	124	124
CHQO3	CHILOQUIN 7NW	3.55	2.74	7.33	2.74	0.97	5.06	2.12	2.07	0.90	0.55	0.01	0.05	28.09	141	141
CRLO3	CRATER LAKE NP	7.59	9.04	15.85	7.65	5.91	16.75	10.65	6.21	2.53	1.33	0.11	0.87	84.49	126	126
GBZO3	GERBER	2.00	2.90	4.50	1.00	1.60	4.00	2.50	1.90	0.50	0.20	0.00	0.00	21.10	116	116
HOWO3	HOWARD PRAIRIE	4.32	4.21	7.22	2.41	3.20	8.54	3.43	3.14	2.09	1.98	0.02	0.05	40.61	125	125

ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
KEN03	KENO	2.76	2.29	4.84	0.94	5.09	4.10	1.98	0.80	0.24	0.30	0.00	0.30	23.64	117	117
LMT	KLAMATH FALLS	1.24	1.24	2.62	0.66	0.76	1.75	1.29	0.61	0.23	0.30	0.00	0.00	10.70	77	77
LOWER KLAMATH																
BBAC1	BIG BAR 4E	6.91	4.41	10.35	1.30	3.21	9.51	2.73	1.73	M	0.12	0.00	M	M		
CHNC1	CALLAHAN	4.34	1.66	5.65	0.91	1.06	5.42	0.96	1.54	1.42	0.42	0.23	0.09	23.70	112	112
COPC1	COPCO #1 DAM	3.24	5.75	4.87	1.09	3.11	5.77	2.03	1.64	1.41	0.60	0.24	0.03	29.78	145	145
FOJC1	FORT JONES	3.25	2.64	4.94	1.08	1.53	5.13	0.77	1.76	1.60	0.36	0.00	0.13	23.19	106	106
HPAC1	HOOPA	M	8.80	9.00	2.80	5.30	16.60	4.40	2.50	1.40	M	0.00	0.10	M		
HPYC1	HAPPY CAMP	4.35	6.33	14.47	2.73	4.95	13.10	3.01	1.89	1.00	0.22	0.00	0.28	52.33	102	102
HYAC1	HYAMPOM	M	3.90	12.20	1.70	3.00	11.20	2.60	2.20	M	M	M	0.00	M		
MTHC1	MT. HEBRON RS	2.21	0.72	2.21	0.60	0.87	2.34	0.56	0.24	0.18	0.20	0.02	0.05	10.20	80	80
ORLC1	ORLEANS	9.38	6.16	13.34	3.25	4.64	12.93	4.98	2.11	1.70	0.16	0.00	0.22	58.87	112	112
STGC1	LAVA BEDS NM	1.28	1.01	2.35	0.18	2.51	2.95	2.05	0.38	0.06	0.69	0.00	0.14	13.60	90	90
TRHC1	TRINITY RIVER HATCHERY	6.72	2.59	6.75	1.58	2.49	9.75	3.75	2.13	2.72	0.09	0.00	M	M		
TULC1	TULE LAKE	1.09	0.92	2.41	0.72	1.12	1.51	1.17	0.42	0.17	0.13	0.00	0.20	9.86	87	87
WEAC1	WEAVERVILLE	9.15	4.51	9.44	2.50	3.01	10.74	2.25	3.15	2.20	0.28	0.00	0.09	47.32	123	123
WLLC1	WILLOW CREEK 1NW	9.37	6.98	12.72	3.14	4.80	11.51	3.63	2.42	1.53	0.15	0.00	0.17	56.42	104	104
YKAC1	YREKA	3.39	2.32	4.19	1.05	1.19	5.41	0.89	1.50	1.33	1.09	0.06	0.05	22.47	114	114
RUSSIAN...NAPA...SAN FRANCISCO BAY																
ANGC1	ANGWIN PACIFIC UNION COLL	5.26	3.69	11.31	2.34	7.18	13.00	0.97	2.78	2.66	M	M	0.03	M		
CLTC1	CALISTOGA	4.95	4.32	10.60	2.37	7.76	12.65	0.20	M	M	M	M	M	M		
FFDC1	FAIRFIELD	2.38	2.50	7.13	0.55	4.26	M	0.39	M	1.21	0.00	M	M	M		
GRNC1	GRATON	8.70	4.10	12.05	2.49	6.45	10.57	0.71	M	M	M	M	M	M		
HLDC1	HEADSBURG FIRE DEPT	5.08	3.86	10.79	2.73	6.27	M	M	M	M	M	0.00	0.00	M		
KENC1	KENTFIELD	5.90	4.87	12.46	2.81	7.31	14.31	1.11	M	M	M	M	M	M		
MHMC1	MOUNT HAMILTON	2.51	4.87	6.90	1.65	5.13	8.14	1.03	1.94	1.52	0.00	0.00	M	M		
NSHC1	NAPA STATE HOSPITAL	3.71	3.05	8.84	1.28	4.27	8.95	0.59	1.89	2.61	0.00	M	0.00	M		
OAMC1	OAKLAND MUSEUM	1.42	3.41	8.67	1.39	4.73	7.69	0.35	M	M	M	M	M	M		
PORC1	POTTER VALLEY PH	10.77	6.00	10.03	2.75	7.22	15.02	1.10	3.33	1.70	0.00	0.00	0.00	57.92	128	128
SFO	SAN FRANCISCO AIRPORT	1.81	3.10	6.71	1.44	4.95	8.17	0.42	1.05	M	0.00	M	0.01	M		
SFOC1	DOWNTOWN SAN FRANCISCO	1.81	3.10	6.71	1.55	4.94	7.02	0.56	1.13	2.02	0.08	0.03	0.00	28.95	130	130
STSC1	SANTA ROSA	5.14	3.13	8.38	1.68	5.71	10.44	0.66	2.41	1.62	0.00	M	0.01	M		
UKHC1	UKIAH FIRE DEPT	7.97	3.26	9.12	2.21	4.94	12.60	0.69	M	1.99	M	M	M	M		
JKI	UKIAH ASOS	6.85	3.83	8.88	1.98	4.48	11.56	0.71	1.59	1.72	0.01	0.00	0.01	41.62	NA	NA
SACRAMENTO. YUBA FEATHER. AMERICAN																
4LW	LAKEVIEW	2.83	M	M	M	M	1.58	2.18	1.93	0.77	M	0.00	0.02	M		
ADNC1	ADIN	2.00	1.36	4.17	0.18	1.44	2.79	2.23	2.16	M	M	0.00	0.07	M		
ALTC1	ALTURAS	1.95	1.19	2.88	0.43	0.73	1.75	2.69	1.63	1.13	0.00	M	M	M		
AUBC1	AUBURN	3.19	4.80	10.69	2.25	6.32	12.13	0.58	2.67	2.97	0.00	0.00	0.00	45.60	125	125
BLU	BLUE CANYON	M	M	M	M	M	M	M	M	M	M	M	M	M		
BNYC1	BURNEY	2.90	2.15	7.25	1.10	5.79	7.85	2.32	3.40	0.95	0.02	0.00	0.30	34.07	127	127
BODC1	BOWMAN DAM	16.16	11.45	32.52	2.49	12.96	29.33	8.21	4.41	6.12	M	0.00	1.35	M		
BRRC1	BRUSH CREEK RS	M	M	M	M	M	M	M	M	M	M	M	M	M		
BUCC1	BUCKS CREEK	7.22	8.44	19.29	2.32	9.81	23.01	3.96	6.13	3.91	0.00	0.00	0.04	84.13	121	121
BUKC1	BUCKHORN	8.56	7.92	20.30	2.13	10.61	21.09	6.45	6.67	3.83	0.40	0.00	0.53	88.49	133	133
CANC1	CANYON DAM	4.60	5.28	12.27	1.05	7.77	9.92	2.42	3.73	2.92	0.00	0.00	0.24	50.20	133	133
CBYC1	CANBY 3SW	M	M	M	M	M	M	M	M	M	M	M	M	M		
CHAC1	CHALLENGE RS	M	M	M	M	M	M	M	M	M	M	M	M	M		
CHEC1	CHESTER	4.64	4.00	9.36	0.99	5.34	9.70	2.07	2.34	2.17	0.00	0.00	0.02	40.63	123	123
CHUC1	CHICO UNIVERSITY FARM	2.55	3.23	4.40	3.38	3.67	5.53	0.28	3.97	1.91	0.00	0.00	0.00	28.92	110	110
CLGC1	COLGATE PH	7.73	6.04	14.65	2.29	6.28	12.70	1.47	2.53	1.95	0.00	0.00	0.02	55.66	135	135
COFC1	COLFAX	5.81	6.84	13.11	M	4.22	16.07	1.56	2.01	M	M	0.00	0.00	M		
DAVC1	DAVIS EXPERIMENTAL FARM	0.91	2.11	5.49	1.89	3.47	6.35	0.08	0.96	1.73	0.00	0.00	0.01	23.00	121	121
DESC1	DE SABLE	8.52	8.89	19.14	2.63	12.72	21.25	2.06	8.00	3.30	M	0.00	0.09	M		
DUNC1	DUNSMUIR	8.02	5.92	19.14	2.03	8.03	22.13	2.86	2.93	2.43	0.24	0.00	0.13	73.86	119	119
DWNC1	DOWNIEVILLE	8.51	10.60	21.52	2.67	10.20	22.69	5.49	5.21	3.78	0.00	0.00	0.39	91.06	145	145
FSTC1	FORESTHILL RS	9.31	9.34	20.93	1.71	7.30	21.50	2.98	4.61	M	M	0.00	0.01	M		
GEOC1	GEORGETOWN RS	8.90	10.85	17.65	2.71	5.57	22.82	2.67	4.79	4.33	0.00	0.00	0.01	80.30	149	149
GLRC1	GOLD RUN 2SW	9.71	9.34	19.62	3.07	5.26	19.66	3.01	4.24	2.86	M	0.00	0.03	M		
GRAC1	GRASS VALLEY NO. 2	8.58	8.63	17.70	2.80	7.02	19.60	2.53	3.53	2.41	0.00	0.00	0.00	72.80	137	137



GREC1	GREENVILLE RS	M	M	M	M	M	M	M	M	M	M	M	M	M			
HATC1	HAT CREEK	1.88	1.27	5.02	0.68	3.23	5.44	2.21	2.58	0.68	0.00	0.00	0.09	23.08	115	115	
HLEC1	HARRY L ENLEBRIGHT DAM	4.59	5.26	12.29	1.98	7.09	11.77	1.27	2.35	1.58	0.00	0.00	M	M			
HRRC1	HARRISON GULCH RS	M	M	M	M	M	M	M	M	M	M	M	M	M			
LSPC1	LAKE SPAULDING	11.68	17.36	24.58	3.11	11.10	25.69	8.20	5.02	7.57	0.00	0.00	M	M			
MCLC1	MCCLOUD	5.12	3.75	12.41	1.33	6.37	23.18	2.66	2.17	2.61	0.20	0.00	0.18	59.98	122	122	
MHS	MT. SHASTA	M	2.97	12.84	0.83	6.80	16.14	1.37	3.23	1.54	0.32	0.00	0.31	M			
MINC1	MINERAL	7.09	7.15	15.29	1.45	8.28	15.59	4.37	4.96	2.20	0.00	0.00	M	M			
MNZC1	MANZANITA LAKE	6.15	5.30	8.85	1.28	3.44	9.49	4.93	7.09	2.38	0.00	0.00	0.00	48.91	118	118	
NCOC1	NICOLAUS	1.28	2.69	6.38	M	3.67	7.07	0.09	1.79	1.57	0.00	M	0.00	M			
NVDC1	NEVADA CITY	8.50	11.37	20.33	3.29	7.04	26.90	3.14	4.24	2.63	M	0.00	0.03	M			
ONDC1	ORLAND	2.38	1.33	4.93	1.31	2.50	5.79	0.15	2.02	1.23	0.00	0.00	0.02	21.66	99	99	
PCHC1	PACIFIC HOUSE	9.97	10.11	17.43	2.80	8.81	21.08	3.54	4.99	2.70	0.00	0.00	M	M			
PLCC1	PLACERVILLE	5.68	6.63	12.92	2.57	M	M	M	3.51	M	M	0.06	M				
PLUC1	PLUMAS EUREKA SP	7.90	8.70	14.90	1.80	10.80	12.40	M	3.60	0.60	0.10	0.00	1.40	M			
PRAC1	PORTOLA	3.72	3.81	7.45	0.72	4.72	8.34	1.21	0.73	1.72	0.00	0.00	0.11	32.53	141	141	
PRDC1	PARADISE	6.90	6.58	17.19	2.89	8.98	15.43	0.92	5.92	3.18	0.00	0.00	0.07	68.06	121	121	
PRPC1	PIT RIVER PH5	9.80	8.90	21.27	2.42	12.28	25.37	4.12	6.25	2.23	M	0.00	0.41	M			
PTRC1	PIT RIVER PH1	1.74	1.07	4.15	0.50	2.81	4.02	1.79	2.40	0.89	0.00	0.00	0.14	19.51	103	103	
QCVC1	QUINCY	3.75	6.06	13.82	1.60	9.11	16.02	2.57	3.04	2.66	0.00	0.00	0.10	58.73	154	154	
RBL	RED BLUFF AP	2.08	1.27	5.55	1.27	2.03	4.60	0.44	1.71	0.89	0.00	0.00	0.12	19.96	83	83	
ROMC1	ROUND MOUNTAIN	M	M	M	M	M	M	M	M	M	M	M	M	M			
SAC	SACRAMENTO AP	1.43	2.39	5.55	1.68	3.39	6.95	0.06	1.02	1.50	0.00	0.00	0.01	23.98	133	133	
SERC1	SIERRAVILLE	4.58	3.27	8.81	0.75	3.50	9.03	1.29	0.93	2.23	0.00	0.00	0.91	35.30	134	134	
SHDC1	SHASTA DAM	7.07	9.02	14.63	1.86	6.24	18.75	2.06	5.27	4.78	0.28	0.00	0.17	70.13	111	111	
SLPC1	SLY PARK	9.30	9.68	16.94	2.96	5.47	17.71	2.13	5.24	2.20	0.00	0.00	0.00	71.63	NA	NA	
SMTC1	SACRAMENTO 5 ESE	1.75	2.65	5.52	1.36	3.88	7.00	0.08	1.40	1.14	0.00	0.00	0.00	24.78	125	125	
SODC1	SODA SPRINGS	11.73	10.63	21.06	1.73	8.27	15.83	5.55	4.45	4.02	0.00	0.00	1.26	84.53	NA	NA	
STOC1	STONY GORGE	4.33	1.05	4.67	1.71	1.99	6.12	0.17	1.18	2.56	0.00	0.00	0.03	23.81	112	112	
STYC1	STRAWBERRY VALLEY	11.95	15.16	26.65	3.20	13.10	29.30	5.54	6.04	3.27	0.00	0.00	0.20	114.41	142	142	
TWLC1	CAPLES LAKE	6.97	6.51	11.67	1.49	6.30	12.91	2.59	3.07	M	1.03	0.00	M	M			
VOLC1	VOLTA PH	4.51	3.31	9.89	1.57	4.20	9.28	3.55	5.63	2.55	M	0.00	0.04	M			
VTNC1	VINTON	2.64	1.46	4.82	0.27	3.31	3.93	0.50	0.82	2.93	0.38	0.00	0.28	21.34	150	150	
WDDC1	WOODLAND	1.13	2.67	6.49	1.68	3.97	6.67	0.10	1.18	2.17	M	0.00	M	M			
WSKC1	WHISKEYTOWN RES	7.29	8.12	13.97	2.30	6.73	20.75	M	5.47	4.57	0.36	0.00	M	M			
SAN JOAQUIN																	
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY	
ABYC1	AUBERRY	3.62	3.72	12.57	3.18	4.67	9.23	0.65	M	1.63	M	0.00	0.03	M			
ARNC1	CALAVERAS BIG TREES	9.93	10.47	19.20	3.41	7.04	18.61	2.07	2.52	3.61	0.00	0.00	M	M			
BCRC1	BIG CREEK PH #1	4.84	3.55	12.26	2.47	4.46	9.08	1.65	2.66	M	M	M	M	M			
CHVC1	CHERRY VALLEY	10.01	9.34	21.05	3.54	8.78	17.77	2.14	4.34	3.60	0.00	0.00	0.70	81.27	170	170	
CMPC1	CAMP PARDEE	2.46	4.01	6.53	2.43	4.70	6.11	0.51	1.81	1.65	0.01	0.00	0.34	30.56	133	133	
EXQC1	EXCHEQUER DAM	M	3.43	7.63	2.02	3.83	7.35	0.72	1.44	2.03	0.00	0.00	0.01	M			
FDDC1	FIDDLETOWN DEXTER RANCH	5.21	7.03	12.72	2.73	6.35	13.35	1.48	3.82	3.21	0.00	0.00	0.13	56.03	151	151	
FLOC1	FLORENCE LAKE	4.28	2.29	5.74	1.75	0.68	6.58	0.77	1.19	M	3.41	M	M	M			
FRAC1	FRIANT GOVERNMENT CAMP	1.62	2.10	7.31	2.26	2.06	5.33	0.17	0.66	2.18	0.00	0.00	0.00	23.69	161	161	
GRVC1	GROVELAND RS	5.11	M	22.80	M	M	M	M	3.47	3.50	M	M	M	M			
HETC1	HETCH HETCHY	8.83	7.85	14.64	2.40	5.54	13.14	1.82	3.21	3.56	0.00	0.00	1.99	62.98	173	173	
HNTC1	HUNTINGTON LAKE	5.04	5.36	17.56	4.00	6.72	12.98	2.36	4.00	2.26	M	0.00	0.00	M			
LOSC1	LOS BANOS	0.54	1.55	3.92	1.61	1.53	2.32	0.09	0.34	0.70	0.00	0.00	0.00	12.60	127	127	
MATC1	MATHER	6.65	4.54	10.86	5.32	7.25	10.80	M	M	M	M	M	M	M			
MCEC1	MERCED	1.08	2.02	3.33	1.47	1.87	4.26	0.26	0.80	1.16	0.00	0.00	0.02	16.27	130	130	
MDRC1	MADERA	0.21	2.03	4.14	1.88	1.50	4.17	0.24	M	1.31	0.00	0.00	0.00	M			
MOD	MODESTO AP	0.75	2.10	3.56	1.11	2.45	3.15	0.03	0.85	1.38	0.00	0.00	0.00	15.38	118	118	
MRIC1	MARIPOSA RS	M	4.25	13.80	3.54	5.72	10.39	0.41	2.46	2.45	M	M	M	M			
NMDC1	NEW MELONES DAM HQ	4.19	6.42	11.51	2.37	4.92	11.71	0.52	1.98	2.95	M	0.00	M	M			
NOFC1	NORTH FORK RS	6.35	5.21	16.78	2.97	6.75	13.07	1.49	2.87	2.12	0.13	0.00	0.03	57.77	169	169	
PANC1	PANOCHÉ 2W	0.67	1.17	3.72	1.65	2.99	3.43	0.25	0.53	0.28	0.00	0.00	0.00	14.69	139	139	
SCKC1	STOCKTON FIRE STA 4	1.38	2.37	6.01	M	3.09	4.63	0.01	M	M	M	0.00	0.00	M			
SONC1	SONORA	4.80	7.45	10.55	2.49	5.66	12.65	0.53	2.61	1.87	0.00	0.00	0.00	48.61	148	148	
SPGC1	SALT SPRINGS PH	7.39	7.97	14.82	2.03	6.85	17.58	2.13	3.61	3.59	0.00	0.00	0.53	66.50	144	144	
TIGC1	TIGER CREEK PH	8.08	9.43	13.95	3.53	6.58	15.58	2.11	3.76	2.70	0.00	0.00	0.09	65.81	142	142	
TRAC1	TRACY CARBONA	0.75	1.46	2.78	0.74	2.38	3.20	0.11	0.29	2.07	0.00	0.00	0.00	13.78	130	130	
WSTC1	WEST POINT	6.76	8.07	16.91	2.81	6.27	14.58	1.89	3.85	2.68	0.00	0.00	0.11	63.93	175	175	
YNPC1	SOUTH ENTRANCE YOSEMITE	6.41	1.22	14.27	2.52	5.52	12.12	1.05	2.59	M	0.00	0.09	0.41	M			

YPQC1	YOSEMITE PARK HEADQUARTER	6.16	6.57	9.30	2.95	7.61	13.24	1.43	2.17	2.06	0.00	0.11	3.42	55.02	146	146
KERN...TULE...KAWEAH...KINGS																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
ASHC1	ASH MOUNTAIN	2.22	6.78	13.63	1.88	4.67	7.78	0.79	1.98	0.97	0.00	0.33	0.02	41.05	155	155
ATWC1	ATWELL CAMP	3.73	5.27	21.32	2.24	4.33	9.94	1.64	4.63	1.12	1.13	0.54	0.73	56.62	NA	NA
BFL	BAKERSFIELD	0.59	0.84	5.82	0.40	0.49	1.67	0.21	0.23	0.08	0.00	0.00	0.00	10.33	159	159
BTPC1	BEAR TRAP MEADOW	3.32	6.12	24.35	5.79	3.34	18.61	4.74	4.35	1.91	1.14	0.64	1.62	75.93	NA	NA
DNPC1	BALCH PH	5.17	3.83	21.17	3.49	4.88	11.48	1.36	2.89	1.41	0.05	0.00	0.25	55.98	181	181
EGCC1	EAGLE CREEK	2.22	5.61	22.42	2.63	5.61	9.53	2.52	4.52	0.21	0.92	0.34	1.24	57.77	NA	NA
GNFC1	GIANT FOREST	3.60	6.80	24.60	3.40	5.50	5.84	M	4.08	1.20	1.60	0.90	0.00	M		
GNNC1	GLENNVILLE	0.57	1.19	0.43	1.69	2.13	4.93	0.37	2.05	0.21	0.00	0.09	0.10	13.76	69	69
GRGC1	GRANT GROVE	4.59	5.90	21.17	3.56	7.54	12.99	1.40	3.47	0.84	0.00	0.19	0.77	62.42	149	149
HCKC1	HOCKETT MEADOW	1.61	6.22	13.21	12.11	1.95	15.72	2.05	3.83	0.62	2.95	0.44	M	M		
HSSC1	HOSSACK	2.40	8.64	24.21	2.65	6.04	M	M	M	0.42	0.00	0.00	0.00	M		
ISAC1	LAKE ISABELLA DAM	0.88	1.66	11.82	0.76	1.16	1.91	0.09	0.86	0.00	0.52	0.00	0.34	20.00	NA	NA
KVLC1	KERN RIVER PH #3	0.00	1.73	M	2.92	1.20	2.33	0.10	0.76	M	M	0.19	M	M		
LDGC1	LODGEPOLE	3.17	6.46	27.04	3.56	7.77	13.50	2.60	3.48	1.06	1.78	0.06	0.60	71.08	159	159
MNHC1	MOUNTAIN HOME	1.70	7.22	20.20	2.20	6.91	11.00	1.62	3.01	0.11	0.82	0.32	0.74	55.85	NA	NA
PFTC1	PINE FLAT DAM	2.06	3.58	12.13	2.50	2.72	6.10	0.64	1.09	2.01	0.05	0.00	0.00	32.88	164	164
RGCC1	ROGERS CAMP	2.10	6.72	21.61	2.43	5.33	8.65	2.72	3.63	0.32	1.03	0.90	1.24	56.68	NA	NA
SCSC1	LAKE SUCCESS DAM	1.37	1.98	9.20	1.63	1.36	3.56	0.72	0.58	0.25	0.00	0.06	0.00	20.71	188	188
TMDC1	TERMINUS DAM	3.57	3.74	9.70	1.92	1.50	4.68	0.66	0.43	0.42	0.00	0.00	0.00	26.62	NA	NA
TREC1	THREE RIVER EDISON PH #1	1.01	4.07	12.27	2.01	3.11	6.64	0.84	1.39	0.86	0.15	0.00	0.00	32.35	133	133
TULARE-BUENA VISTA LAKES																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
CNGC1	COALINGA	0.04	0.33	1.63	1.32	0.14	2.28	0.05	0.24	0.05	0.00	0.00	0.01	6.09	73	73
FAT	FRESNO AIR TERMINAL	0.44	1.80	5.92	1.72	1.60	3.46	0.32	0.35	1.91	0.00	0.00	0.00	17.52	156	156
HJO	HANFORD	0.76	1.24	5.29	0.88	0.96	2.70	0.32	0.41	0.91	0.04	0.00	0.00	13.51	157	157
LEMC1	LEMON COVE	1.50	2.34	8.74	1.90	1.31	4.66	0.53	0.42	0.45	0.00	0.00	0.01	21.86	150	150
LINC1	LINDSAY	0.88	2.27	8.11	1.56	1.83	4.04	0.71	0.48	0.38	0.00	0.03	0.02	20.31	162	162
PRTC1	PORTERVILLE	M	M	M	M	M	M	M	M	M	M	M	M	M		
VISC1	VISALIA	0.67	1.33	6.33	1.24	0.95	2.37	0.36	0.34	0.60	0.00	0.00	0.00	14.19	129	129
WASC1	WASCO	0.00	0.72	6.02	0.40	0.31	1.37	0.38	0.32	0.81	0.00	0.00	0.00	10.33	141	141
CENTRAL CALIFORNIA COASTAL																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
BISC1	BIG SUR STATE PARK	2.17	3.81	7.38	3.64	7.27	12.21	0.70	2.57	M	0.00	M	M	M		
CCHC1	CACHUMA DAM	2.24	1.42	9.48	1.84	3.36	11.85	0.14	0.42	0.46	0.00	0.00	0.00	31.21	143	143
HOLC1	HOLLISTER	0.80	2.11	2.02	2.30	2.88	M	0.25	M	M	0.00	M	M	M		
JNLC1	JUNCAL DAM	1.49	2.28	14.01	1.73	5.09	10.64	0.08	1.18	0.47	0.00	0.00	0.00	36.97	119	119
KICC1	KING CITY	0.69	1.32	2.93	1.51	3.77	4.03	0.16	0.37	0.54	0.00	0.00	0.04	15.36	125	125
LSLC1	LOS ALAMOS	M	M	M	M	M	M	M	M	M	M	M	M	M		
PRB	PASO ROBLES	0.72	0.84	5.80	1.53	2.51	4.39	0.30	0.79	0.30	0.00	0.00	0.01	17.19	131	131
PRSC1	PRIEST VALLEY	1.43	2.22	8.76	3.11	6.56	7.16	2.77	M	M	M	M	M	M		
SAEC1	SAN CLEMENTE DAM	0.62	2.26	5.47	2.06	5.31	6.38	0.37	M	M	M	M	M	M		
SBA	SANTA BARBARA	2.61	1.10	10.36	1.20	3.81	7.52	0.03	0.55	1.45	0.00	0.00	0.00	28.63	154	154
SBPC1	SAN LUIS OBISPO	1.70	1.85	9.66	2.56	3.70	7.97	0.28	1.12	1.34	0.03	0.00	0.01	30.22	124	124
SCRC1	SANTA CRUZ	3.16	4.05	9.40	2.17	5.75	10.87	0.66	1.53	2.35	0.01	0.06	0.05	40.06	131	131
SMX	SANTA MARIA	1.69	0.94	9.85	1.08	3.00	5.75	0.15	0.38	0.59	0.00	0.00	0.09	23.52	168	168
SNSC1	SALINAS NO. 2	0.65	2.22	3.53	1.48	3.24	3.16	0.21	0.72	M	0.00	M	0.02	M		
WWIC1	WATSONVILLE WATERWORKS	1.62	3.23	6.67	2.01	4.65	7.88	0.27	M	1.11	0.01	0.03	0.00	M		
SOUTHERN CALIFORNIA COASTAL																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
BBLC1	BIG BEAR LAKE F.S.	2.11	2.29	15.92	0.72	4.39	2.77	1.40	0.76	0.00	1.88	0.18	1.29	33.71	159	159
CQT	DOWNTOWN LA	0.94	0.53	10.23	0.79	3.29	3.96	0.00	0.45	0.00	0.00	0.00	0.00	20.19	133	133
CUYC1	CUYAMACA	5.20	4.97	13.66	2.61	8.46	4.81	0.84	1.97	0.11	1.32	0.00	M	M		
ELPC1	EL CAPITAN DAM	3.74	2.23	9.36	0.73	5.04	2.76	0.54	1.57	0.15	0.10	0.00	0.12	26.34	156	156
EORC1	ELSINORE	1.61	1.06	11.67	0.70	3.08	2.96	0.46	0.47	0.07	0.09	0.09	0.03	22.29	184	184
HENC1	HENSHAW DAM	2.40	2.91	15.24	1.93	7.70	4.01	0.54	1.00	0.04	0.16	0.01	0.29	36.23	130	130
LAGC1	LAGUNA BEACH	M	M	M	0.72	M	2.12	0.24	M	M	M	M	M	M		
LAX	LA INT'L AIRPORT	1.56	0.59	6.83	0.81	1.47	4.04	0.00	0.53	0.02	0.00	0.00	0.01	17.86	135	135
LGB	LONG BEACH	1.62	0.60	10.41	1.15	1.60	2.67	0.05	0.66	0.01	0.00	0.00	0.02	18.79	145	145

LOX	OXNARD	2.23	1.00	9.16	0.78	2.31	6.03	0.07	0.50	0.15	0.00	0.00	0.03	22.26	NA	NA
OJAC1	OJAI	2.15	1.65	10.36	0.55	4.09	6.32	0.16	0.97	0.24	0.00	0.00	0.00	26.49	122	122
MWS	MOUNT WILSON	2.27	1.89	15.71	0.55	4.84	6.11	0.03	0.49	0.07	0.00	0.00	0.00	31.96	79	79
OCNC1	OCEANSIDE MARINA	3.61	0.64	5.82	1.50	1.19	2.02	0.05	M	0.13	0.00	0.00	0.79	M		
SAN	LINDBERGH FIELD	2.18	0.88	5.00	0.30	2.10	1.46	0.26	0.36	0.03	0.00	0.00	0.13	12.70	118	118
SPLC1	SANTA PAULA	M	M	M	M	M	M	M	M	M	M	M	M			
STAC1	SANTA ANA FS	2.66	1.30	9.98	1.02	1.91	1.76	0.00	0.45	0.03	0.00	0.00	0.06	19.17	139	139
NORTH AND CENTRAL LAHONTAN																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
CEDC1	CEDARVILLE	2.82	1.41	3.88	0.61	1.16	3.00	2.82	1.57	1.01	0.00	0.00	0.00	18.28	139	139
DOLC1	DOYLE 4SSE	2.71	0.49	4.53	0.21	0.99	3.92	0.61	0.64	2.35	0.19	0.00	0.04	16.68	96	96
DOYC1	DOYLE	3.67	1.10	3.27	0.12	2.08	2.55	0.37	0.64	2.22	0.00	0.00	M	M		
FOBC1	FORT BIDWELL	2.44	2.30	5.56	1.17	1.29	5.60	3.86	1.29	1.07	0.00	0.00	0.00	24.58	135	135
FRNN2	FERNLEY	M	M	M	M	M	M	M	M	M	M	M	M			
JESC1	JESS VALLEY	4.50	1.74	3.65	0.77	1.59	3.08	4.78	2.97	2.17	0.00	0.00	0.77	26.02	136	136
Q83	SUTCLIFFE-PYRAMID LK	1.82	0.30	1.69	0.00	1.12	1.08	0.49	0.41	1.21	0.00	0.15	0.08	8.35	109	109
SNVC1	SUSANVILLE	M	M	M	0.23	2.46	3.30	0.47	0.60	2.30	0.00	0.00	0.10	M		
STDN2	STEAD	3.29	0.45	3.97	0.04	1.91	2.20	0.39	0.59	1.42	0.00	0.00	0.15	14.41	138	138
SVEC1	SUSANVILLE 1 WNW	M	M	M	0.23	2.46	3.30	0.47	0.60	2.30	0.00	0.00	0.10	M		
WAWN2	WADSWORTH 4N	1.70	M	1.00	0.10	0.40	M	M	M	M	0.30	0.00	M	M		
WTNN2	WELLINGTON	3.37	0.44	1.70	0.36	0.77	1.22	0.30	0.53	0.71	0.43	0.00	0.11	9.94	NA	NA
LAKE TAHOE...TRUCKEE...CARSON...WALKER																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
BDEC1	BODIE	1.85	1.26	2.26	1.11	1.07	3.23	M	M	0.59	1.57	0.02	M	M		
BOCC1	BOCA RESERVOIR	5.52	3.90	7.58	0.46	5.07	7.73	1.03	1.71	2.46	0.65	0.03	0.58	36.72	164	164
BPTC1	BRIDGEPORT	2.34	1.10	4.52	0.73	1.65	1.50	0.49	0.17	1.32	0.45	0.05	0.36	14.68	157	157
CRCN2	CARSON CITY	4.33	0.80	4.49	0.08	1.30	1.40	0.17	M	1.83	0.00	0.00	0.00	M		
DAGN2	DAGGET PASS	4.04	3.03	4.88	0.54	3.41	4.29	0.45	0.87	1.82	0.49	0.00	0.18	24.00	220	220
DONC1	DONNER MEM SP	M	M	13.68	5.38	M	14.95	3.27	3.02	2.78	0.18	0.00	M	M		
FEXN2	FALLON EXPER STATION	M	M	M	M	0.44	1.78	M	0.75	0.46	M	0.01	0.00	M		
GLBN2	GLENBROOK	4.14	3.53	5.84	0.59	4.35	6.28	0.60	0.94	1.57	0.44	0.00	M	M		
HTHN2	HAWTHORNE	1.27	0.29	0.31	0.07	0.17	0.21	0.07	0.57	0.10	0.17	0.13	0.02	3.38	62	62
MINN2	MINDEN	3.49	1.20	3.03	0.35	1.29	2.27	0.28	0.44	2.02	0.74	0.04	1.09	16.24	194	194
RNO	RENO	2.65	0.45	1.39	0.10	1.35	1.28	0.11	0.40	1.35	0.00	0.00	0.03	9.11	122	122
SMIN2	SMITH 6N	3.10	0.28	1.49	0.10	0.85	1.25	0.17	0.56	1.39	2.16	0.00	M	M		
SRKN2	SPARKS	1.97	0.25	1.56	0.07	1.37	1.32	0.21	0.42	1.38	0.07	0.00	0.00	8.62	116	116
TAHC1	TAHOE CITY	7.63	6.78	11.40	0.84	5.75	12.73	2.00	2.04	2.12	0.03	0.00	0.46	51.78	159	159
TKEC1	TRUCKEE RS	5.90	4.90	9.40	0.90	8.00	10.20	1.30	4.10	M	0.01	0.10	0.12	M		
TPLN2	TOPAZ LAKE 4N	M	M	M	M	M	M	M	M	M	M	M	0.79	M		
VRN2	VIRGINIA CITY	M	M	M	M	M	M	M	M	M	0.00	0.00	M	M		
WABN2	WABUSKA 6SE	1.35	0.16	0.94	0.00	0.18	1.44	0.05	0.33	0.51	0.17	0.11	0.03	5.27	111	111
YRGN2	YERINGTON	1.61	0.12	0.99	0.00	0.43	0.57	0.02	0.23	0.61	0.11	0.06	0.10	4.85	90	90
MOJAVE .MONO LAKE..SALTON SEA																
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
BARC1	BARSTOW	1.13	1.12	7.07	0.01	0.52	0.24	0.07	0.00	0.00	0.20	0.58	0.34	11.28	261	261
BEAN2	BEATTY 8N	M	M	M	M	M	M	M	M	M	M	M	M			
BIH	BISHOP AP	1.33	0.28	5.38	0.02	0.94	1.00	0.02	0.06	0.00	0.08	0.00	0.17	9.28	185	185
DEVC1	DEATH VALLEY	0.13	0.02	0.78	0.08	0.14	0.10	0.00	0.07	0.00	0.27	0.53	0.09	2.21	95	95
ELLC1	ELLERY LAKE	6.10	1.77	5.47	3.00	2.17	1.21	1.30	4.80	0.90	0.90	0.00	0.40	28.02	114	114
FMTC1	FAIRMONT	2.06	1.29	6.80	0.85	3.68	6.89	0.62	0.40	0.12	0.00	0.00	0.18	22.89	140	140
GEMC1	GEM LAKE	2.13	1.18	M	M	3.15	3.00	0.47	M	M	M	0.00	M	M		
HEEC1	HAIWEE	1.12	0.14	4.11	0.26	1.01	1.57	0.00	0.03	0.00	0.00	0.08	0.05	8.37	114	114
INDC1	INDEPENDENCE	0.20	0.20	6.80	0.03	0.07	0.33	0.07	0.09	0.00	0.02	0.15	0.05	8.01	151	151
IPL	IMPERIAL	1.37	0.00	0.47	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.09	2.57	85	85
LASC1	LAKE SABRINA	1.85	0.83	7.13	M	1.73	3.54	0.47	M	M	M	0.00	M	M		
LEVC1	LEE VINING	3.73	2.10	8.01	0.73	2.48	3.93	0.46	0.27	0.92	0.27	0.05	0.35	23.30	179	179
LKAC1	LAKE ARROWHEAD F.S.	M	M	M	1.10	M	M	M	M	M	M	0.00	0.37	M		
MOJC1	MOJAVE	M	M	M	M	M	M	M	M	M	M	M	M			
NID	CHINA LAKE ARMITAGE	M	M	M	0.20	0.34	0.44	M	M	0.00	0.02	0.05	M	M		
NLDC1	NILAND	0.35	0.00	0.67	0.00	0.70	0.00	0.00	M	M	0.00	M	0.27	M		
IPMD	PALMDALE	1.56	0.27	3.34	0.52	0.69	1.41	0.01	0.01	0.00	0.14	0.00	0.65	8.80	120	120
PSP	PALM SPRINGS	0.40	0.04	3.72	0.14	M	0.13	0.00	0.02	0.00	0.35	0.00	0.57	M		

RANC1	KERN COUNTY FD	0.99	0.18	5.61	0.35	0.40	1.07	0.00	0.00	0.00	M	M	M	M			
SOU1	SOUTH LAKE	1.97	1.34	9.26	M	0.47	5.88	1.10	M	M	M	0.00	M	M			
TYEC1	TWENTYNINE PALMS	0.75	0.00	0.77	0.00	M	0.12	0.00	0.00	M	0.53	M	0.20	M			
HUMBOLDT																	
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY	
B23	BATTLE MOUNTAIN	0.72	1.48	1.74	0.08	0.16	1.93	1.43	1.81	0.42	0.02	0.07	0.11	9.97	114	114	
BOWN2	BEOWAWE	1.32	1.24	1.50	0.16	0.04	1.00	1.07	1.51	0.42	0.00	0.00	0.15	8.41	95	95	
EKO	ELKO	1.87	1.55	2.08	0.19	0.37	1.25	1.55	1.79	0.65	0.10	0.11	0.38	11.89	125	125	
GIBN2	GIBBS RANCH	1.67	1.73	2.60	0.55	0.46	1.37	1.81	1.41	1.04	0.22	0.52	0.37	13.75	128	128	
GOLN2	GOLCONDA	M	M	M	M	M	M	M	M	M	M	M	M				
IMLN2	IMLAY	1.22	1.12	1.34	0.22	1.57	1.92	0.89	1.70	0.35	0.00	M	0.38	M			
JIGN2	JIGGS 8SSE	M	M	M	0.00	M	M	M	M	M	M	M	M				
LOVN2	LOVELOCK	2.06	0.39	0.97	0.09	0.75	1.14	0.37	0.65	0.12	0.02	0.07	0.03	6.66	112	112	
PRDN2	PARADISE VALLEY	M	M	M	M	M	M	M	M	M	M	M	M				
RRRN2	REESE RIVER O'TOOLE	2.67	0.98	1.43	0.00	0.22	0.67	M	M	M	M	M	M				
RYPN2	RYE PATCH DAM	1.86	0.70	1.76	0.19	0.90	1.50	0.34	1.01	0.26	0.00	0.00	0.44	8.96	102	102	
SFKN2	SOUTH FORK SP	1.20	1.57	1.52	0.81	0.50	0.99	0.78	1.85	0.40	0.06	0.82	0.41	10.91	NA	NA	
WMC	WINNEMUCCA	2.72	1.37	1.59	0.28	1.35	2.06	1.95	1.45	0.66	0.11	0.01	0.15	13.70	164	164	
BLACK ROCK DESERT																	
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY	
DUFN2	DUFURRENA (SHELDON)	2.56	0.22	1.15	0.19	0.29	0.82	0.77	1.58	0.60	M	M	0.01	M			
KRVN2	KINGS RIVER VALLEY	1.88	0.46	2.49	0.63	0.49	0.90	1.31	2.47	M	M	0.00	0.00	M			
LCRN2	LEONARD CREEK RANCH	3.45	0.37	3.12	0.38	0.48	2.41	2.72	0.93	0.12	M	0.00	M	M			
MCDN2	MCDERMITT	1.72	0.80	1.48	0.25	0.66	1.40	1.62	2.38	1.33	0.14	0.02	0.01	11.81	128	128	
ORVN2	OROVADA 4WSW	3.21	0.83	3.21	0.22	0.67	2.05	1.48	1.73	1.01	0.24	0.02	0.02	14.69	139	139	
CENTRAL NEVADA DESERT																	
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY	
ARTN2	ARTHUR 4NW	3.58	3.52	3.95	0.45	0.39	3.04	2.87	1.47	0.70	0.37	0.50	0.13	20.97	141	141	
BDRN2	BOULDER CITY	M	M	M	M	M	M	M	M	M	M	M	M				
BLN2	BLUE EAGLE RANCH	1.73	1.00	1.25	0.10	0.25	0.83	0.76	1.41	0.16	1.00	0.22	0.47	9.18	105	105	
DYRN2	DYER	2.42	0.21	0.40	0.07	0.65	1.04	0.27	0.19	0.00	0.05	0.37	0.39	6.06	118	118	
EKAN2	EUREKA	1.94	2.12	0.95	0.02	1.74	1.03	1.88	2.39	0.60	0.46	0.97	0.58	14.66	122	122	
ELY	ELY	1.33	1.65	3.33	0.27	1.13	1.02	2.07	2.67	0.20	1.50	0.07	1.33	16.57	167	167	
LAGN2	LAGES	1.06	0.97	2.44	0.16	0.86	M	0.97	2.34	0.45	0.40	M	M	M			
MCGN2	MCGILL	1.39	1.78	3.05	0.32	1.48	0.57	1.42	2.98	0.17	0.48	0.22	1.27	15.13	173	173	
MIDN2	MIDDLEGATE	2.19	0.41	0.75	0.00	0.06	0.32	0.00	0.18	M	0.00	0.03	0.17	M			
MNAN2	MINA	4.27	0.00	1.00	0.00	0.38	0.28	0.04	0.17	0.10	0.18	0.02	0.47	6.91	114	114	
OASN2	OASIS	1.93	0.70	2.36	0.07	0.29	0.92	1.37	1.99	0.48	0.33	0.73	0.40	11.57	143	143	
PAHN2	PAHRUMP	0.72	0.25	3.11	0.44	0.45	0.23	0.00	0.14	0.00	0.01	0.00	0.24	5.59	108	108	
RBLN2	RUBY LAKE	3.53	1.66	3.50	0.48	1.87	1.80	2.75	1.81	M	0.54	M	0.96	M			
RTHN2	RUTH	2.56	2.48	3.59	0.06	2.05	1.92	3.29	M	0.21	1.76	1.27	1.24	M			
SKVN2	SMOKEY VALLEY	2.55	0.46	3.67	0.10	0.15	0.92	0.22	0.25	0.19	M	0.07	0.45	M			
SLVN2	SILVERPEAK	1.52	0.49	0.64	0.07	0.03	0.25	1.60	0.22	0.12	0.29	0.53	0.75	6.51	138	136	
SSHN2	SHOSHONE	M	M	M	M	M	M	M	M	M	M	M	M				
TPH	TONOPAH	0.89	0.87	0.58	0.12	0.24	0.47	0.06	0.36	0.00	0.64	0.00	0.66	4.89	84	84	
SNAKE AND COLUMBIA																	
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY	
AWH	WILDHORSE RESERVOIR	1.82	2.37	2.78	0.53	1.00	2.23	2.47	1.24	0.90	0.05	0.25	0.17	15.81	120	120	
JPTN2	JACKPOT	M	M	M	M	M	M	M	M	M	M	M	M				
OLEO3	ODELL LAKE	3.84	6.12	11.38	3.52	3.42	7.08	2.56	1.86	0.82	0.90	0.11	0.23	41.84	128	128	
TUSN2	TUSCARORA	1.88	2.60	3.62	0.52	0.67	2.08	1.89	1.00	1.18	0.06	0.43	0.19	16.12	135	135	
LOWER COLORADO																	
ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY	
BLH	BLYTHE	0.27	0.00	0.57	0.00	1.17	0.06	0.00	0.00	0.00	1.64	0.00	0.09	3.80	95	95	
BULA3	BULLHEAD CITY	1.20	0.00	2.38	0.00	0.17	0.06	0.05	0.00	0.00	0.00	0.00	1.65	5.51	94	94	
CALN2	CALIENTE	1.23	0.00	3.13	M	M	M	0.33	2.13	0.00	0.28	0.54	0.47	M			
DNWN2	DESERT NTL WILDLIFE REF	M	M	2.10	0.00	0.26	0.09	M	M	M	M	M	1.46	M			
EED	NEEDLES	0.37	0.00	1.20	0.00	0.72	0.08	0.09	0.45	0.00	0.17	0.04	1.10	4.22	83	83	
EGN2	ELGIN	2.43	0.54	6.90	0.00	1.30	1.24	M	M	M	M	M	0.31	M			
GUNU1	GUNLOCK PH	M	M	M	M	1.95	1.53	1.03	M	0.00	1.07	0.14	1.03	M			

HIKN2	HIKO	2.16	0.34	4.02	0.10	0.59	0.62	0.08	0.49	0.00	0.78	0.27	0.43	9.88	172	172
LAUN2	LAUGHLIN	1.01	0.06	1.47	0.00	1.43	0.15	0.15	0.00	0.00	0.25	0.00	1.11	5.63	134	134
LAVU1	LA VERKIN	2.71	1.28	6.07	0.06	2.26	1.55	1.56	0.78	0.00	0.22	0.04	1.31	17.84	149	149
LHCA3	LAKE HAVASU CITY	0.60	0.00	1.03	0.02	1.16	0.05	0.26	0.13	0.00	0.91	0.00	0.80	4.96	NA	NA
LUNN2	LUND	1.51	1.16	2.91	0.10	0.91	0.74	1.37	2.45	0.11	1.08	0.09	1.09	13.52	123	123
PWMN2	PAHRANAGAT WILDLIFE REF	0.35	1.08	0.38	0.10	0.15	0.84	0.04	0.95	0.00	0.48	0.48	0.50	5.35	81	81
SGUU1	ST. GEORGE	2.54	0.61	4.56	0.02	1.26	0.54	0.36	0.27	0.00	1.11	0.00	0.40	11.67	133	133
SPVN2	SPRING VALLEY STATE PA	2.94	0.91	6.62	0.03	0.87	0.85	0.45	1.26	0.00	0.06	0.98	1.32	16.29	133	133
SRCN2	SEARCHLIGHT	1.98	0.07	5.41	0.00	1.51	0.15	0.13	0.18	0.00	0.29	0.24	0.75	10.71	129	129
SUNN2	SUNNYSIDE	1.76	0.05	2.57	0.24	0.02	0.42	1.01	1.26	0.90	0.90	0.24	0.90	10.27	99	99
VEF	LAS VEGAS	1.25	0.04	1.90	0.03	0.06	0.24	0.00	0.07	0.00	0.40	0.02	0.72	4.73	103	103
VEYU1	VEYO POWER HOUSE	1.30	0.53	M	0.40	1.77	1.46	1.37	M	0.00	0.84	0.08	1.04	M		
VOFN2	VALLEY FO FIRE SP	1.95	0.06	4.12	0.01	1.97	0.40	0.05	0.34	0.00	0.23	0.00	0.43	9.56	147	147
WUPA3	WIKIEUP	1.56	0.28	2.27	0.00	1.58	0.00	0.00	M	0.00	0.51	0.08	0.90	M		
YUM	YUMA	M	M	M	M	M	M	M	M	M	M	M	M	M		

GREAT SALT LAKE

ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
ENV	WENDOVER	0.23	0.46	0.77	M	M	0.27	0.71	M	M	0.23	0.17	0.19	M		
LENN2	GREAT BASIN N P	2.61	2.34	4.23	0.44	2.10	1.16	2.00	2.97	0.31	1.02	0.44	0.78	20.40	150	150
MNTN2	MONTELLO	0.37	0.37	M	M	M	M	M	M	M	M	M	M	M		

ESCALANTE DESERT

ID	Location	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	WY to Date	Pct Avg to Date	Pct Tot WY
CDEU1	CEDAR CITY SE	4.95	2.52	4.54	M	M	M	M	M	M	M	M	M	M		
EMRU1	ENTERPRISE	3.62	1.65	8.82	0.14	1.52	1.63	0.60	1.21	0.26	0.90	0.21	0.97	21.53	146	146

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