Attachment 11

Wetland Delineation Report
Rancho Monticello Resort

ORIGINAL

United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

MAY 30 2003

Bureau of Reclamation
Lake Berryessa Field Office
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IN REPLY
REFER TO:
MP-150
ENV-2.00

MEMORANDUM

To: Area Manager, Central California Area Office
Attn: CC-422 (CBailey)

From: James Romero
Administrative Support Branch Chief

Subject: Rancho Monticello Resort Wetland Delineation

Please find attached the Wetland Delineation Report for the Rancho Monticello Resort conducted on April 25, 2003. Please call Michelle Prowse, Environmental Specialist at 916-978-5036 or Demetria Adams, Environmental Specialist at 916-978-5053 if you have any questions.

Attachment

Classification	
Project	SOL
Control No.	
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Wetland Delineation

Rancho Monticello Resort

April 25, 2003

Table of Contents

Introduction

This wetland verification package addresses identified potential jurisdictional waters of the United States, including wetlands, for the U.S. Bureau of Reclamation (USBR) re-development and management of visitor services Project (Project). The report includes a delineation of a wetland that may be subject to U.S. Corps of Engineers (Corps) jurisdiction under Section 404 of the Clean Water Act and California Department of Fish and Game jurisdiction under Sections 1600-1607 of the California Fish and Game Code.

Study Area

The study area is comprised of an area in the Rancho Monticello Resort (RMR) at Lake Berryessa in Napa County, California (Appendix A). The wetland area studied is approximately 9,000 square feet or 0.20661 acres in size.

The growing season, which is the period between the last freezing temperature in spring and the first in fall, ranges from 215 to 260 days in Napa Valley. The growing Season near Lake Berryessa is about 285 days (see Appendix C).

The latitude is 383522N and the longitude is 1221514W, in decimal degrees, for RMR. (USDA)

Project Description

USBR is developing a comprehensive plan for the re-development and management of visitor services (commercial and non-commercial) to support traditional short-term diverse outdoor recreation opportunities at Lake Berryessa. This project is needed to correct resort operations that over the past 40 years have focused on long-term exclusive use of prime recreational areas along the Lake Berryessa shoreline and that have excluded short-term use by the general public. Present use is in conflict with current USBR policies pertaining to exclusive use. The current concession operations expire by limitation of time in 2008/2009 and the existing concessionaires have no right of preference for renewal. This project will identify changes and specific direction to assure that future installations at Lake Berryessa rectify the present conditions and introduce operations as identified in the Visitor Service Plan.

A small wetland currently exists below the area of the water treatment plant located at the RMR at Lake Berryessa. Delineation of the wetland is necessary to determine the status of the wetland and to assess potential impacts that may be encountered in the re-development effort.

Wetland Area

The area of the wetland is the area characterized as the cattail community (see data forms – soil pits B, and data point E in Appendix B).

Jurisdiction and Authority

U.S. Army Corps of Engineers

The Corps regulates impacts to waters of the U.S. under the jurisdictional authority of Section 404 of the Clean Water Act (CWA) (33 U.S.C. 404 et seq.). Jurisdictional waters of the U.S. include all navigable waters, interstate waters, their tributaries, adjacent wetlands, and certain isolated waters (Federal Register 1986).

California Department of Fish and Game

The Department of Fish and Game regulates impacts to rivers, streams, or lakes under the jurisdictional authority of Sections 1600-1607 of the California Fish and Game Code. Jurisdiction over rivers and streams includes the bed, bank, and channel.

Delineation Survey and Mapping Methods

USBR Regional Office staff conducted a delineation of the project area on April 25, 2003 using the methodology in the U.S. Corps of Engineers Wetlands Delineation Manual to determine the extent of wetlands. The delineators were Michelle Prowse, Environmental Specialist, and Demetria Adams, Environmental Specialist, Division of Environmental Affairs (MP-150).

For wetland data points, plants species were identified based on Alden (1998), Blackwell (1999), Little (1980), Pojar (1994), and Whitman (1986), and Sandi Richerson, Natural Resource Specialist, USBR. Plant species percent cover was analyzed within an approximately five-foot radius at each data point. Soil pits were also excavated at wetland data points to determine the presence of hydric soil indicators with the exception of data point E since this point was inundated at the time of the delineation.

Soil colors were determined based on the Munsell soil color chart (1998). Assessment of the hydrologic criterion was based on indirect (wetland drainage patterns, high water line, drift lines, sediment deposits, etc.) indicators. Approximately half of wetland soils were moist, but not inundated and the other half of the wetland was inundated.

Data sheets used for this delineation are included in Appendix B. Data sheets were completed for 4 soil pits and one data point within the RMR area.

Characterizations of the plant communities in the area were made and plotted on a map (see Figure1). Figure 1 maps the area bordered by an oil recycling area, the RMR water treatment evaporation ponds, Main Road, and a small creek that runs next to the water treatment evaporation ponds, across Main Road (beneath the road) and continues parallel with the road. The map is not to scale.

4 soil pits were dug in the different plant communities. The soil pits are represented on the map (Figure 1) by a dot, and are labeled 'soil pit A' to 'soil pit D'. A data sheet was completed for soil pit E, although this area was inundated and the soil was not sampled. For wetland/non-wetland data points, plant species were identified based on Alden (1998), Blackwell (1999), Little (1980), Pojar (1994), and Whitman (1986). The plant species were then recorded as UPL, FACU, FACW-, FACW+, FACW, OBL, NI, or N/A based on classifications by the Fish and Wildlife Service (1988) and Reed (1988).

Feature Descriptions

The area of the RMR wetland study is the level plot of ground surrounded by the following boundaries: the base of the RMR water treatment evaporation ponds, to Main Road, and the oil recycling area, to the small creek.

The soil in the RMR wetland study is classified as 154, which is Henneke gravelly loam with 30 to 75 percent slopes and 167, which is Montara clay loam with 30 to 50 percent slopes (see Appendix D) (USDA).

The dominant species found in the non-wetland area included the following: Dunegrass (*Elymus mollis*) Region 0 indicator is N/A, Mediterranean barley (*Hordeum marinum*), formarly *H. hystrix*, Family: Poaceae (Non-native) Region 0 indicator is FAC; Western buttercup (*Ranunculus occidentalis*) Region 0 indicator is FACW possibly intergraded with *Ranunculus californicus,* Family: Ranunculaceae (Native) Region 0 indicator is FAC; Italian ryegrass (*Lolium multiflorum*), Family: Poaceae (Non-native) Region 0 indicator is N/A; Common Vetch (*Vicia sativa*) Region 0 indicator is NO.

In the wetland area, the dominant plants species were, cattail (*Typha* sp.) Region 0 indicator is OBL, and pacific willow (*Salix lasiandra*) Region 0 indicator is OBL.

Soils were sampled within the different distinct plant communities within the RMR Project area.

Henneke series - 154:

> "The Henneke series consists of excessively draining soils on uplands. Slope is 5 to 75 percent. Elevation is 500 to 4,000 feet. These soils formed in material weathered from sepentine. The vegetation is scattered oak, digger pine, scrub oak, manzanita, muskbrush, toyon, MacNabb cypress, and a few annual grasses. The mean annual precipitation is 25 to 45 inches, and the mean annual temperature 59 to 62 degrees F. Summers are hot and dry, and winters cool and moist. The frostfree season is 220 to 260 days." (USDA)
>
> "In a representative profile the surface layer is reddish brown, neutral gravelly loam 7 inches thick. The subsoil is reddish brown, mildly alkaline very gravelly

clay loam 8 inches thick. Fractured, greenish blue serpentine is at a depth of 15 inches." (USDA)

"Permeability is moderately slow. The effective rooting depth is 10 to 20 inches. Available water capacity is 1 to 3 inches." (USDA)

Henneke gravelly loam, 30 to 75 percent slopes.

"This steep and very steep soil is on uplands. It has the profile described as representative for the series." (USDA)

"Runoff is rapid to very rapid. The hazard of erosion is moderate to high. This soil is very low in fertility." (USDA)

Henneke gravelly loam is not on the USDA – Soil Conservation Service Hydric Soils List.

Montara series – 167:

"The Montara series consists of well drained soils on uplands. Slope is 5 to 50 percent. Elevation is 500 to 1,500 feet. These soils formed in material weathered from serpentine. The vegetation consists mainly of annual grasses and a few digger pine. The mean annual precipitation is 25 to 45 inches, and the mean annual temperature is 59 to 62 degrees F. Summers are hot and dry, and winters are cool and moist. The frost-free season is 240 to 260 days." (USDA)

Montara clay loam, 30 to 50 percent slopes.

"This steep soil is on uplands. Runoff is rapid. The hazard of erosion is high." (USDA)

Montara clay loam is not on the USDA – Soil Conservation Service Hydric Soils List.

Sampling point, labeled soil pit A on the map (Figure 1), was sampled within the grasses community in the Project area. There were no wetland plant indicators present, nor were there any wetland hydrology indicators. Soils in this area are very dark grayish brown (2.5Y 3/2), homogenous throughout the soil pit. It contains a lot of clay, is smooth and very fine with no rocks or particulates. This soil is consistent with the Montara series.

Sampling point, labeled soil pit B on the map (Figure 1), was sampled within the wetland community in the Project area. There was no standing water present. Dead Cattails were the only wetland indicators. Soils in this area are very dark brown from 0-7" (2.5YR 3/2) in depth and very dark grayish brown from 7-16" in depth (10YR 3/2) moist, and homogenous throughout the soil pit. It contains a lot of clay loam, is smooth and moderate fine with earthworms and organic matter. This soil is consistent with the Montara series.

Sampling point, labeled soil pit C on the map (Figure 1), was sampled within a community of grasses and trees in the Project area. There was no wetland plant or tree indicators present, nor any wetland hydrology indicators. Soils in this area are gravelly loam, dark reddish brown (7.5YR 3/3), slightly sticky, no silt, homogenous with fine roots and rocks throughout the soil pit. This soil is consistent with the Henneke series.

Sampling point, labeled soil pit D on the map (Figure 1), was sampled within another grass and tree community in the Project area. There was no wetland plant or tree indicators present, nor any wetland hydrology indicators. Soils in this area are very gravelly clay loam, dark reddish brown (5YR 3/2), homogenous with roots, rocks and organic matter throughout the soil. This soil is consistent with the Henneke series.

Sampling point, labeled data point E on the map (Figure 1), was sampled within the inundated area of the cattail community. There are cattails and willows present in this area, which are wetland indicators. Hydrology was present and secondary soil indicators were present (inundated).

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--------. 2003. Soil Survey of Napa County, CA –"Montara series" http://www.ca.nrcs.usda.gov/mrla/Napa/NapaSS/montara.html

Contact Information and Directions

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5520 Knoxville RD
Napa, CA 94558
(707) 966-2111

Getting here is easy.....

General Information

Welcome to the Lake Berryessa Recreation Area. Surrounded by rolling hills of oak, manzanita, and gray pine, Lake Berryessa is well-known by outdoor recreation enthusiasts as a favorite weekend spot. The lake stretches for nearly 25 miles with 165 miles of shoreline. Lake Berryessa offers a multitude of wildlife viewing opportunities for the general public. Surrounding terrain varies from gently-rolling hills to rugged, steep mountains with elevations ranging from 440 to 2,200 feet. In the summer, you can expect hot, dry days (90 - 100+ degrees) and cool nights (50 - 60 degrees). The winters are mild, but rain is frequent, especially between October and May.

The Bureau of Reclamation has administrative responsibility for the 20,000-acre lake and surrounding 10,000 acres of land.

The lake, day-use areas, hiking trails, visitor centers, resorts, and wildlife area offer many opportunities to visitors.

Lake Berryessa is located 70 miles northeast of San Francisco (2-hour drive) or 40 miles west of Sacramento (1-hour drive). Nearest towns are Napa to the southwest or Winters to the east. State Highway 128 borders the lake to the south, and Knoxville Road (also known as Berryessa/Knoxville) follows the lake along the west and north sides. The famous wine-growing regions of Napa and Sonoma are only 30 miles away.

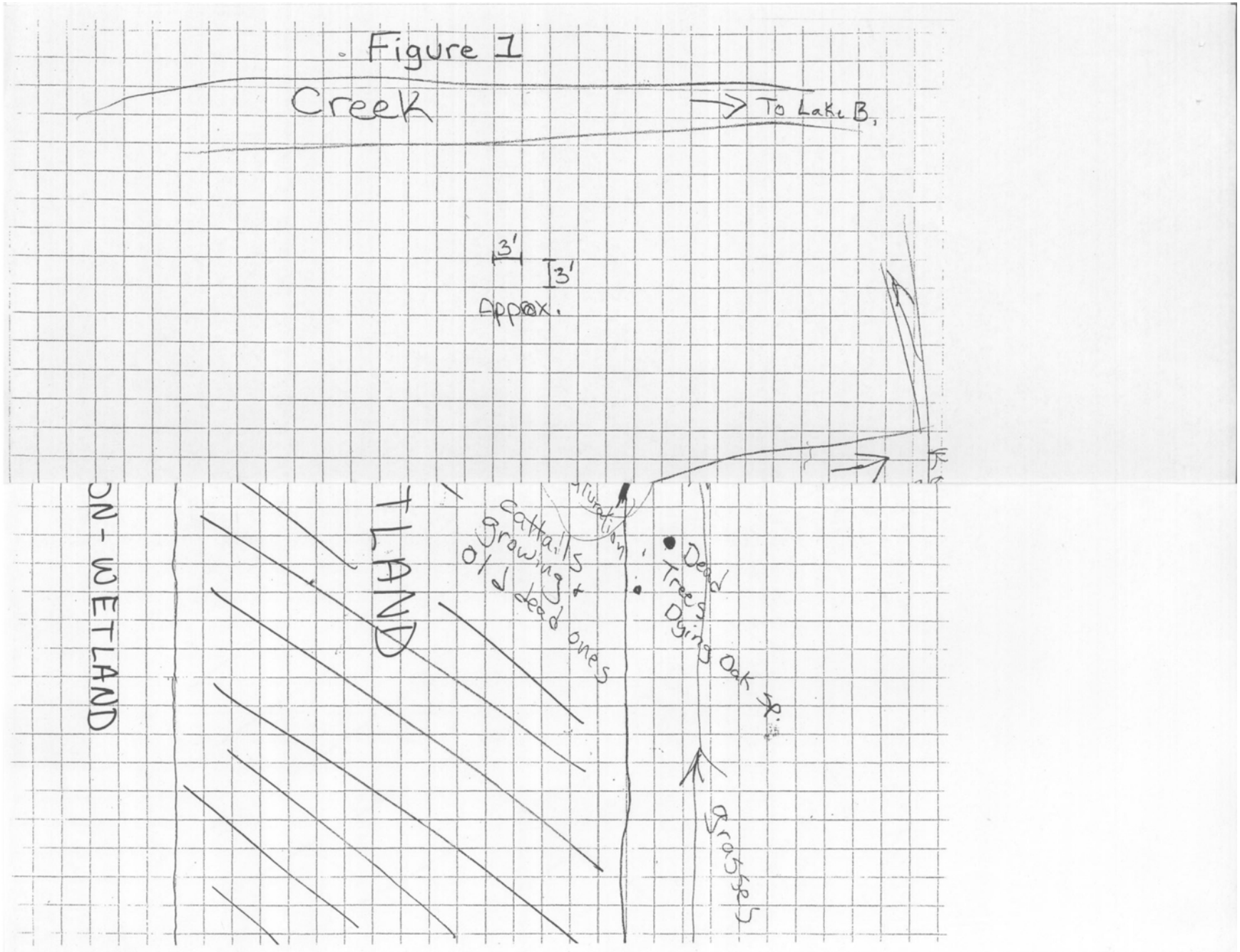


Figure 1
Creek
To Lake B.
3'
3'
approx.
Vegetation
Cattails
Growing +
old dead ones
Dead
Trees
Dying oak
grasses
UPLAND
ON-WETLAND

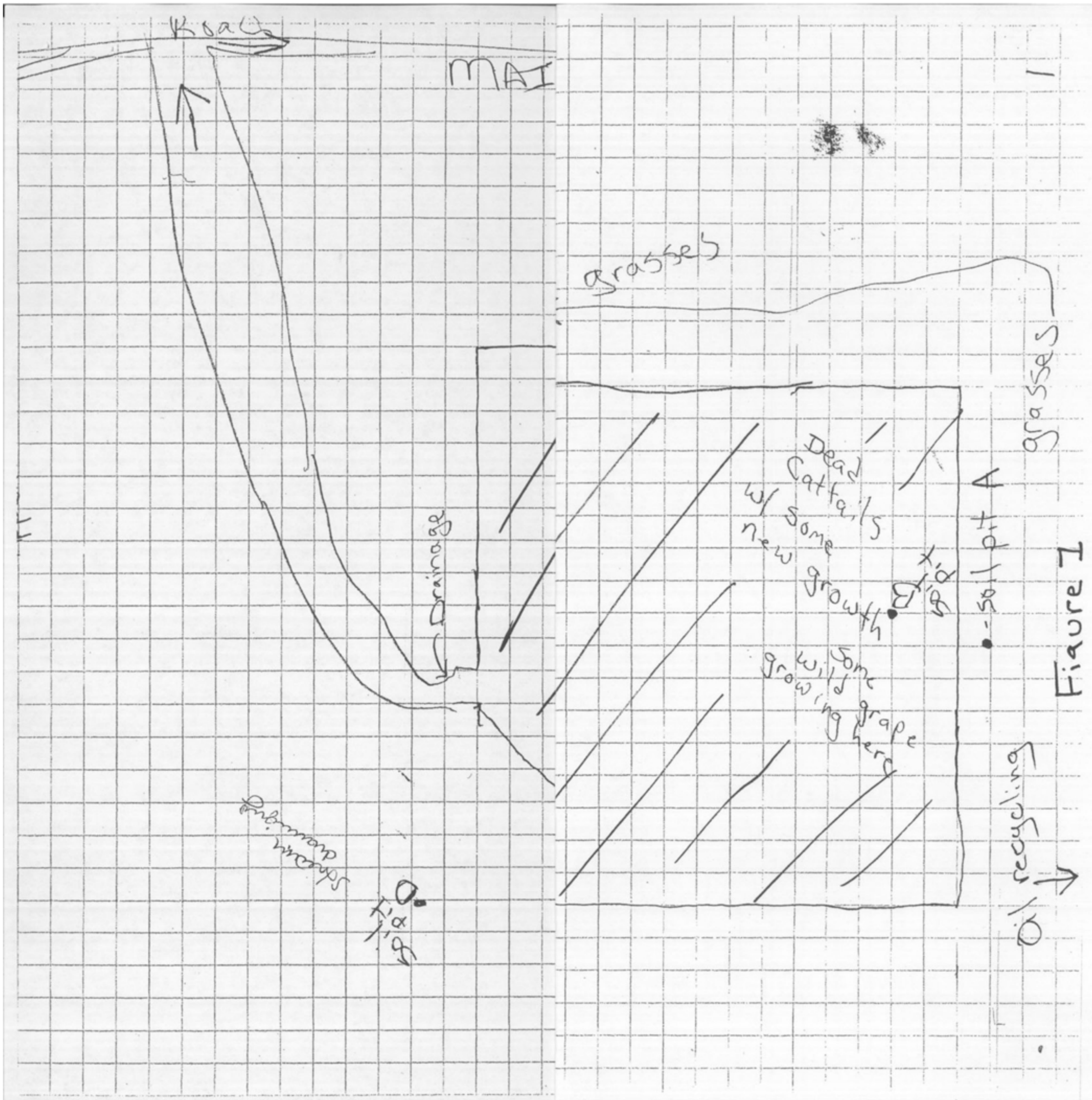
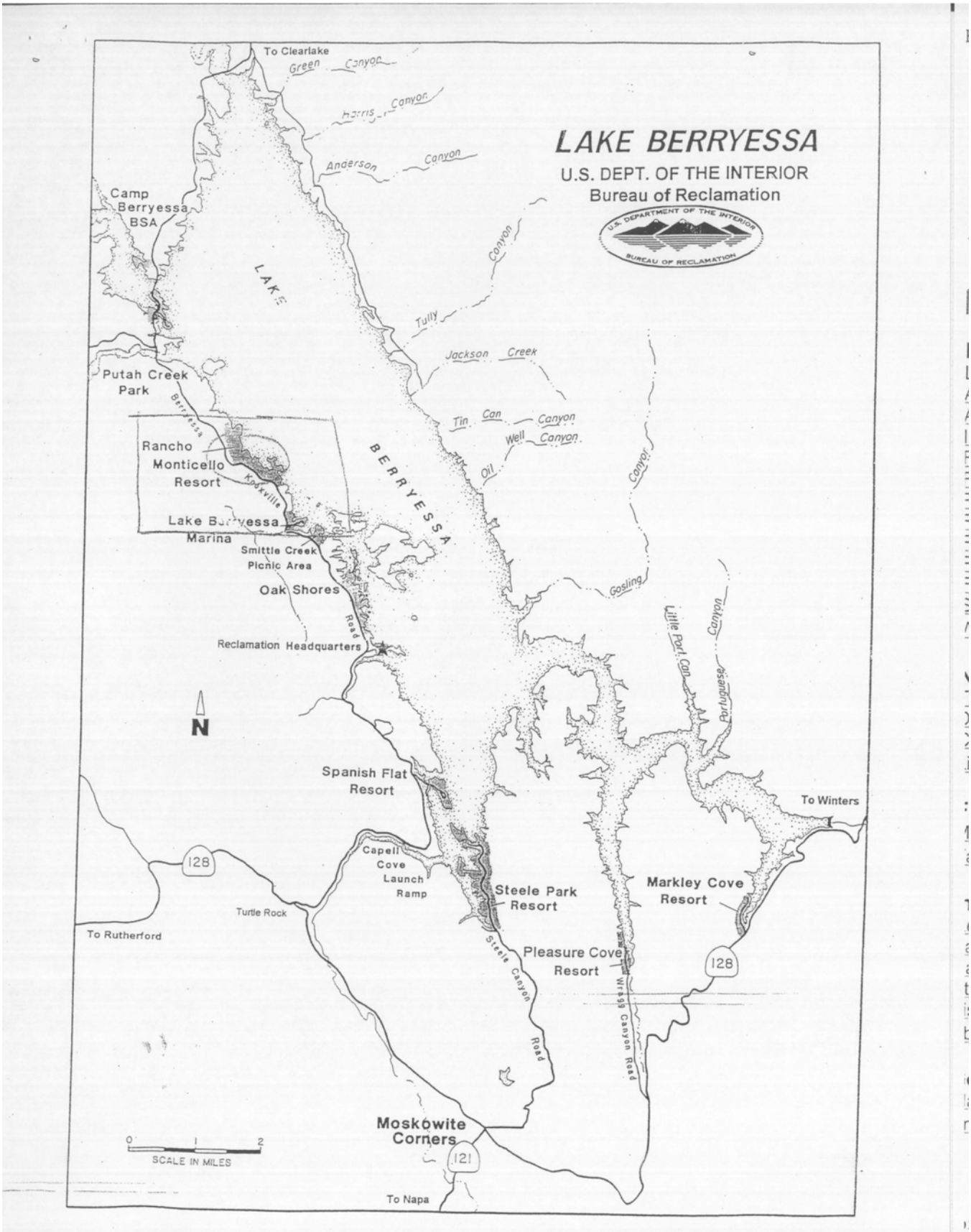

Road
MAI
grasses
grasses
Drainage
Dead Cattails w/ some new growth
Some wild grape growing here
pit B
soil pit A
Oil recycling

Figure I

Appendix A


LAKE BERRYESSA
U.S. DEPT. OF THE INTERIOR
Bureau of Reclamation
To Clearlake
Green Canyon
Harris Canyon
Anderson Canyon
Camp Berryessa BSA
LAKE
Tully Canyon
Jackson Creek
Putah Creek Park
Berryessa
Rancho Monticello Resort
Knoxville
Lake Berryessa Marina
Smittle Creek Picnic Area
Oak Shores
Reclamation Headquarters
Road
BERRYESSA
Tin Can Canyon
Well Canyon
Oil Canyon
Gosling
Little Portuguese Canyon
N
Spanish Flat Resort
To Winters
128
Capell Cove Launch Ramp
Steele Park Resort
Markley Cove Resort
Turtle Rock
To Rutherford
Steele Canyon Road
Pleasure Cove Resort
Wragg Canyon Road
128
Moskowite Corners
121
0 1 2
SCALE IN MILES
To Napa

AnglerNet

Dean's desk
Trip Planner
Home

Select a Lake
Almanor

Berryessa
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R.V. Parks and
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Public Boat Ramps
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State Park Offices
Fish and Game
About Fish

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Classifieds
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Lake Berryessa

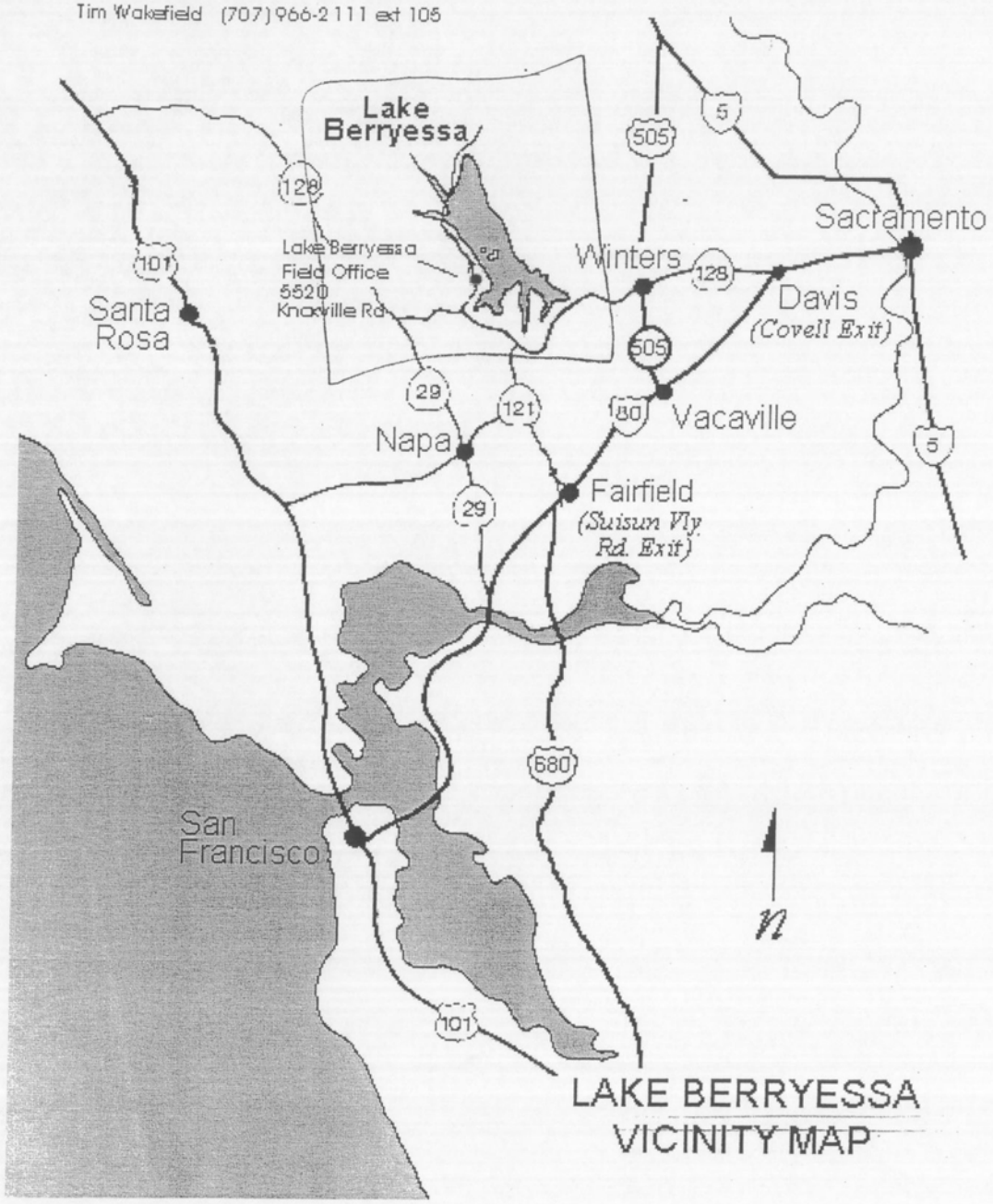
LakeMap

Click on a point of interest.

Resorts & Marinas	Campgrounds & R.V. Parks	Boat Launches
01-Lake Berryessa Marina Resort	01-Lake Berryessa Marina Resort	08-Capell Cove
07-Markley Cove Resort	02-Putah Creek Park	09-Lake Berryessa Marina Resort
02-Putah Creek Park	03-Pleasure Cove Resort	10-Rancho Monticello Resort
03-Pleasure Cove Resort	04-Rancho Monticello Resort	11-Spanish Flat
04-Rancho Monticello		

707-966-2111 ext 142 - Patty

Tim Wakefield (707) 966-2111 ext 105



LAKE BERRYESSA
VICINITY MAP

Location of
Napa County in California

* State Agricultural Experiment Station

USGS 62 km W of Sacramento, California, United States 01 Jul 1980

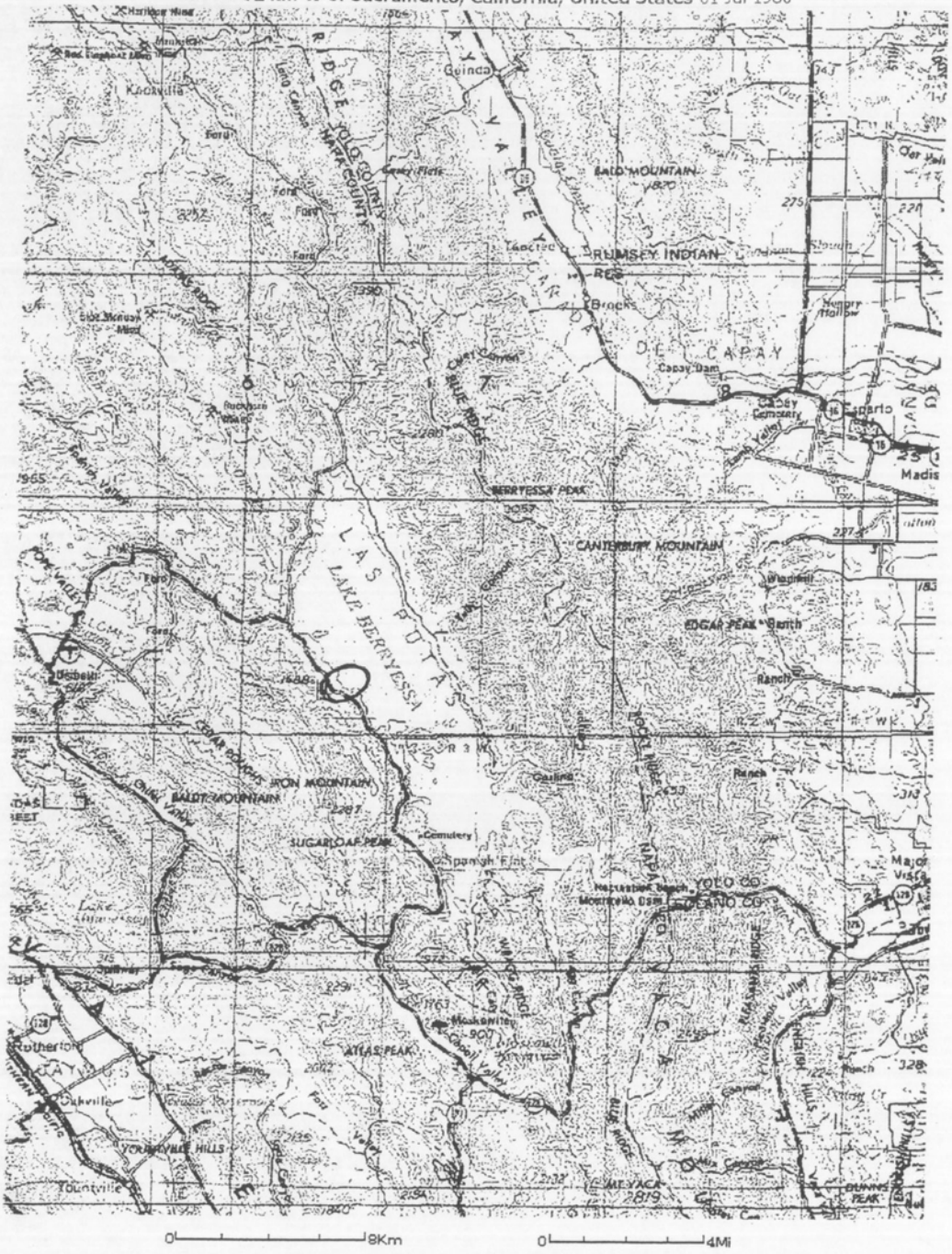


Image courtesy of the U.S. Geological Survey

Send To Printer Back To TerraServer Change to 11x17 Print Size Show Grid Lines Change to Landscape

USGS 62 km W of Sacramento, California, United States 16 Jun 1993

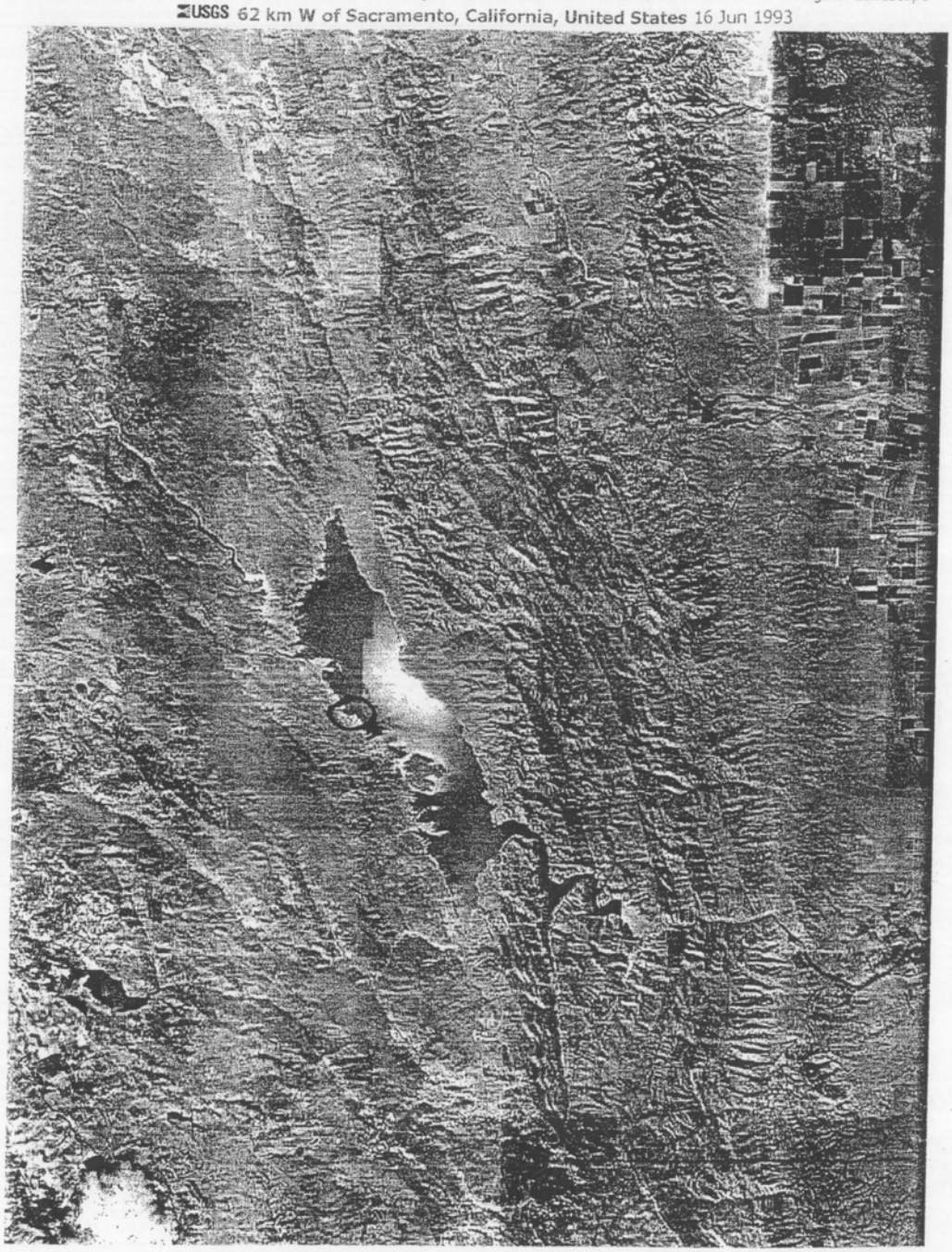
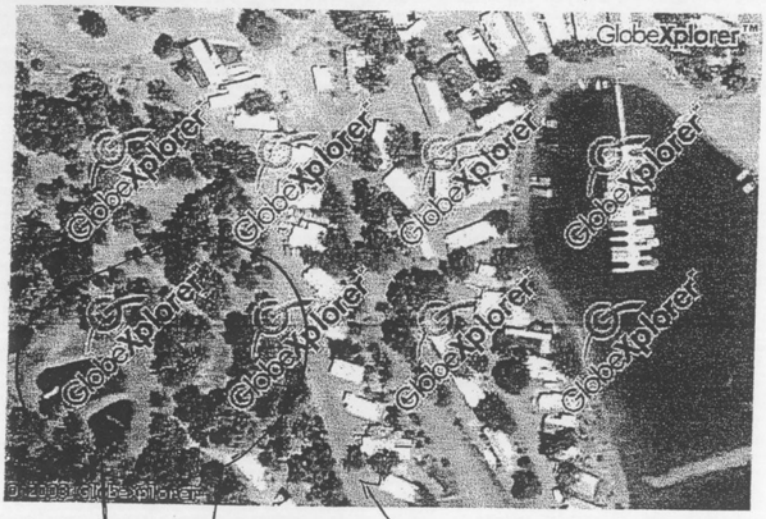


Image courtesy of the U.S. Geological Survey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Water Treatment Ponds
Study AREA
Main Road