APPENDIX A

Engineering and Geology Field Trip Reports

Temperance Flat Reservoir

APPENDIX A.1

Study Team Field Trip Report

(June 12, 2002)

Field Trip Log			
Trip Log Number:	7	**Project No.:**	1003032.01180502
Dates:	6/12/02	**Times:**	~1245-1250
Site Name:	New Prospect/Middle Temperance	**Location:**	Friant
Prepared By:	DKR/JMH/WAM	**Reviewed By:**	
Date:	6/12/02	**Date:**	

Attendees/Visitors Name	**Organization/Phone/Email**
DKR	MWH, 925.685.6275 x125, david.k.rogers@mwhglobal.com
JMH	MWH, 925.685.6275 x143, james.m.herbert@mwhglobal.com
WAM	MWH, 425.602.4025 x1060, william.a.moler@mwhglobal.com
William Swanson	MWHA
Stephen Osgood/Yung-Hsin	MWHA
Jason Phillips	USCOE
Bill Luce/Greg Mongano/ Joel Sturm	USBR
Clarence Duster/Gary Turlington/Steve Harrington	USBR
Waiman Yip	DWR
	USFG

Weather Conditions:

Clear with slight haze, warm (low 80s), light breeze

Access Route (attach map):

Highway 99, State highway 145 (E) through Madera, to Friant Road (S), to Lake Millerton Boat Ramp. Temperance Flat accessed from Marshall Station via Auberry Road, Wellbarn Avenue, and Spearhead Road

Attachments:	Yes	No
Photo Log	✓	
Photos	✓	
Video Log (available)	✓	
Dictation Log (available)	✓	
Topographic Map	✓	

Purpose:

Review proposed location of new damsite.

Field Observations:

Existing Structures/Cultural Features:

None noted. Temperance Flat, about 1½- to 1¾-mile upstream, is nearest location with existing structures/cultural features.

Kerckhoff Dam and Powerhouse are located upstream of Friant Dam. Pool elevations above 620 would impact the powerhouse, penstock, tramway, and several other structures. Approximately 1-mile of high voltage transmission lines would also have to be relocated (URS, 2000).

Right of Way/Access Restrictions:

A trail and/or graded road were observed on the left canyon wall in the vicinity of the Prospect location. The only other access is via Millerton Lake.

Overhead/Buried Utilities:

None noted.

Description of Proposed Structures (attached a field sketch or sketch on a topo map):

Unaware of specific recommendations made for this location. Pool elevation would be at ~1,100 ft.

Description of Appurtenant Features (spillways, tunnels, pumping plants, flood routing/coffer dams/dewatering during construction, outlet works, switch yards, transformer yards, transmission lines, conveyance pipelines/canals, access roads, security, operation/maintenance):

Unaware of specific recommendations made for this location.

Briefly Describe Geologic/Geotechnical Site Conditions:

The Prospect damsite is located within the lower reaches of the Sierra Nevada foothills above the Great Valley. The Prospect damsite would be located across the generally southwest-flowing San Joaquin River (CDMG, 1967).

Both abutment locations appear to be underlain by pre-Cenozoic granitic and metamorphic rocks (CDMG, 1967).

As with most sites in the region, studies indicate that there are no faults in the area capable of producing ground motions greater than those generated by four known regional sources that include the San Andreas fault system, the Sierra Frontal fault system, the White Wolf fault, and the Garlock fault (USCOE, 1990).

Location/Description of Nearest Borrow Areas (attach map or show on topo map):

Temperance Flat, ~ 1½- to 1¾-miles upstream of the proposed damsite, may be underlain by materials that can used for borrow. Another source of borrow may be the possible tunnel spoil (Kerckhoff tunnel) observed upstream of Temperance Flat.

Location/Description of Equipment/Material Staging and Lay Down Areas (attach map or show on topo map):

Potential staging and laydown areas would be in Temperance Flat, or in areas presently submerged.

Identification of Environmental Sensitive Areas (wetlands, springs, rivers, streams, endangered/threatened species habitats, etc.):

An oak woodland habitat covers the riverbank slopes.

Description of Mining or Other Anthropologic Activities:

A prospect is shown on the USGS topographic map containing the Prospect damsite, but nothing further is known about it. The Sullivan Mine is located in Temperance Flat. No others were noted.

Action Items/Data Needs (list who has responsibility and schedule for completion):

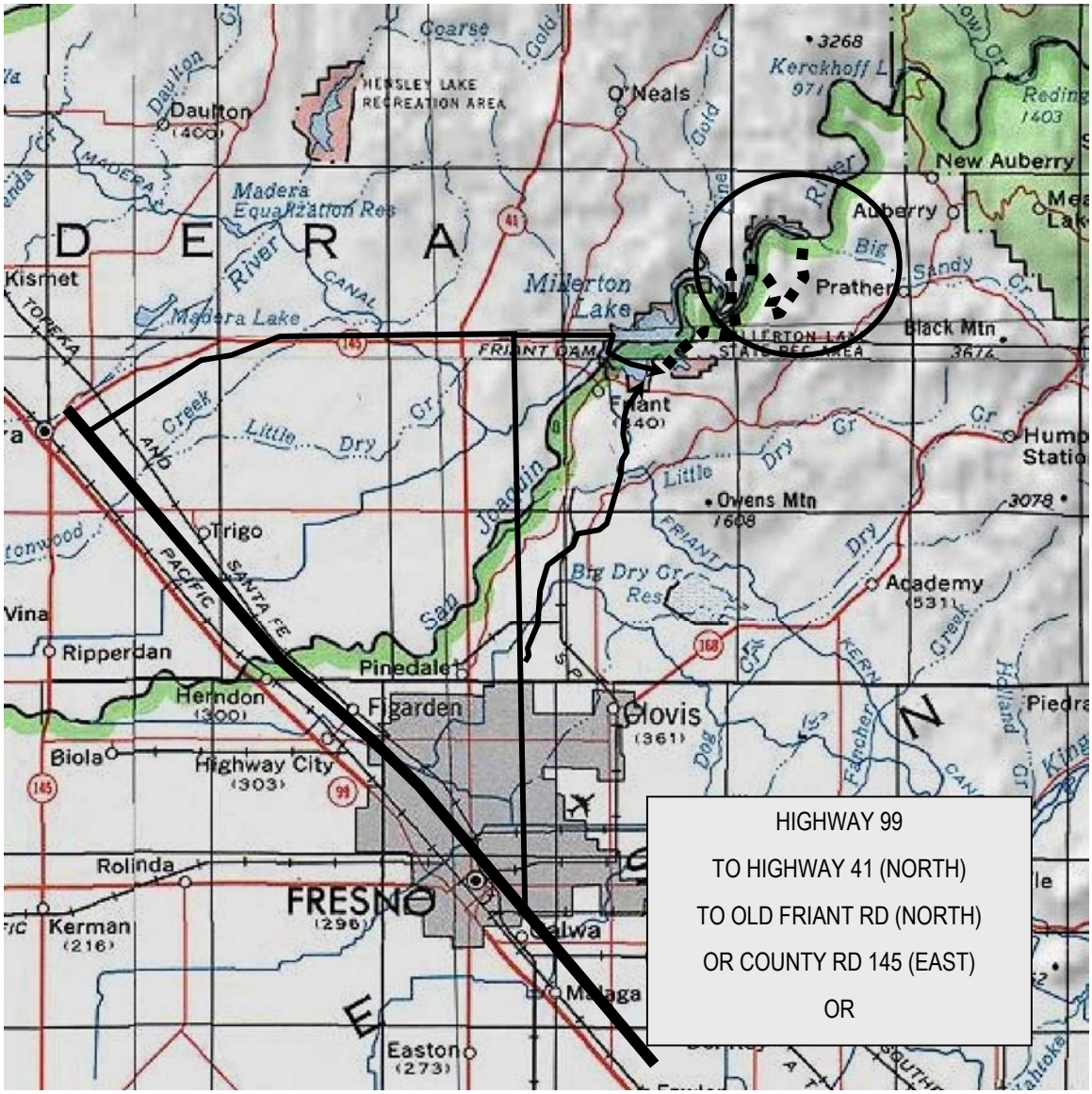
USBR to prepare draft Technical Memorandum and regional seismicity / faulting by August 23, 2002.

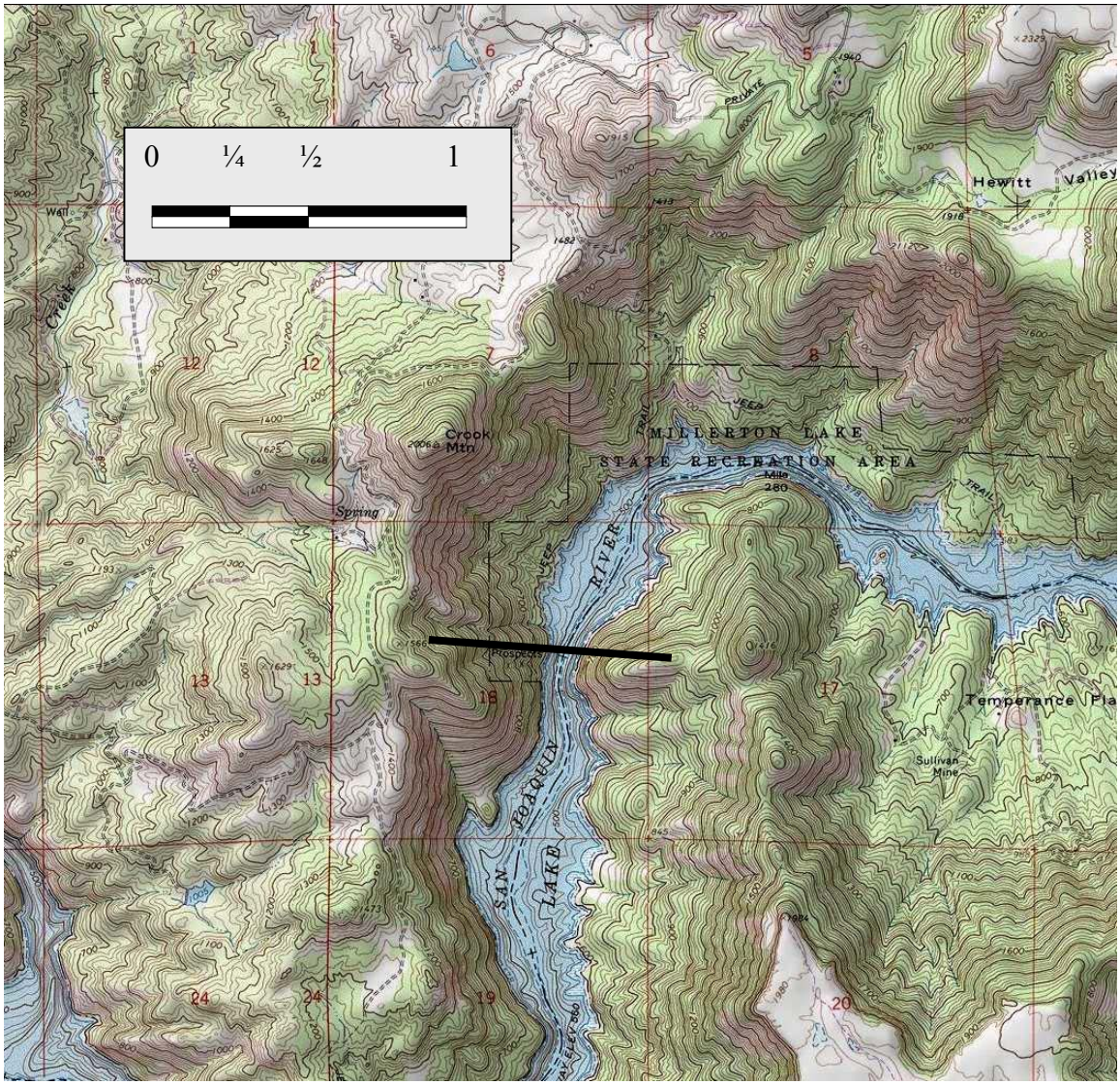
Routing:

MWH-5

USBR-3

DWR-2


HIGHWAY 99
TO HIGHWAY 41 (NORTH)
TO OLD FRIANT RD (NORTH)
OR COUNTY RD 145 (EAST)
OR
Coarse Gold
Daulton
(400)
HENSLEY LAKE RECREATION AREA
O'Neals
3268
Kerckhoff L.
971
New Auberry
Auberry
Prather
Madera Equalization Res
Millerton Lake
Kismet
Madera Lake
FRIANT DAM
Black Mtn
3674
Friant
(340)
Owens Mtn
1608
3078
Trigo
Academy
(531)
Vina
Ripperdan
Pinedale
Herndon
(300)
Figarden
Clovis
(361)
Biola
Highway City
(303)
Rolinda
FRESNO
(296)
Kerman
(216)
Calwa
Malaga
Easton
(273)
Piedra


0 ¼ ½ 1
MILLERTON LAKE
STATE RECREATION AREA
SAN JOAQUIN RIVER
Crook Mtn
Spring
Hewitt
Valley
Temperance Fla
Sullivan Mine
Mile 280

Temperance Flat / Prospect – Upstream view of proposed dam site.

Downstream view of proposed dam site.