

STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF WATER RIGHTS

NORTH COAST WATERSHED  
RESERVOIR INVESTIGATION

Reservoir ID No. 596

Date of Report: 2/16/2012  
Investigation by: Kevin Porzio

**Owner Information:**

Name: Newton Dalpoggetto  
Mailing Address: 555 Crest Way, Sonoma, CA 95476-3465

**Property Information:**

Address: Carneros Highway across from Haire Lane  
County: Napa  
Assessor's Parcel No: 047-070-018

**FINDINGS**

**Background:** On August 18, 2011, Mr. Newton Dalpoggetto was mailed a "Notice of Potential Unauthorized Diversion and Use of Water, and Failure to File a Statement of Water Diversion and Use for Diversion of Water in Napa County." The letter requested that within 30 days Mr. Dalpoggetto provide information regarding the basis of right to store water in the identified reservoir. The Division has not received a response from Mr. Dalpoggetto as of the date of this report. The reservoir located on Napa County Assessor's Parcel Number 047-070-018 was analyzed using the best resources available to Division staff at the time this report was written. A field inspection of the reservoir was not conducted for this review because the Division has not received permission from the land owner to access the property.

**Source:** Unnamed Stream tributary to Huichica Creek thence Napa Slough thence Napa River thence San Pablo Bay.

**Reservoir Location:** California Coordinate System of 1983, Zone 2, North 1,854,670 feet and East 6,452,790 feet.

**Topographical Map:** United State Geological Survey (USGS) 7.5 minute quadrangle map. Sonoma quadrangle original mapping 1951, photo revised 1980.

**Orthophoto Source:** National Agriculture Imagery Program (NAIP), United States Department of Agriculture, Napa County orthophoto imagery.

**Supplemental Photo Source:** Microsoft Research Maps, Bing Maps, Google Maps.

**Estimated Reservoir Depth:** Reservoir depth is estimated to be 15 feet. This figure is based on an average depth of the reservoirs inspected within Napa County.

**Estimated Reservoir Area:** 2.0 acres. The area was digitized from the 2010 NAIP orthophoto.

AM  
2/24/12

**Estimated Reservoir Volume:** 21.0 acre-feet (depth x area x 0.7). Based on "How to File an Application to Appropriate Water" September 2004, Division of Water Rights, SWRCB.

**Estimated Watershed Size:** 170 acres. The area was digitized using the Sonoma USGS quad map.

**Precipitation Data:** 35 inches per year. Based on USGS 1:100,000 Digital Line Graphs (DLG). DLG included as attachment.

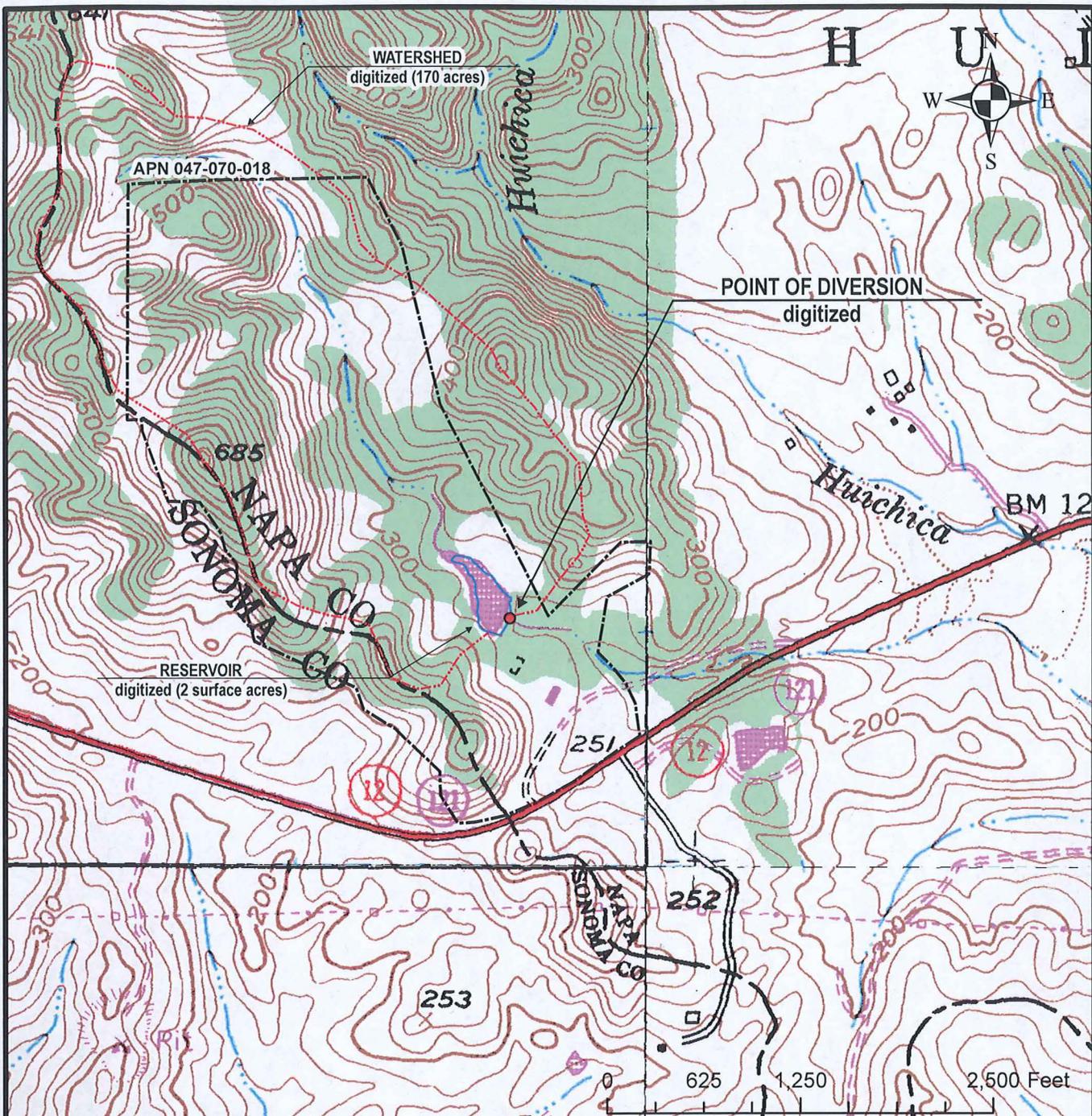
**Watershed Runoff:** Estimated yearly watershed runoff 99.2 acre-feet per year (area x precipitation x C). Runoff coefficient,  $C = 0.2$  (Viessman, Warren. Introduction to Hydrology, 4<sup>th</sup> edition).

### **Discussion & Recommendations:**

This parcel contains a reservoir identified in a survey conducted for the Substitute Environmental Document as part of the development for the Policy for Maintaining Instream Flows in Northern California Coastal Streams. The USDA provides several years of NAIP orthophoto imagery of Napa County on its website. These orthophoto images were downloaded and used, along with the USGS Sonoma quad map, to determine if the reservoir identified is built on a stream channel. Using ArcGIS, the quad map and orthophoto imagery were uploaded and reviewed. A review of the quad map shows the reservoir as photo revised (pinkish in color) with blue line streams above and below the reservoir suggesting the reservoir is built on a stream channel. The same stream channel can be visibly seen in the review of the NAIP orthophoto imagery. Using ArcGIS, the reservoir surface area and watershed area were also estimated. The depth of the reservoir was estimated to be 15 feet and is based on the average of depths collected during recent on-site reservoir surveys by Division staff within Napa County. The reservoir volume was estimated by using an equation from "How to File an Application to Appropriate Water" created by the Division of Water Rights in September 2004. The average annual watershed runoff volume the reservoir could capture was estimated using the watershed area, a runoff coefficient for unimproved land, and precipitation data for Napa County from a USGS 1:100,000 Digital Line Graph. Based on these estimates, it appears the watershed upstream of the reservoir can produce, on average, 99.2 acre-feet per year. The capacity of the reservoir is estimated to be 21.0 acre-feet indicating the reservoir has the ability to fill and refill on an annual basis.

The 2010, 2009, 2005, and 2003 NAPI orthophoto images show water being held in storage behind the earthen dam. Supplemental Photos: Figure 1, shows a 1993 image from Microsoft Research Maps and is the earliest available photo showing the storage of water. Figure 2, as shown by Bing Maps, is an aerial photo looking south down the upper portion of the watershed which contributes to the reservoir. Figure 3 and Figure 4 provided by Google Maps show a close up shot of the reservoir, the upstream area, and the downstream area respectively.

A review of Division records indicates Newton Dalpoggetto has no basis of right on file with the Division and he has not filed a Statement of Water Diversion and Use to record the annual amount of water diverted at the facility. Based on the information gathered, the reservoir is storing water subject to the permitting authority of the State Water Board. Storage of water in a reservoir without an existing water right is considered an unauthorized diversion of water. The Division should consider enforcement action for the unauthorized diversion of water and failure to file a Statement of Water Diversion and Use.



OWNER      **NEWTON DALPOGGETTO**

SOURCE      **UNNAMED STREAM TRIBUTARY TO HUICHICA CREEK**

COUNTY OF   **NAPA**

U.S.G.S. QUAD:   **SONOMA**

YEAR OF ORIGINAL USGS MAPPING:   **1951**

YEAR OF REVISION:   **1980**

STATE OF CALIFORNIA  
 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
**STATE WATER RESOURCES CONTROL BOARD**  
**DIVISION OF WATER RIGHTS**

RESERVOIR ID NO.    **596**

**NON-PERMITTED RESERVOIR MAP**

DATE: <b>02-10-2012</b>	DRAWN: <b>KPorzio</b>	CHECKED:
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SCALE: **1:12,000**

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.



OWNER        **NEWTON DALPOGGETTO**

SOURCE      **UNNAMED STREAM TRIBUTARY TO HUICHICA CREEK**

COUNTY OF    **NAPA**

IMAGERY SOURCE  
**UNITED STATES DEPARTMENT OF AGRICULTURE  
 NATIONAL AGRICULTURE IMAGERY PROGRAM**

IMAGERY DATE **2010**

STATE OF CALIFORNIA  
 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
**STATE WATER RESOURCES CONTROL BOARD  
 DIVISION OF WATER RIGHTS**

RESERVOIR ID NO.    **596**

**NON-PERMITTED RESERVOIR MAP**

DATE: <b>02-10-2012</b>	DRAWN: <b>KPorzio</b>	CHECKED:
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SCALE: **1:12,000**

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.



OWNER        **NEWTON DALPOGGETTO**

SOURCE      **UNNAMED STREAM TRIBUTARY TO HUICHICA CREEK**

COUNTY OF   **NAPA**

IMAGERY SOURCE  
**UNITED STATES DEPARTMENT OF AGRICULTURE  
 NATIONAL AGRICULTURE IMAGERY PROGRAM**

IMAGERY DATE **2009**

STATE OF CALIFORNIA  
 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
**STATE WATER RESOURCES CONTROL BOARD  
 DIVISION OF WATER RIGHTS**

RESERVOIR ID NO.    **596**

**NON-PERMITTED RESERVOIR MAP**

DATE: <b>02-10-2012</b>	DRAWN: <b>KPorzio</b>	CHECKED:
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SCALE: **1:12,000**

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.



<p>OWNER        <b>NEWTON DALPOGGETTO</b></p> <p>SOURCE      <b>UNNAMED STREAM TRIBUTARY TO HUICHICA CREEK</b></p> <p>COUNTY OF   <b>NAPA</b></p> <p>IMAGERY SOURCE  <b>UNITED STATES DEPARTMENT OF AGRICULTURE  NATIONAL AGRICULTURE IMAGERY PROGRAM</b></p> <p>IMAGERY DATE <b>2005</b></p>	<p style="text-align: center;">STATE OF CALIFORNIA  CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  <b>STATE WATER RESOURCES CONTROL BOARD  DIVISION OF WATER RIGHTS</b></p> <p>RESERVOIR ID NO.    <b>596</b></p> <p style="text-align: center;"><b>NON-PERMITTED RESERVOIR MAP</b></p>			
<p style="text-align: right;">SCALE: <b>1:12,000</b></p>	<table border="1" style="width: 100%;"> <tr> <td data-bbox="958 1927 1149 1927">DATE: <b>02-10-2012</b></td> <td data-bbox="1149 1927 1338 1927">DRAWN: <b>KPorzio</b></td> <td data-bbox="1338 1927 1531 1927">CHECKED:</td> </tr> </table>	DATE: <b>02-10-2012</b>	DRAWN: <b>KPorzio</b>	CHECKED:
DATE: <b>02-10-2012</b>	DRAWN: <b>KPorzio</b>	CHECKED:		

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.



OWNER        **NEWTON DALPOGGETTO**

SOURCE      **UNNAMED STREAM TRIBUTARY TO HUICHICA CREEK**

COUNTY OF   **NAPA**

IMAGERY SOURCE  
**UNITED STATES DEPARTMENT OF AGRICULTURE  
 NATIONAL AGRICULTURE IMAGERY PROGRAM**

IMAGERY DATE **2003**

STATE OF CALIFORNIA  
 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
**STATE WATER RESOURCES CONTROL BOARD  
 DIVISION OF WATER RIGHTS**

RESERVOIR ID NO.    **596**

**NON-PERMITTED RESERVOIR MAP**

DATE: <b>02-10-2012</b>	DRAWN: <b>KPorzio</b>	CHECKED:
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SCALE: **1:12,000**

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.

## SUPPLEMENTAL PHOTOS

Source: Microsoft Research Maps    Link: <http://msrmaps.com/AdvFind.aspx>    Viewed: 02/08/2012



**Figure 1.** Aerial photo dated July 10, 1993 as shown by Microsoft Research Maps. North is towards the top of the page and Highway 12 / 121 can be seen in the lower right corner of the photo.

## SUPPLEMENTAL PHOTOS

Source: Bing Maps

Link: <http://www.bing.com/maps>

Viewed: 02/10/2012

Not to scale

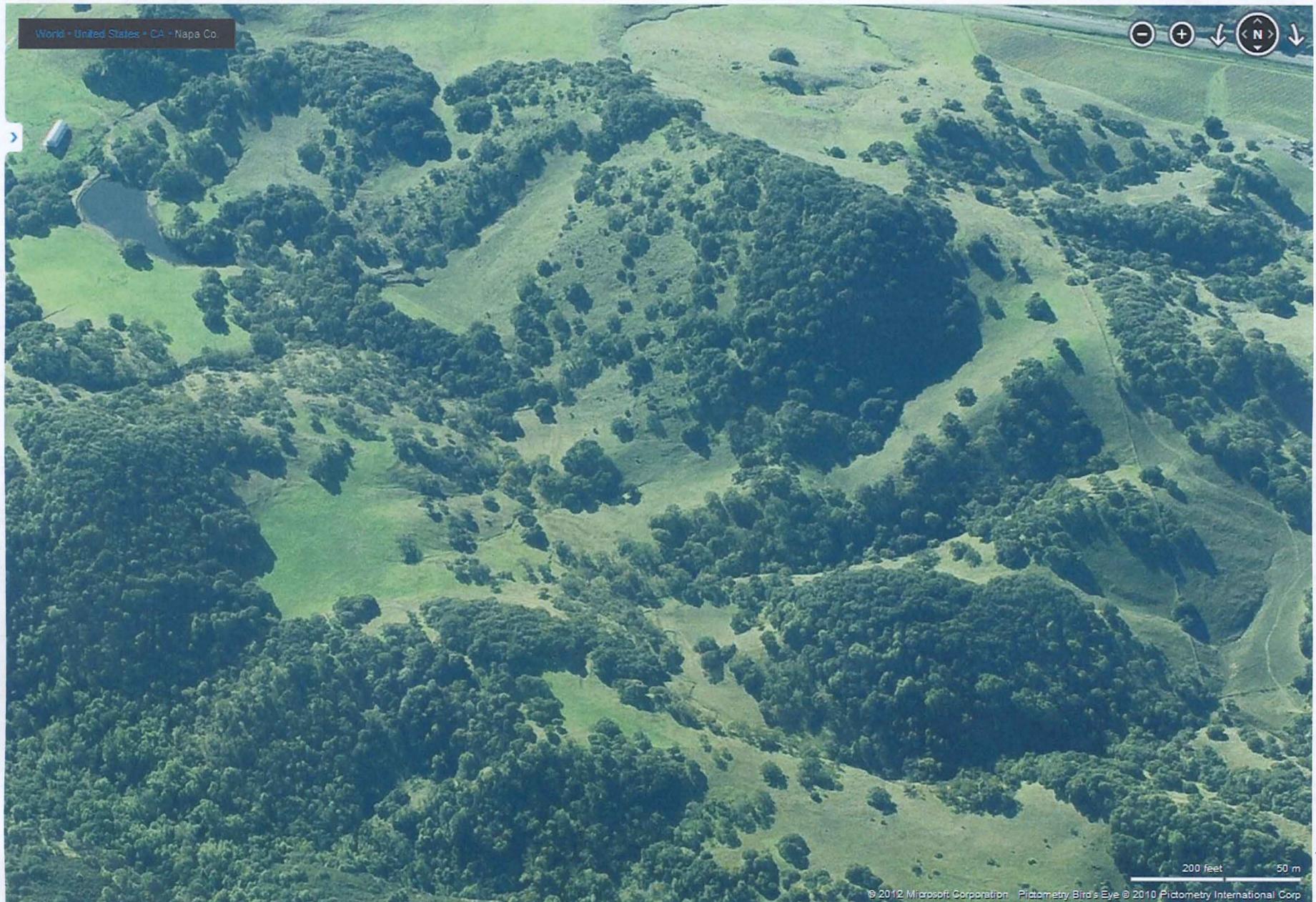


Figure 2. Aerial image looking south towards the reservoir showing the upstream channel.

## SUPPLEMENTAL PHOTOS

Source: Google Maps

Link: <http://maps.google.com/>

Viewed: 02/10/2012

Not to scale



Figure 3. Aerial image from Google Maps showing the reservoir. The dam and spillway can also be made out in this image. North is towards the top of the page.

## SUPPLEMENTAL PHOTOS

Source: Google Maps

Link: <http://maps.google.com/>

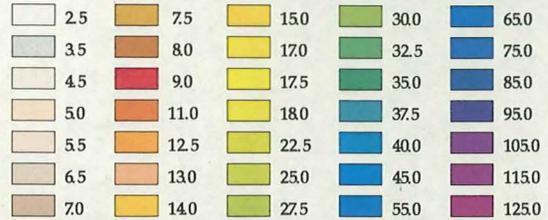
Viewed: 02/10/2012

Not to scale

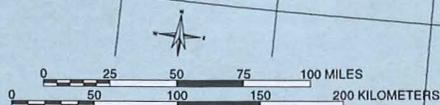
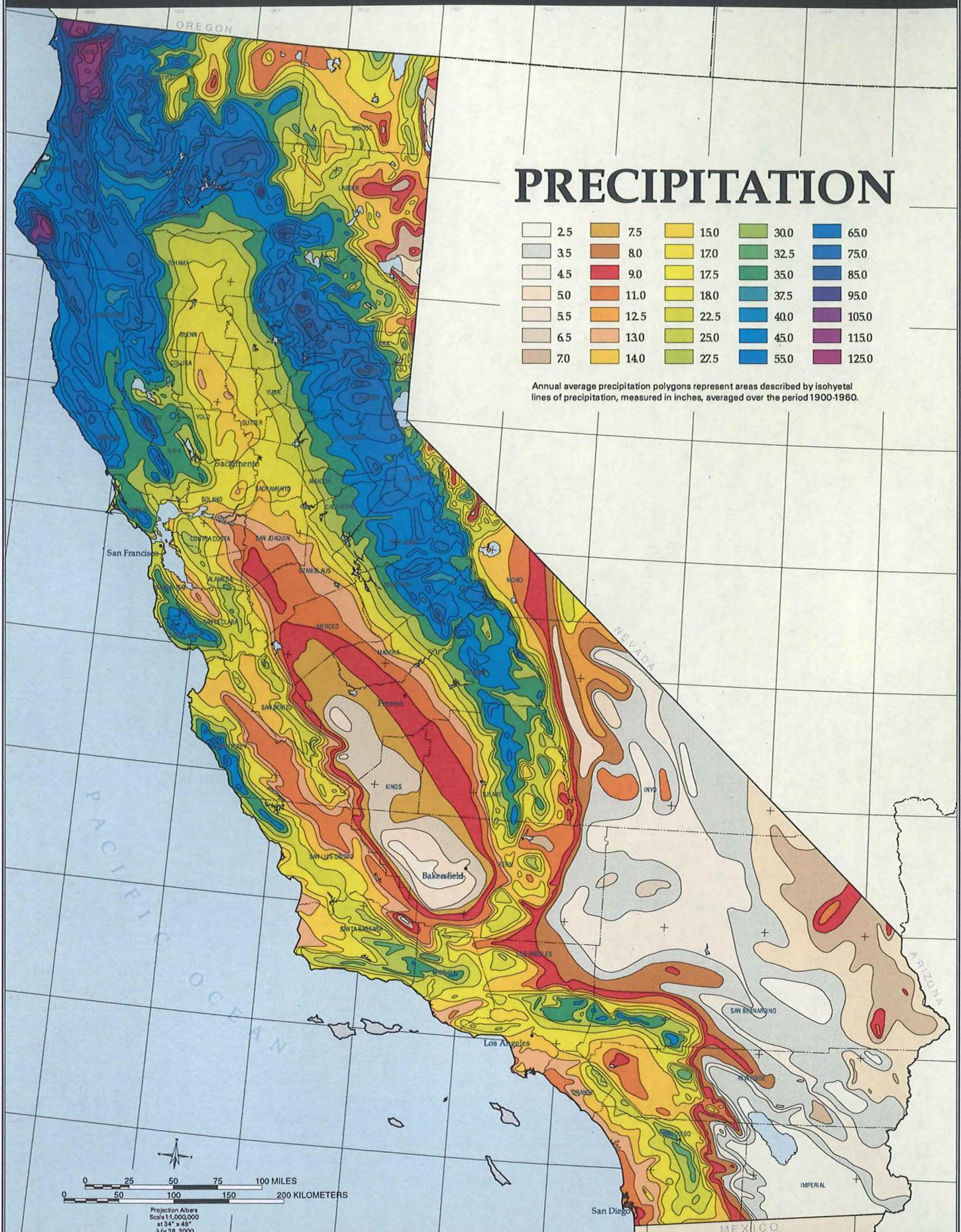


**Figure 4.** Aerial image showing the downstream channel. The reservoir dam and spillway can be seen in the upper left hand corner. North is towards the top of the page.

## PRECIPITATION



Annual average precipitation polygons represent areas described by isohyetal lines of precipitation, measured in inches, averaged over the period 1900-1960.



Projection Albers  
Scale 1:1,000,000  
at 34° x 48"  
July 28, 2000

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Gray Davis, Governor,  
State of California  
Mary D. Nichols, Secretary for Resources,  
The Resources Agency  
Andrea E. Tuttle, Director,  
Department of Forestry and Fire Protection

MAP ID: PRECIPITATION 1900-1960

DATA SOURCES  
USGS 1:100,000 DLGS  
S.E. Rantz, USGS, 1969, 1972

Obtain FRAP maps, data, metadata and publications on the Internet at <http://frap.dfg.ca.gov>  
or from CDF, FRAP, 1920 20th Street, Sacramento, CA, 95814, (916) 227-2662