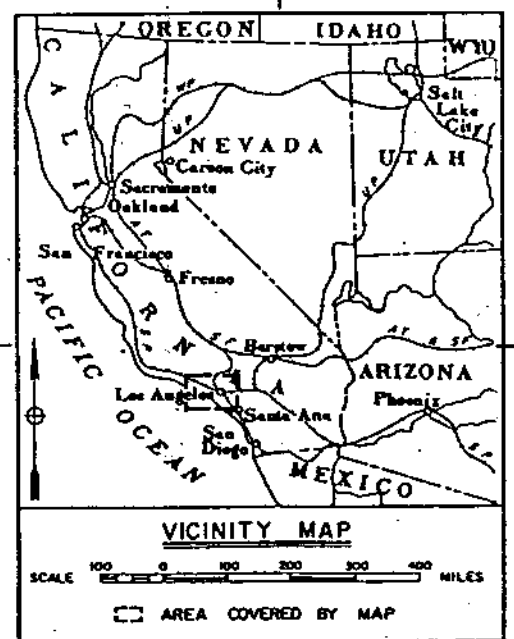


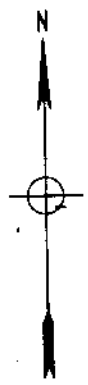
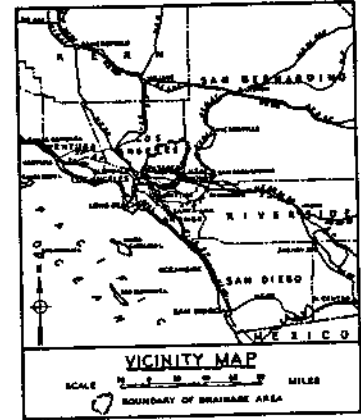
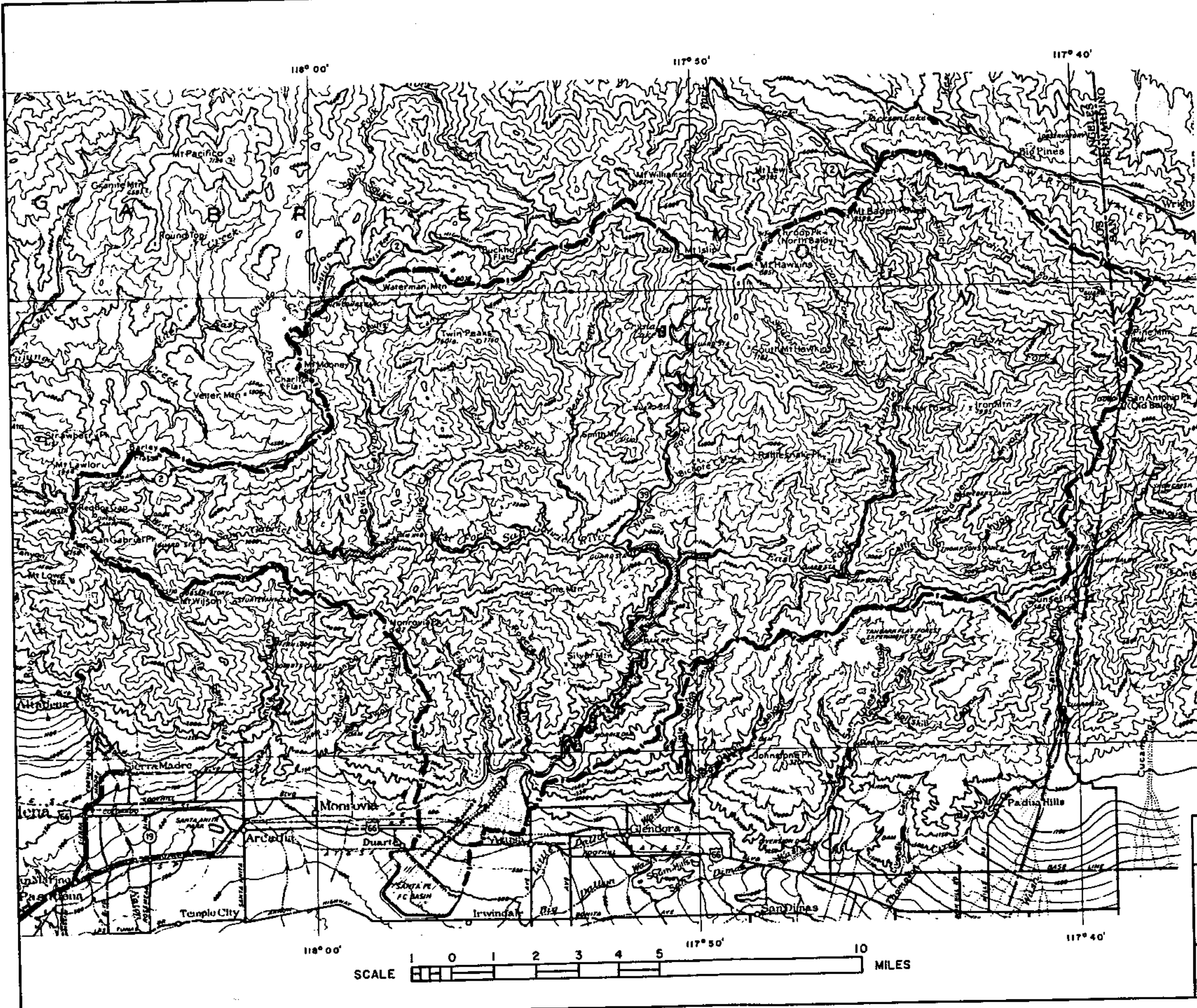
SANTA FE DAM

SANTA FE DAM
WATER CONTROL MANUAL

GENERAL LOCATION MAP

U. S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT





LEGEND

- BOUNDARY OF DRAINAGE AREA ABOVE SANTA FE DAM.
- LEVEE.
- EXISTING WATER-CONSERVATION OR WATER-SUPPLY RESERVOIR.
- EXISTING WATER-CONSERVATION AND FLOOD-CONTROL RESERVOIR.
- EXISTING FLOOD-CONTROL BASIN.

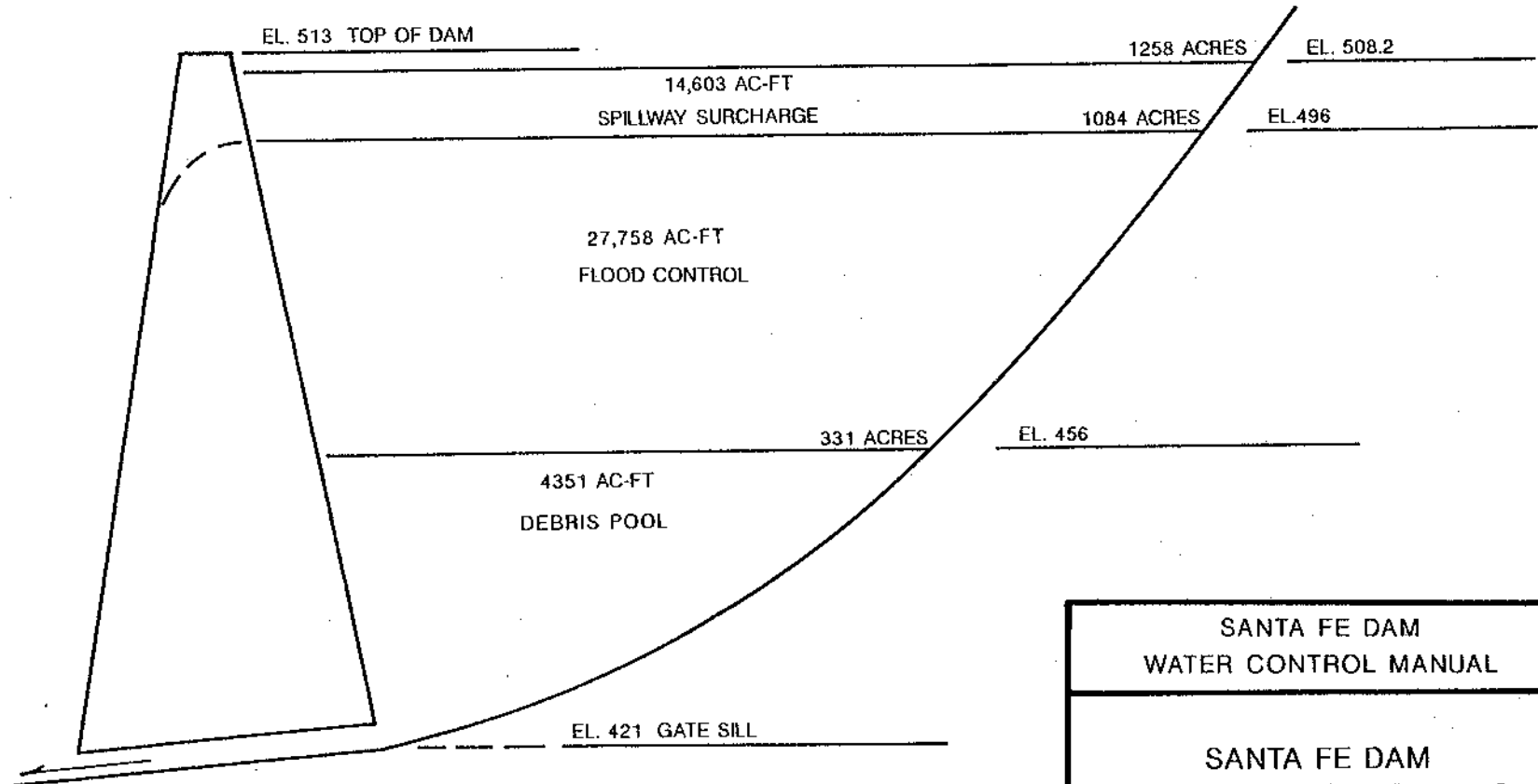
NOTE:
BASE MAP PREPARED FROM U.S.G.S. QUADRANGLE SHEETS,
U.S. ARMY TACTICAL MAPS AND MISCELLANEOUS DATA.
POLYCONIC PROJECTION, NORTH AMERICAN DATUM (1927)
CONTOUR INTERVAL 50, 250 AND 500 FEET.

**SANTA FE DAM
WATER CONTROL MANUAL**

**DRAINAGE AREA AND
TOPOGRAPHY MAP**

**U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT**

SANTA FE RESERVOIR, CALIFORNIA

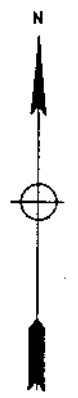


SANTA FE DAM
WATER CONTROL MANUAL

SANTA FE DAM
STORAGE ALLOCATION DIAGRAM

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

NOTE: BASIN TOPOGRAPHY ON THIS
PLATE CONFORMS TO 1961 SURVEY.



LEGEND
TAKING LINE ———

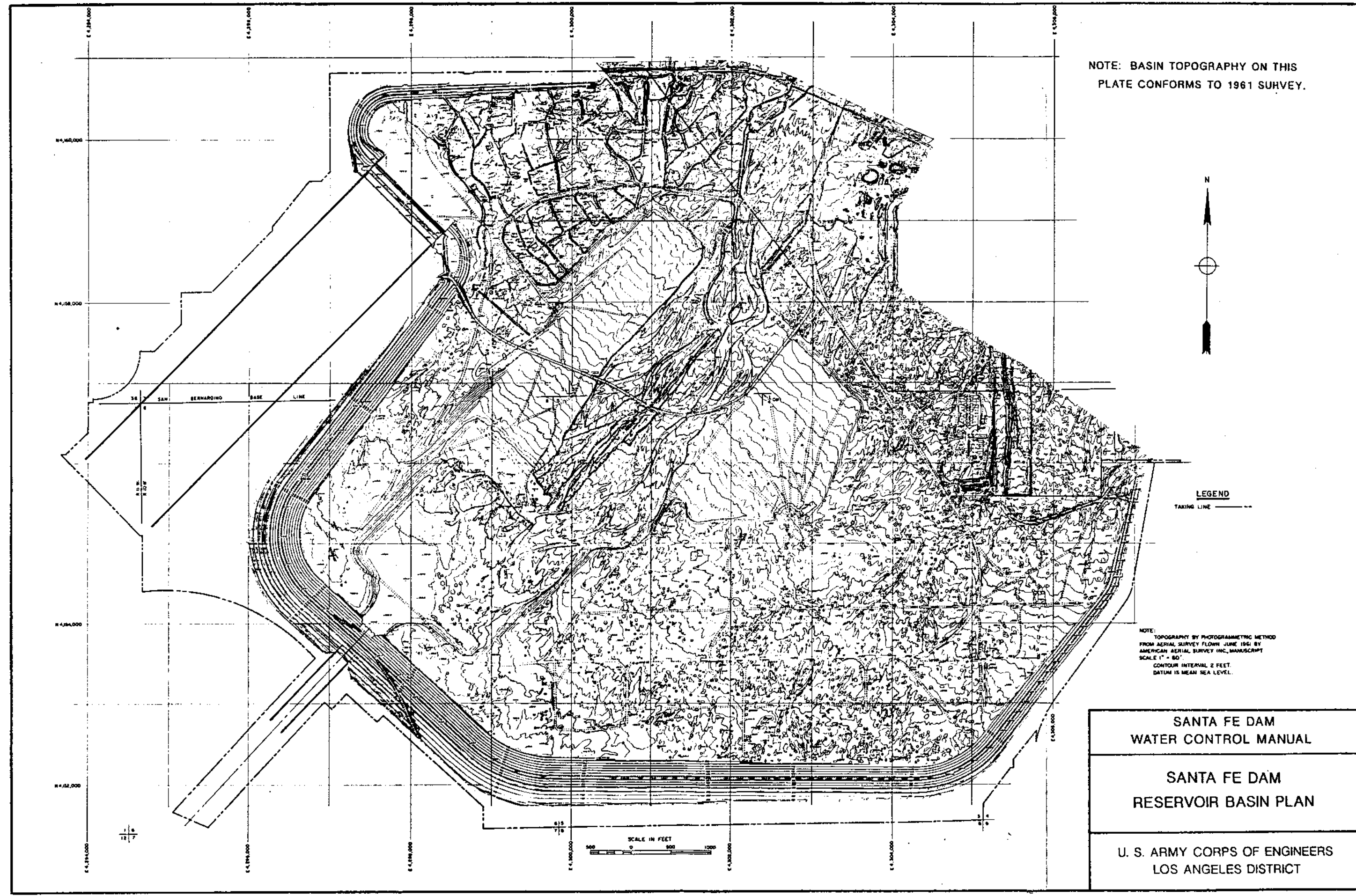
NOTE:
TOPOGRAPHY BY PHOTOGRAMMETRIC METHOD
FROM AERIAL SURVEY FLOWN JUNE 1961 BY
AMERICAN AERIAL SURVEY INC., MANUSCRIPT
SCALE 1" = 50'
CONTOUR INTERVAL 2 FEET.
DATUM IS MEAN SEA LEVEL.

SANTA FE DAM
WATER CONTROL MANUAL

SANTA FE DAM
RESERVOIR BASIN PLAN

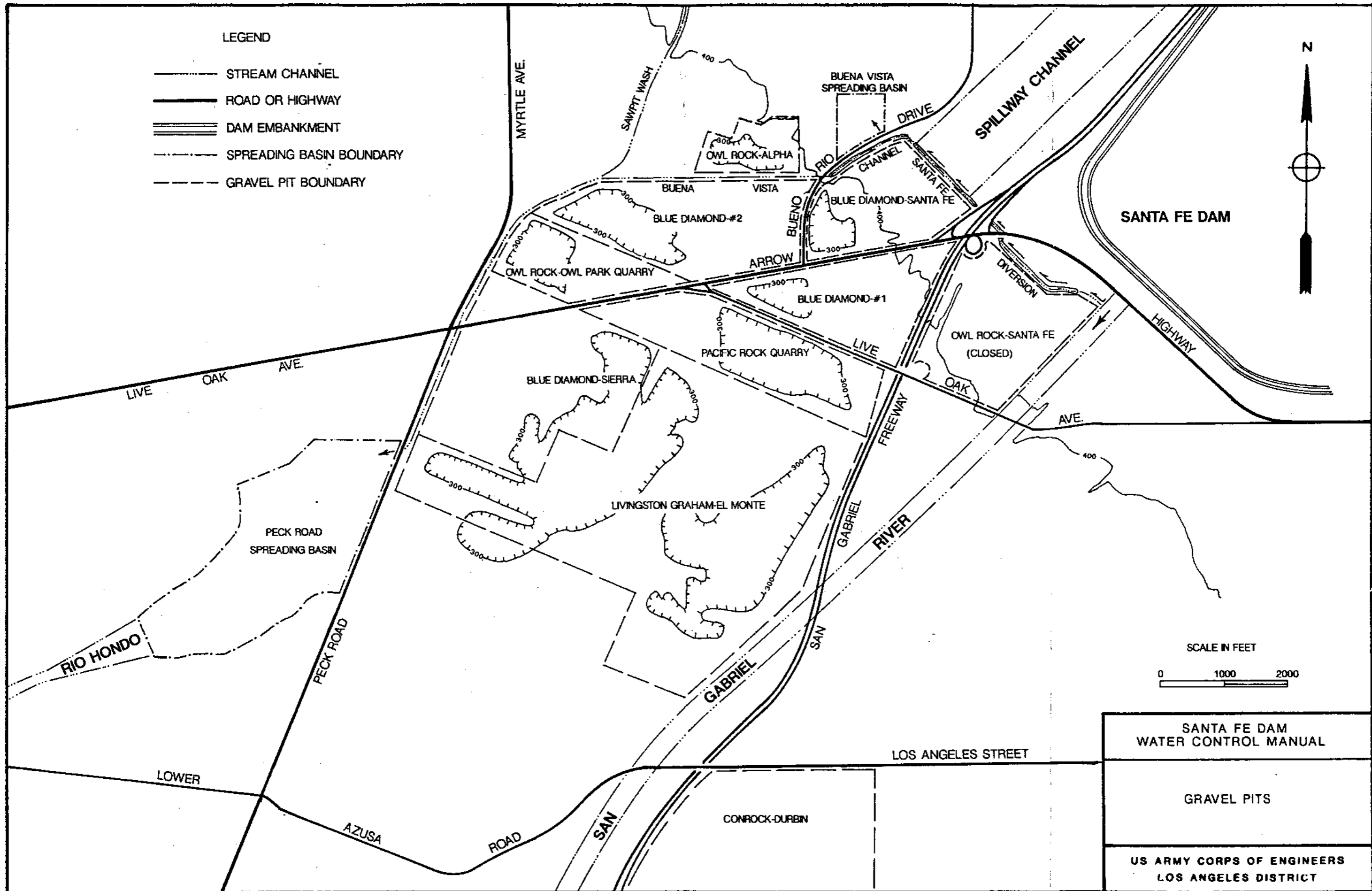
U. S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

SCALE IN FEET
0 500 1000



The Plate you are attempting to access is not currently available.

For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.

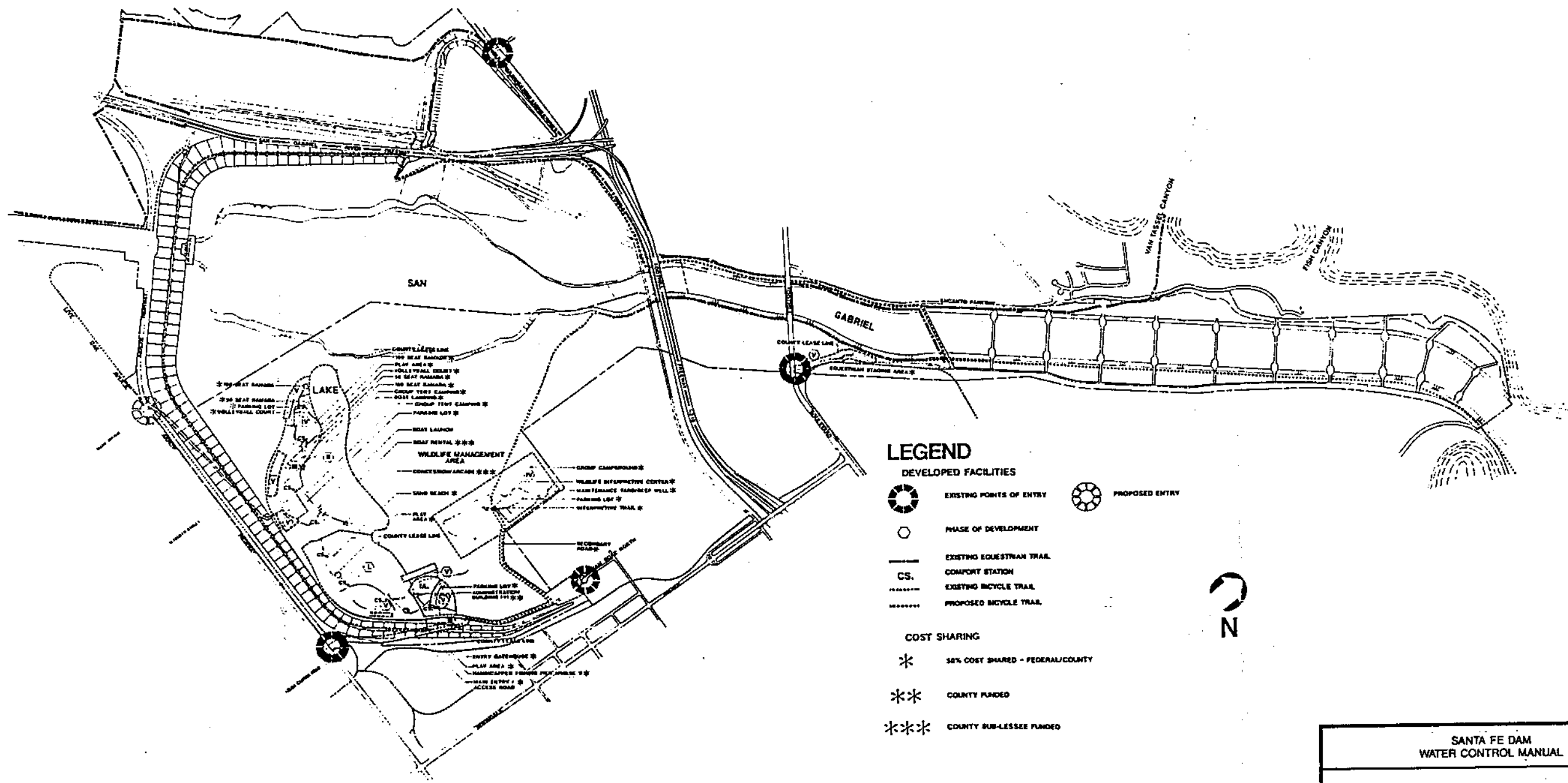


The Plate you are attempting to access is not currently available.

For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.

The Plate you are attempting to access is not currently available.

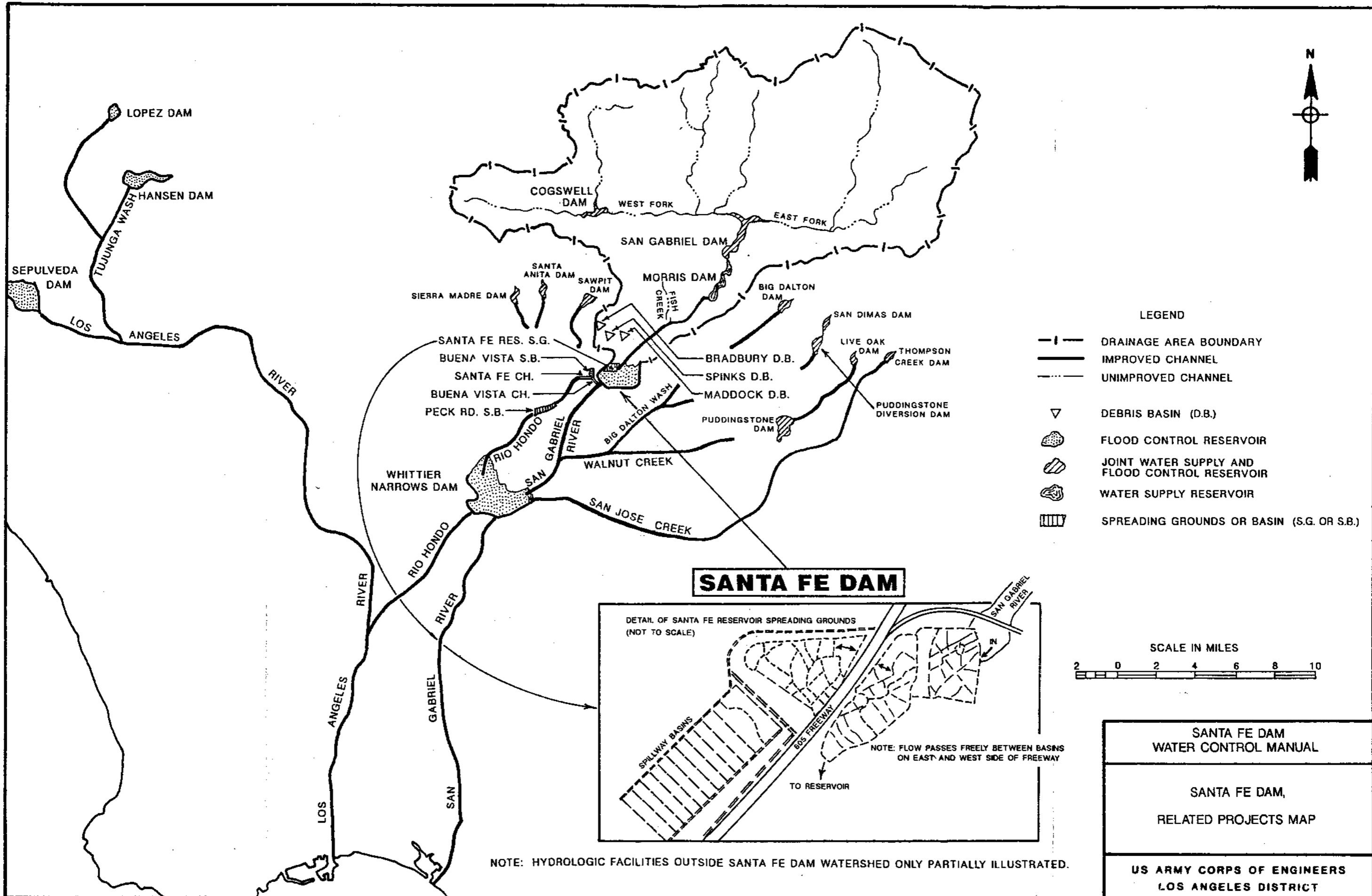
For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.



SANTA FE DAM
WATER CONTROL MANUAL

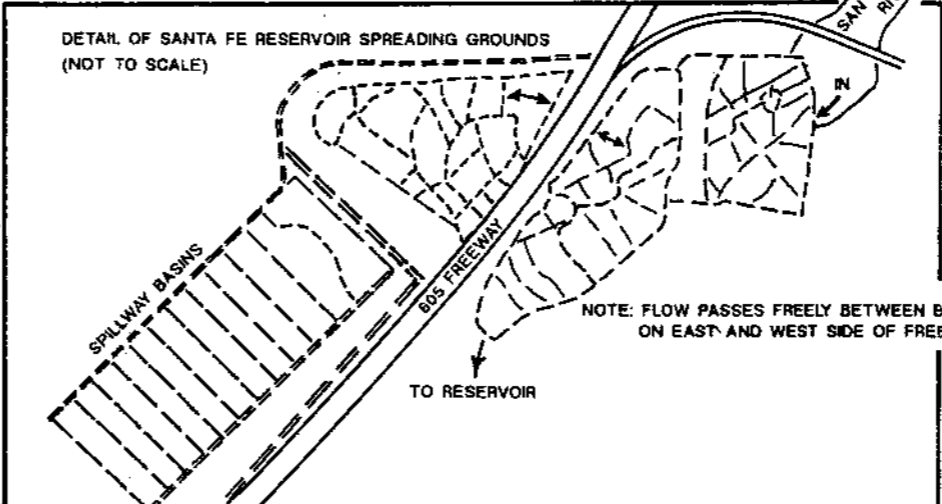
RECREATION
DEVELOPMENT PLAN

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



- LEGEND**
- DRAINAGE AREA BOUNDARY
 - IMPROVED CHANNEL
 - UNIMPROVED CHANNEL
 - DEBRIS BASIN (D.B.)
 - FLOOD CONTROL RESERVOIR
 - JOINT WATER SUPPLY AND FLOOD CONTROL RESERVOIR
 - WATER SUPPLY RESERVOIR
 - SPREADING GROUNDS OR BASIN (S.G. OR S.B.)

SANTA FE DAM

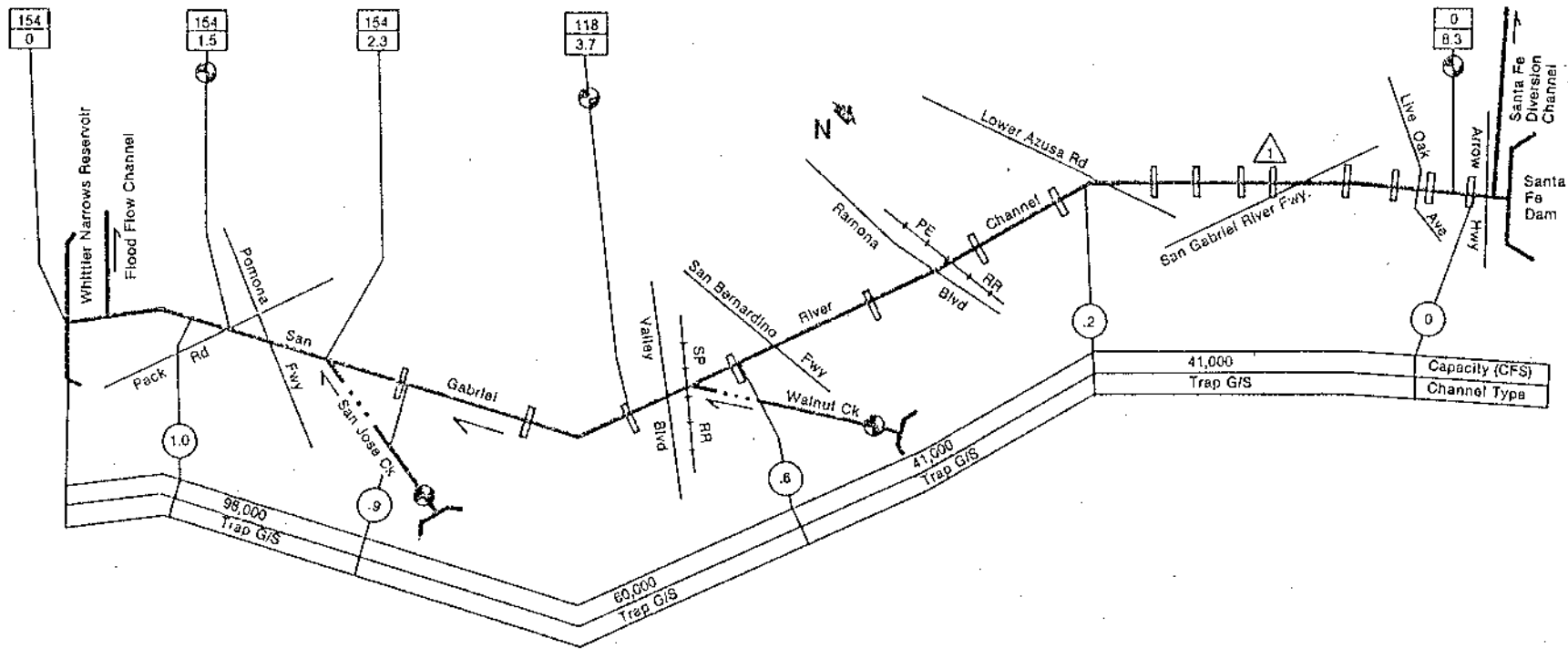


NOTE: HYDROLOGIC FACILITIES OUTSIDE SANTA FE DAM WATERSHED ONLY PARTIALLY ILLUSTRATED.

SANTA FE DAM
WATER CONTROL MANUAL

SANTA FE DAM,
RELATED PROJECTS MAP

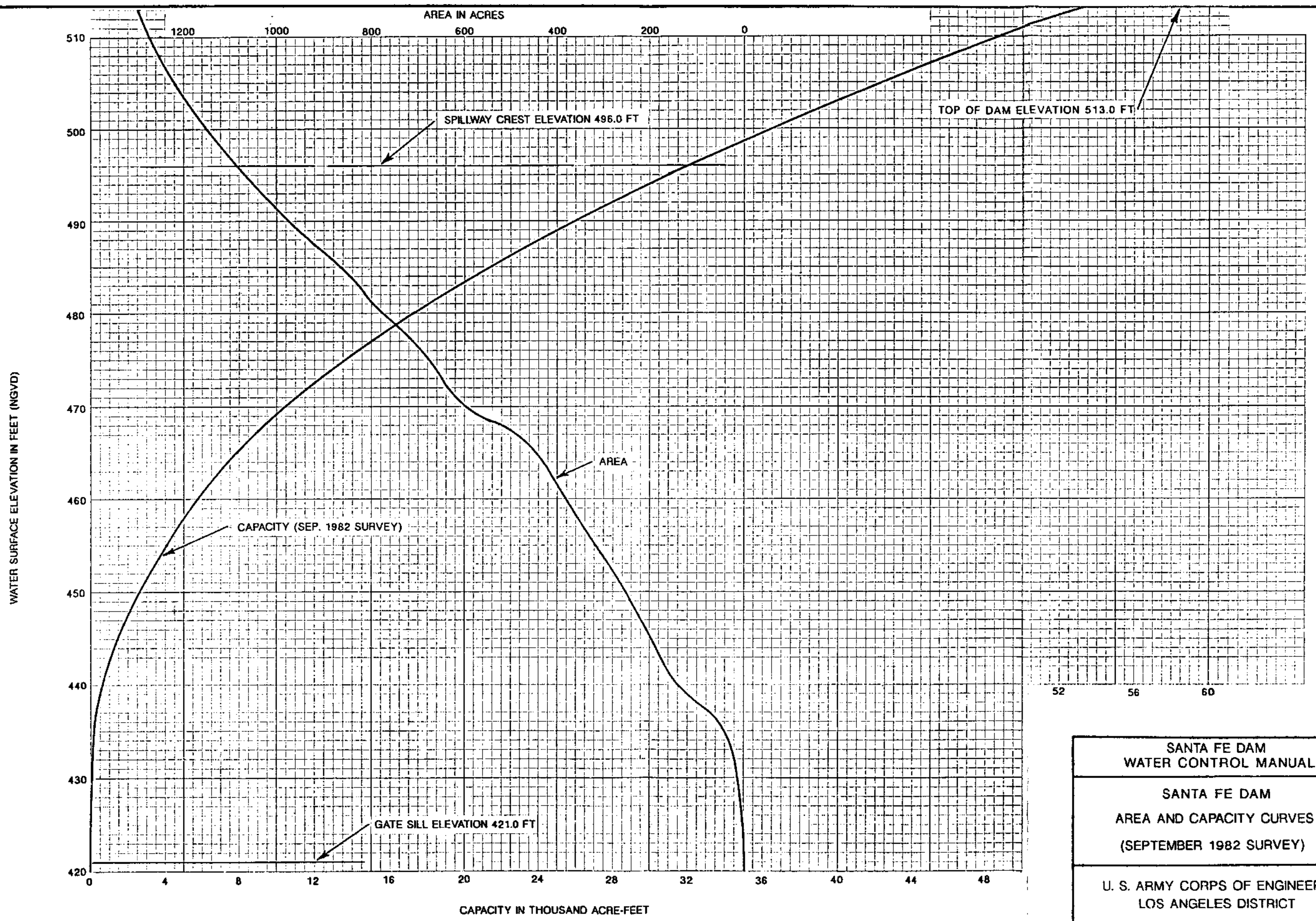
US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



Legend	
	Dam
	Recharge Basin
	Rubber Dam
	Drop Structure
	Stream Gage
	Drainage Area Miles From Stream Mouth
	Travel Time (Hours)
	Foot Bridge
	Channel Unlined
	Rip Rap Side Slopes
	Soft Bottom
	Concrete
	Grouted Stone
	Side Slope
	Bottom
	Levee

Significant Features	Miles	Remarks
Santa Fe Diversion Channel (LACFCD)		Diverts Water to Rio Hondo Channel
San Gabriel River Below Santa Fe Dam Walnut Creek	8.3	Flows Regulated By San Dimas, Puddingstone, Diversion, Puddingstone, Live Oak, and Big Dalton Dams Telemetry WCKP
Walnut Creek at Puente (LACFCD) San Jose Creek		Flow partially regulated by Thompson Creek Dam
San Jose Creek Near El Monte		
San Gabriel River Below Valley Blvd (LACFCD)	3.7	LACFCD Telemetry
Gravel Pits	7.5	About 100' Deep
San Gabriel River Above Whittier Narrows Dam	1.5	Telemetry SGRP

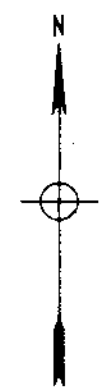
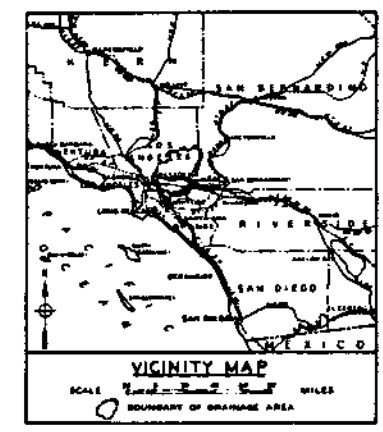
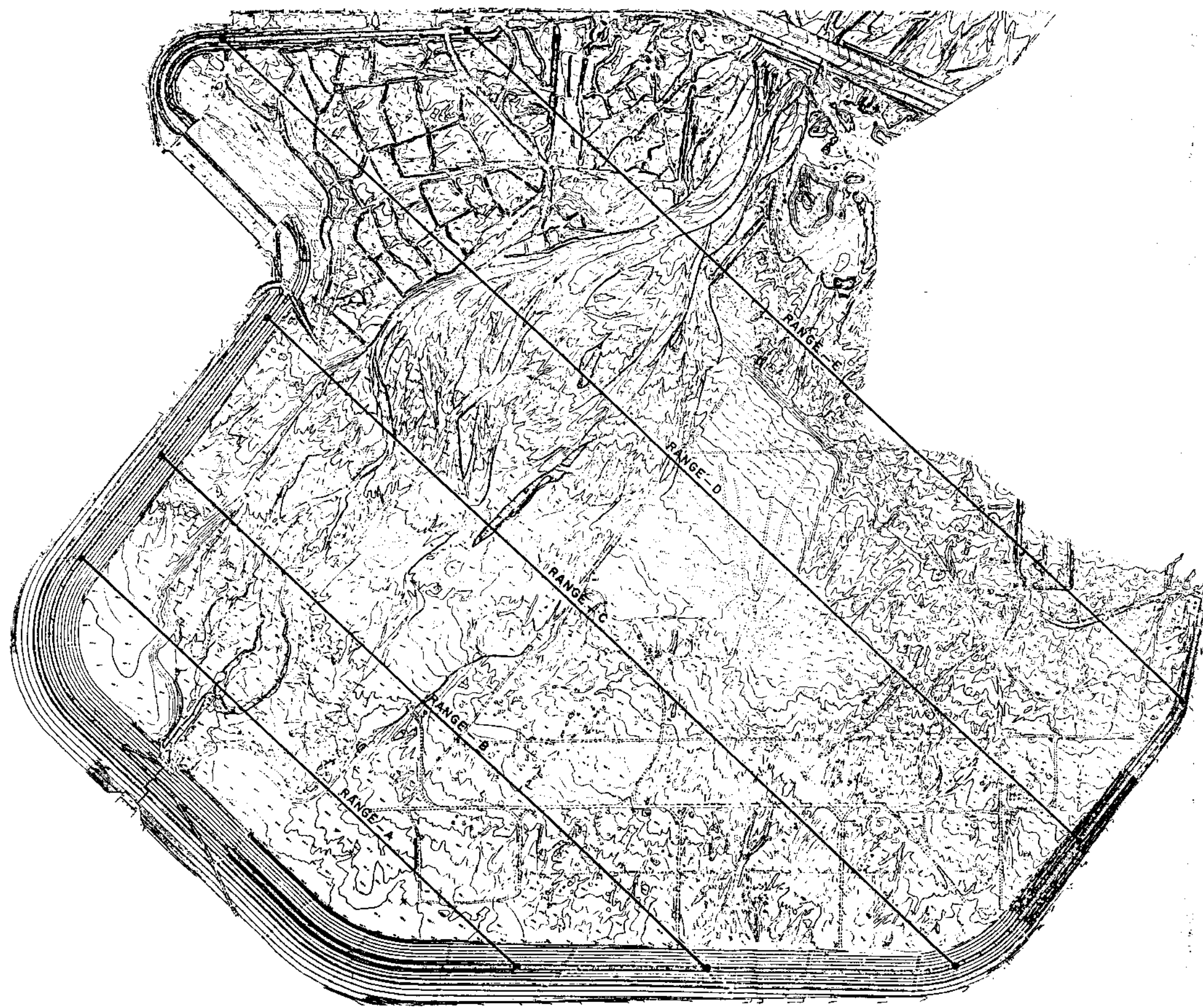
SANTA FE DAM
WATER CONTROL MANUAL
CHANNEL CAPACITIES AND
CONFIGURATIONS, SAN GABRIEL RIVER,
SANTA FE DAM TO WHITTIER NARROWS
DAM (MARCH 1989)
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



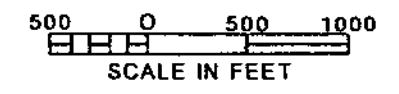
SANTA FE DAM
 WATER CONTROL MANUAL

SANTA FE DAM
 AREA AND CAPACITY CURVES
 (SEPTEMBER 1982 SURVEY)

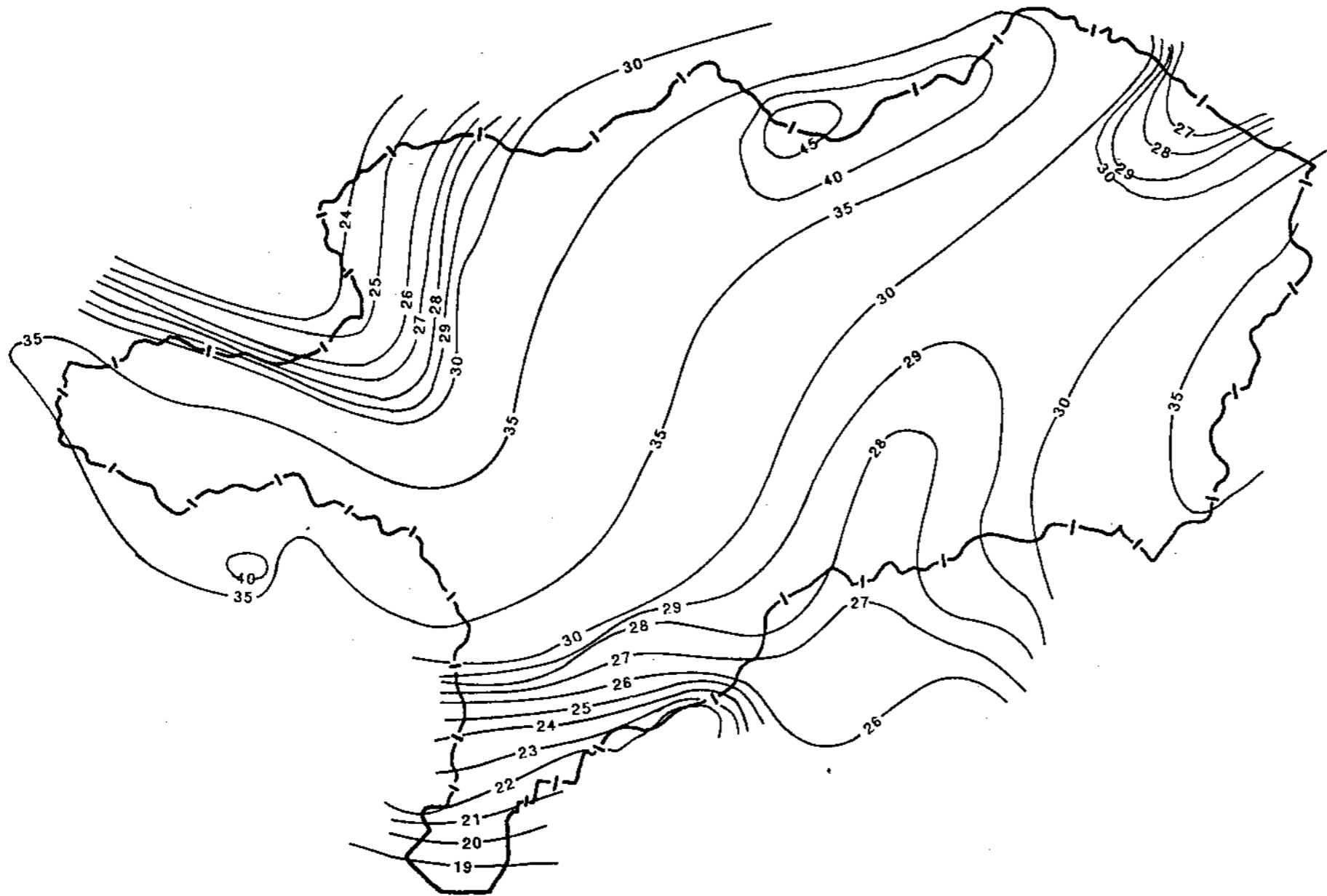
U. S. ARMY CORPS OF ENGINEERS
 LOS ANGELES DISTRICT



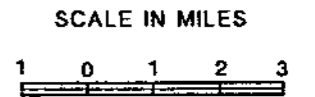
NOTE: Topography by photogrammetric method from aerial survey flown August 1969.
National Geodetic Vertical Datum.



SANTA FE DAM WATER CONTROL MANUAL
SANTA FE DAM SEDIMENTATION RANGE LINES
U. S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT

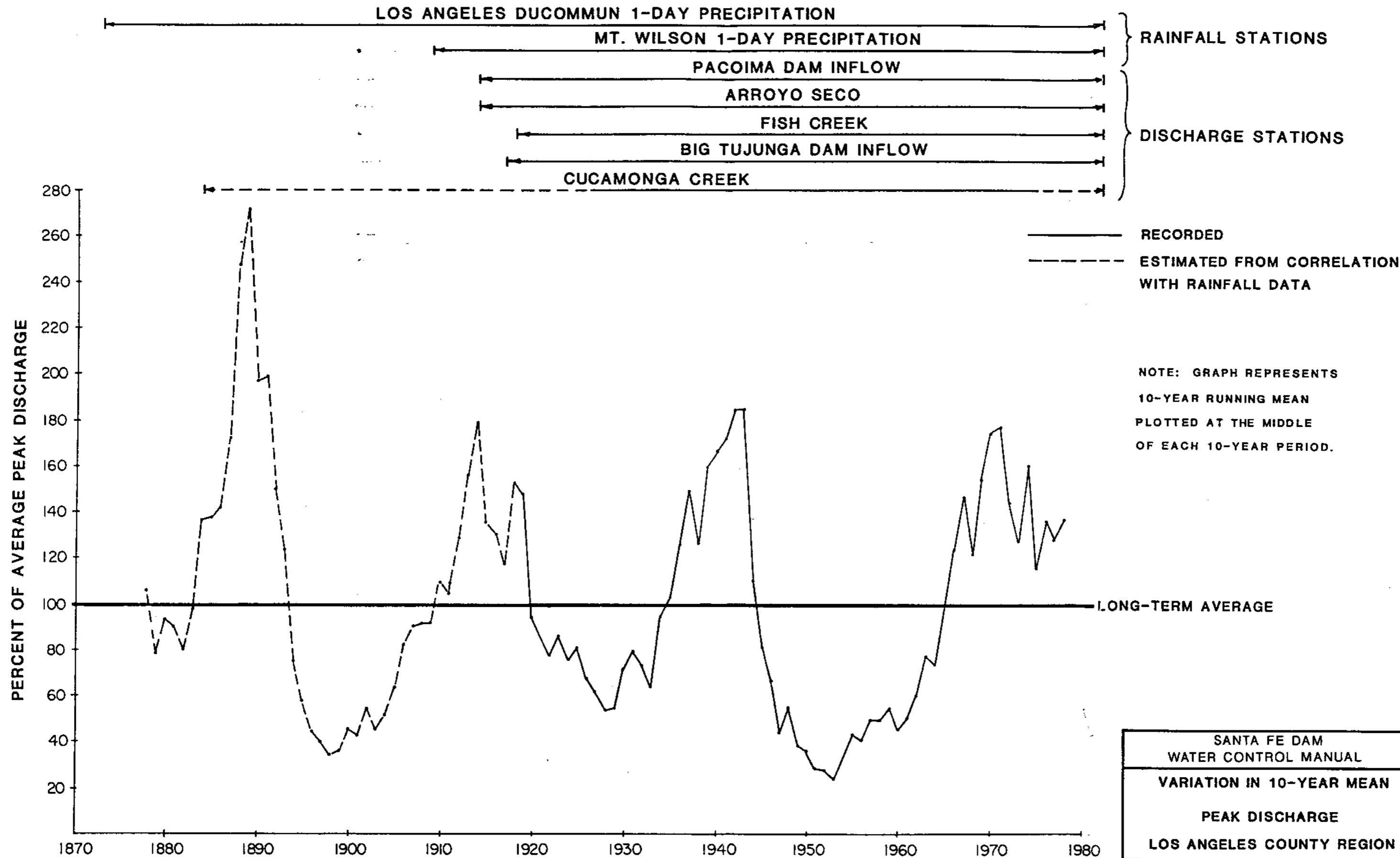


—|— DRAINAGE AREA BOUNDARY
—20— ISOHYET OF EQUAL PRECIPITATION DEPTH

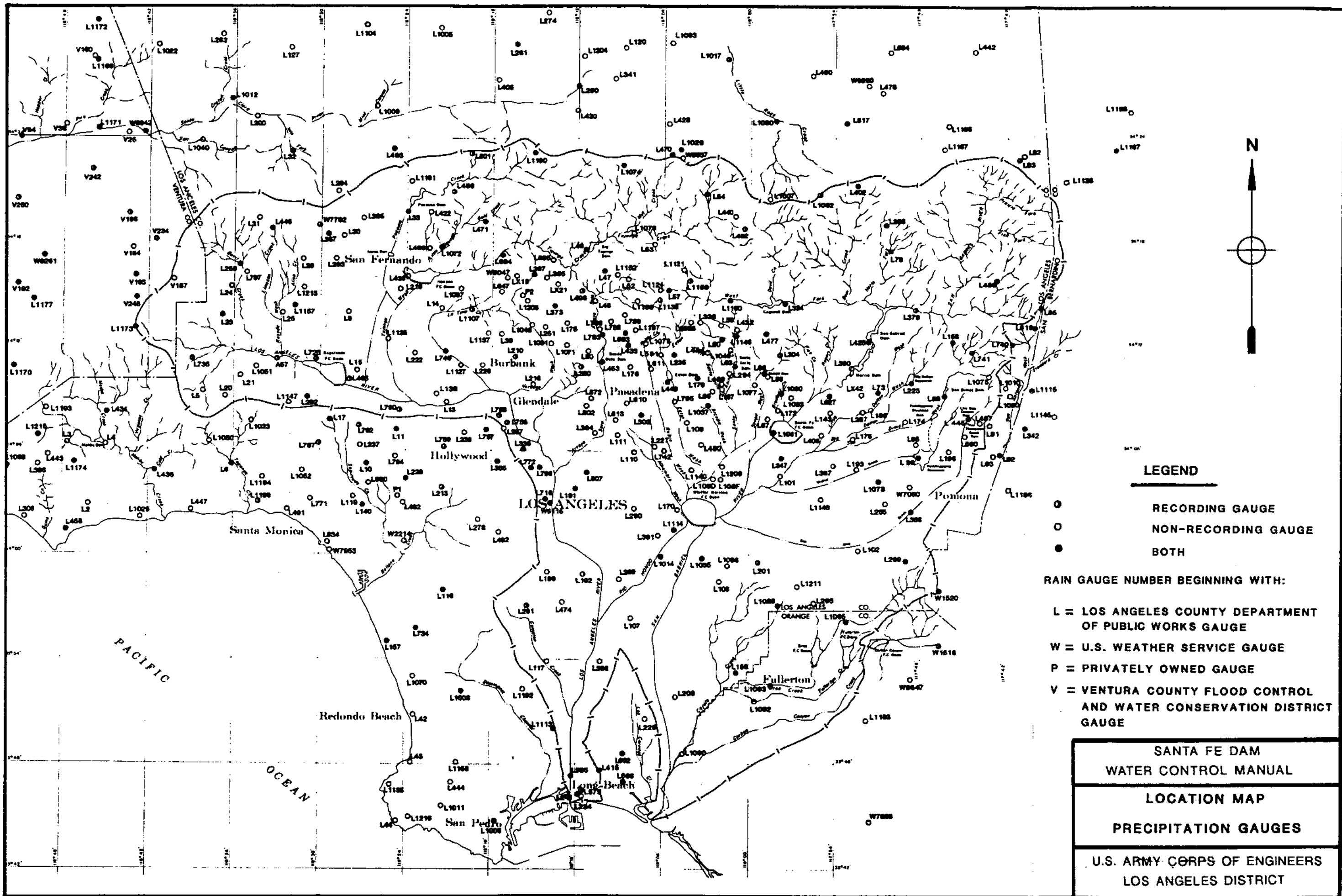


SANTA FE DAM WATER CONTROL MANUAL
SANTA FE DAM WATERSHED 100-YEAR NORMAL MEAN SEASONAL PRECIPITATION WATER YEARS 1873 TO 1973
US ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT

SOURCE: LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS, HYDROLOGIC REPORT, 1977-80.



SANTA FE DAM WATER CONTROL MANUAL
VARIATION IN 10-YEAR MEAN PEAK DISCHARGE LOS ANGELES COUNTY REGION
U.S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT

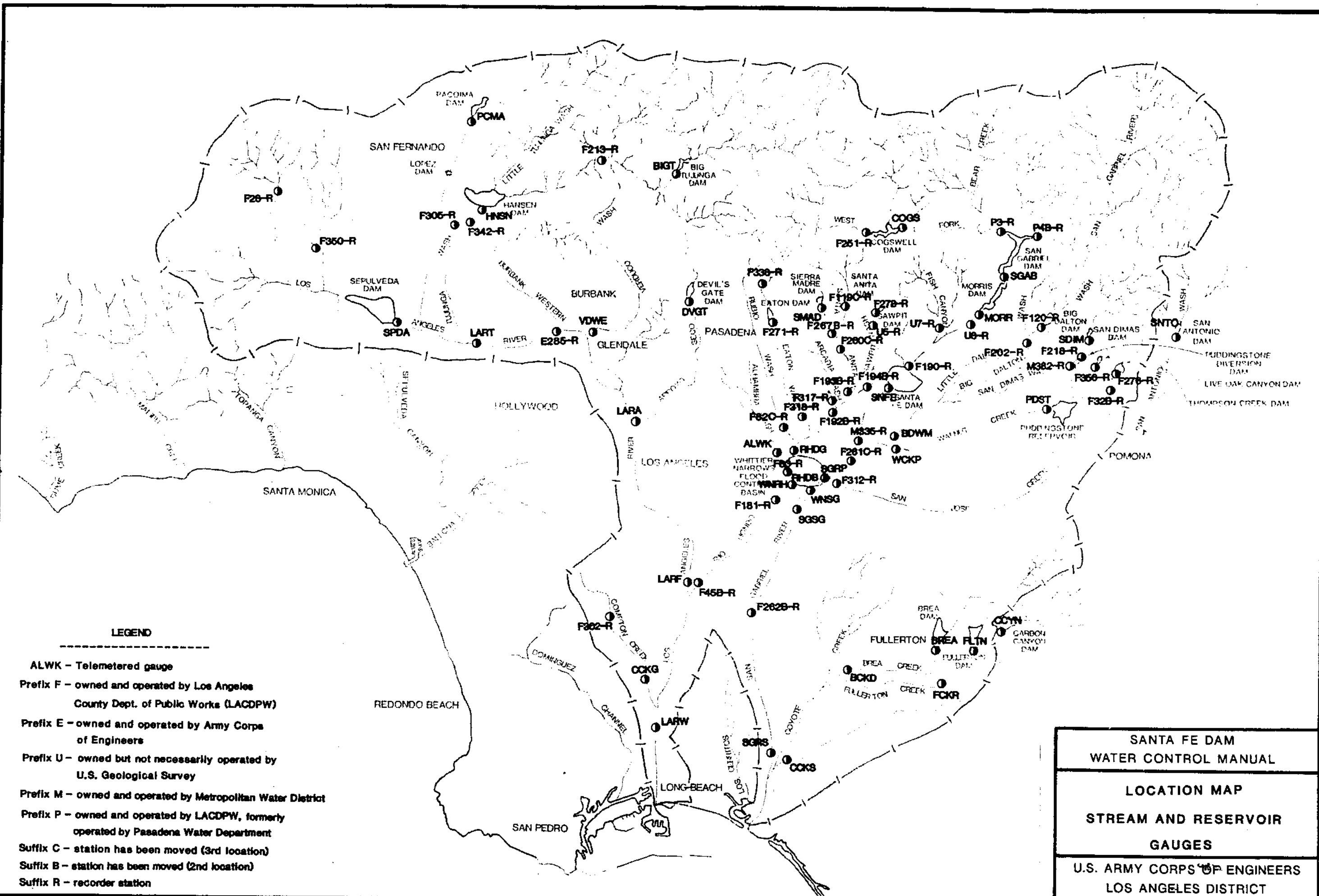


LEGEND

- RECORDING GAUGE
- NON-RECORDING GAUGE
- BOTH

- RAIN GAUGE NUMBER BEGINNING WITH:
- L = LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS GAUGE
 - W = U.S. WEATHER SERVICE GAUGE
 - P = PRIVATELY OWNED GAUGE
 - V = VENTURA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT GAUGE

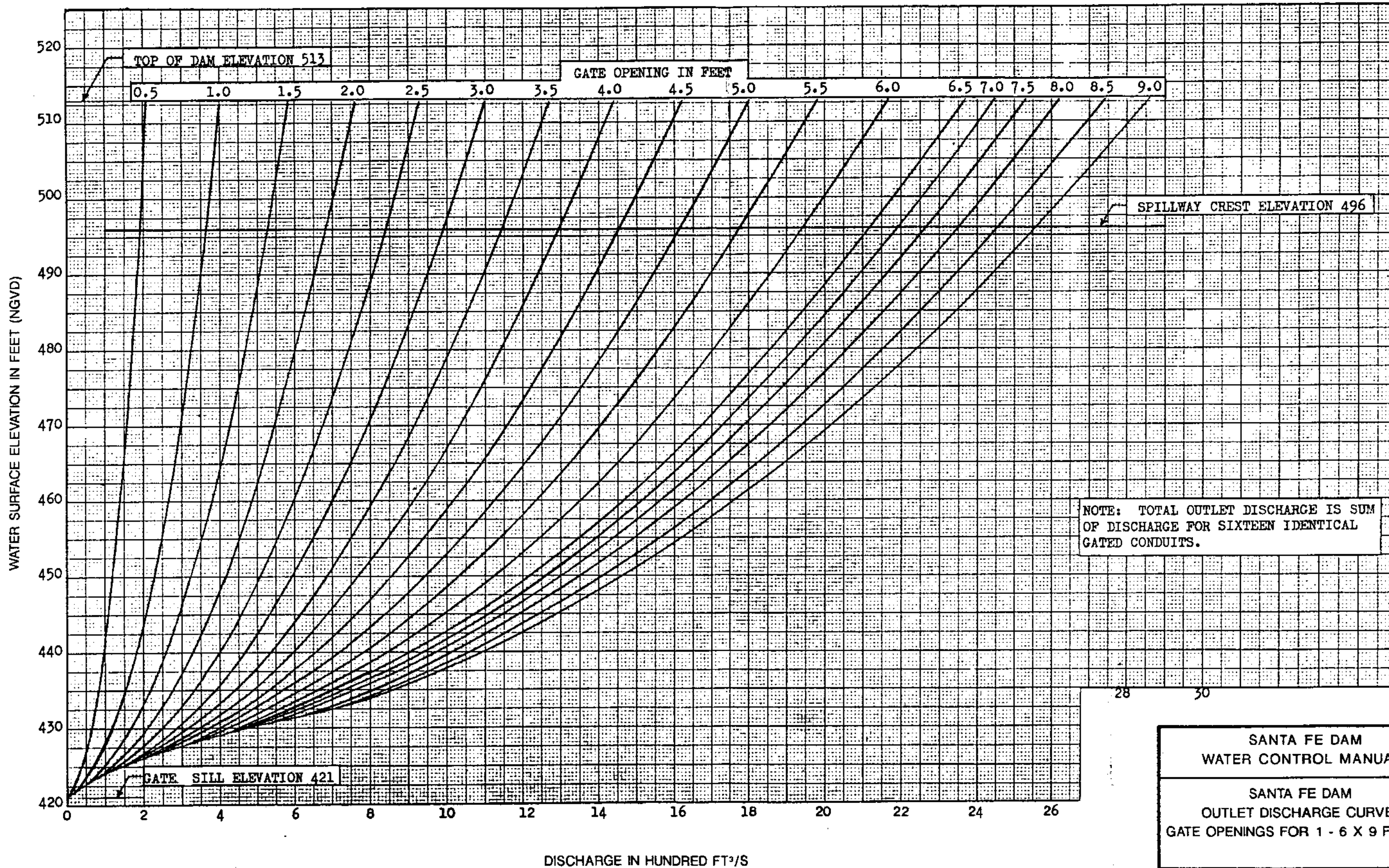
SANTA FE DAM
 WATER CONTROL MANUAL
 LOCATION MAP
 PRECIPITATION GAUGES
 U.S. ARMY CORPS OF ENGINEERS
 LOS ANGELES DISTRICT



LEGEND

- ALWK - Telemetered gauge
- Prefix F - owned and operated by Los Angeles County Dept. of Public Works (LACDPW)
- Prefix E - owned and operated by Army Corps of Engineers
- Prefix U - owned but not necessarily operated by U.S. Geological Survey
- Prefix M - owned and operated by Metropolitan Water District
- Prefix P - owned and operated by LACDPW, formerly operated by Pasadena Water Department
- Suffix C - station has been moved (3rd location)
- Suffix B - station has been moved (2nd location)
- Suffix R - recorder station

SANTA FE DAM WATER CONTROL MANUAL
LOCATION MAP
STREAM AND RESERVOIR GAUGES
U.S. ARMY CORPS OF ENGINEERS LOS ANGELES DISTRICT

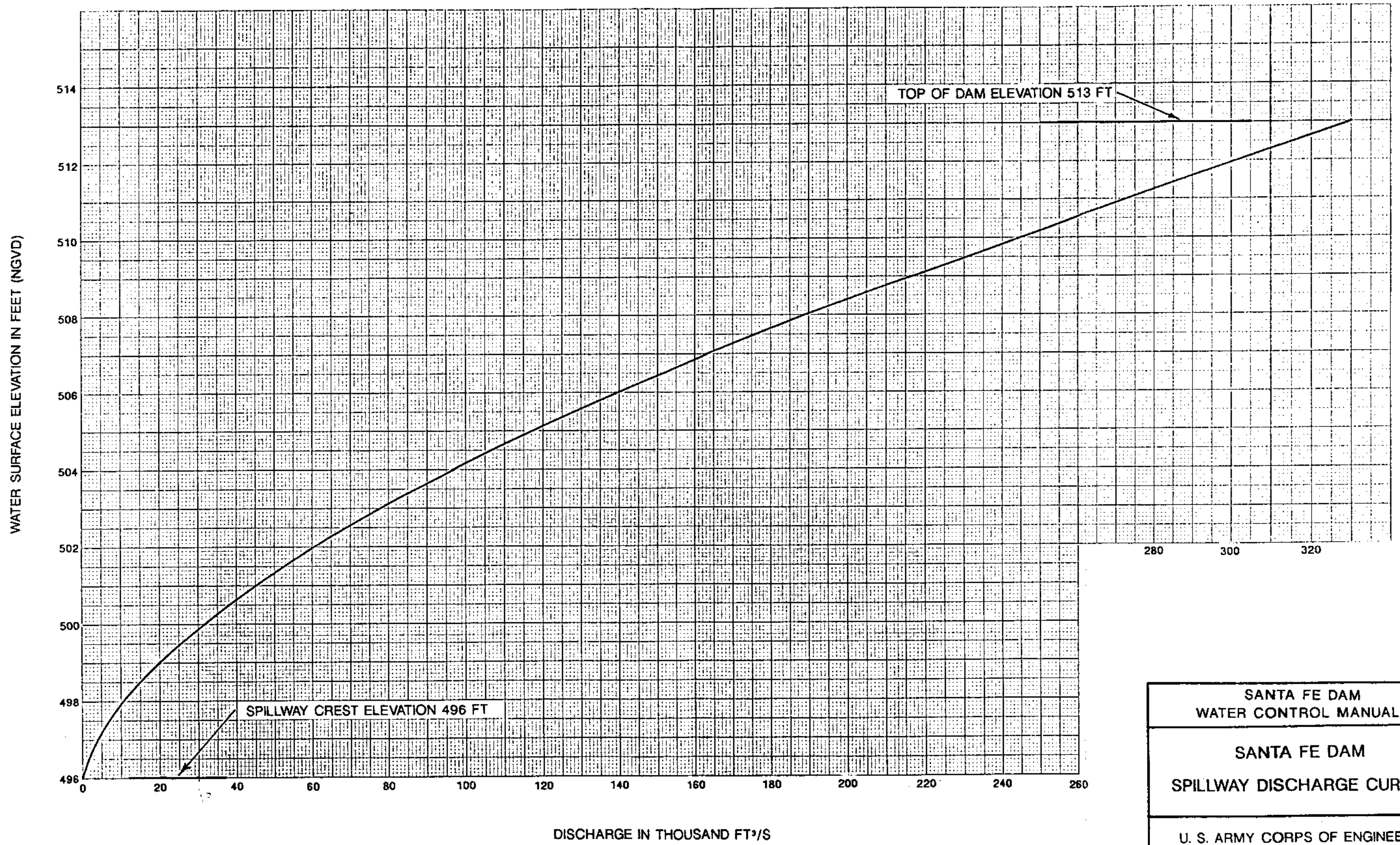


NOTE: TOTAL OUTLET DISCHARGE IS SUM OF DISCHARGE FOR SIXTEEN IDENTICAL GATED CONDUITS.

SANTA FE DAM
 WATER CONTROL MANUAL

SANTA FE DAM
 OUTLET DISCHARGE CURVE
 GATE OPENINGS FOR 1 - 6 X 9 FT. GATE

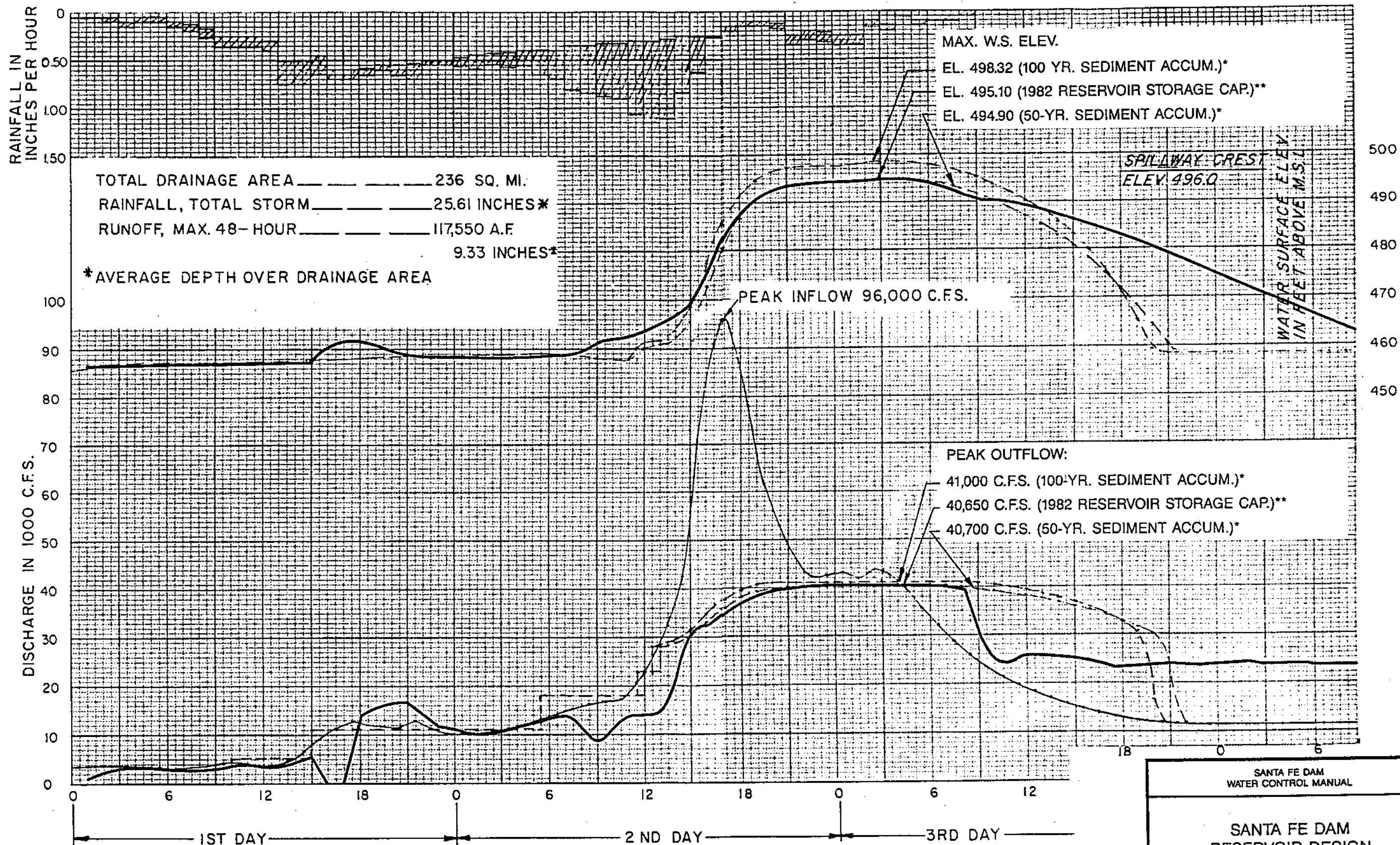
US ARMY CORPS OF ENGINEERS
 LOS ANGELES DISTRICT



SANTA FE DAM
 WATER CONTROL MANUAL

SANTA FE DAM
 SPILLWAY DISCHARGE CURVE

U. S. ARMY CORPS OF ENGINEERS
 LOS ANGELES DISTRICT

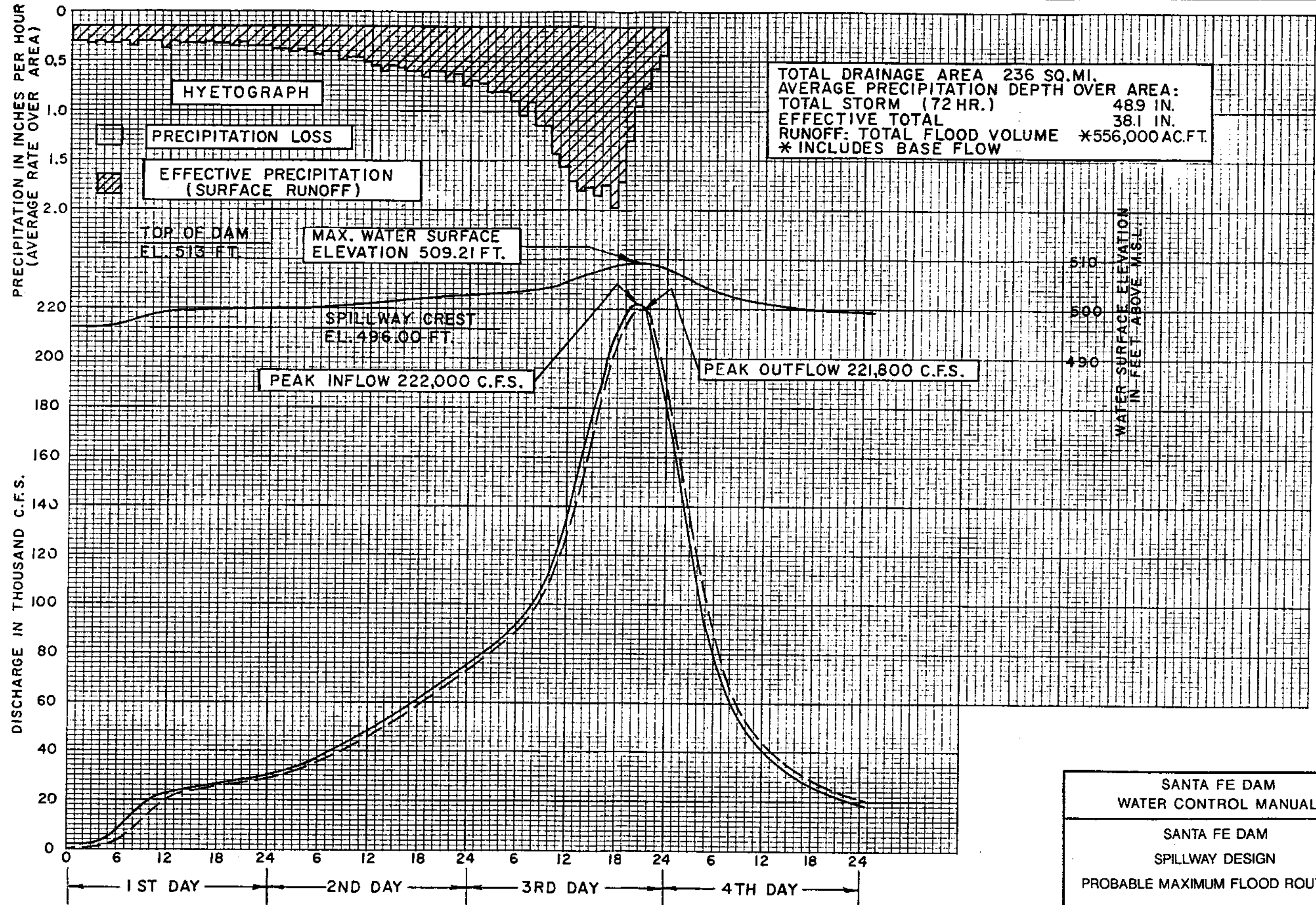


*Operation of Santa Fe Dam is not in tandem with Whittier Narrows Dam.
 **Santa Fe Dam is operated to balance the concurrent flood control storage at Whittier Narrows Dam (tandem operation).

SANTA FE DAM
 WATER CONTROL MANUAL

SANTA FE DAM
 RESERVOIR DESIGN
 STANDARD PROJECT
 FLOOD ROUTING

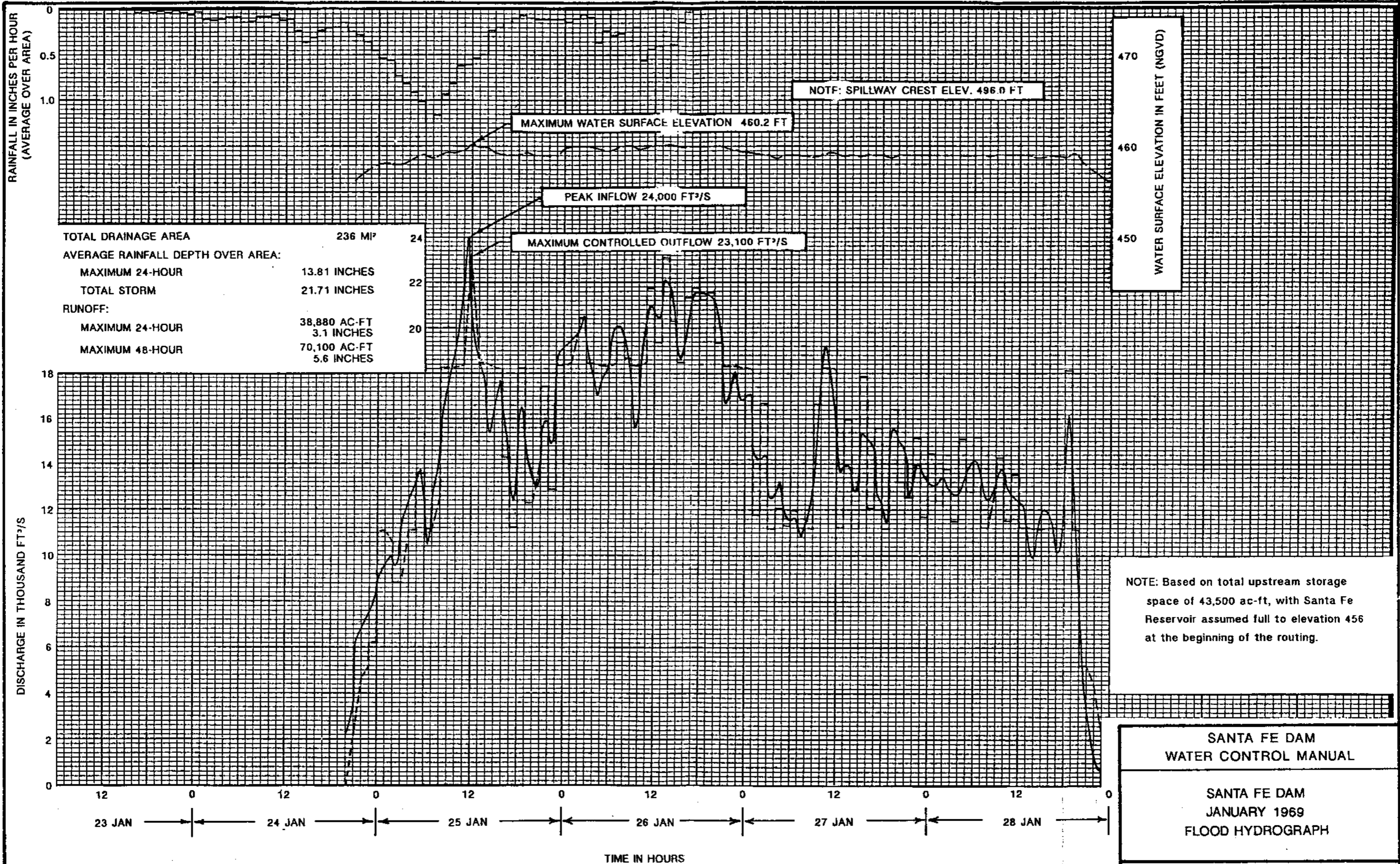
U.S. ARMY CORPS OF ENGINEERS
 LOS ANGELES DISTRICT



SANTA FE DAM
 WATER CONTROL MANUAL

SANTA FE DAM
 SPILLWAY DESIGN
 PROBABLE MAXIMUM FLOOD ROUTING

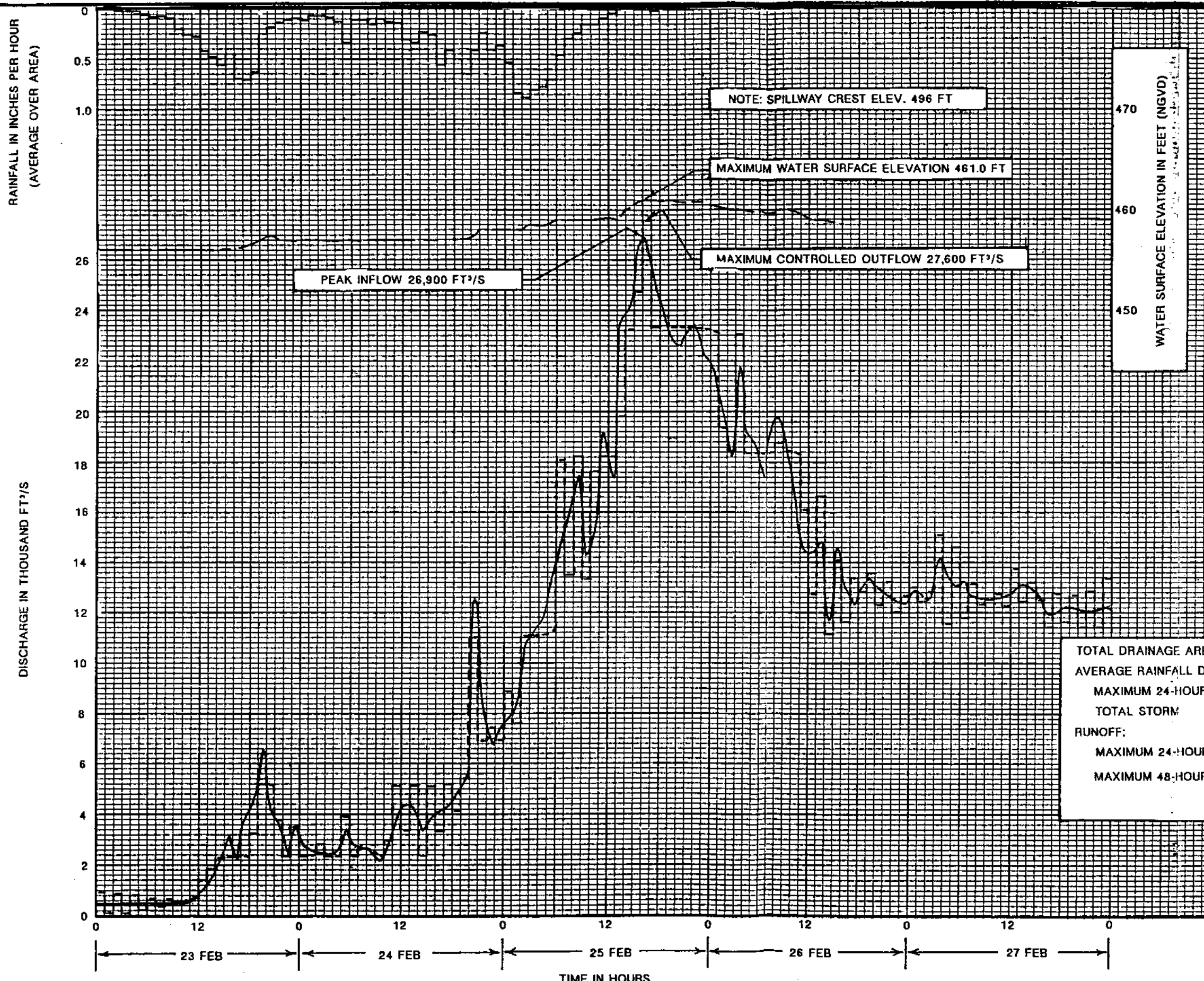
U. S. ARMY CORPS OF ENGINEERS
 LOS ANGELES DISTRICT



SANTA FE DAM
WATER CONTROL MANUAL

SANTA FE DAM
JANUARY 1969
FLOOD HYDROGRAPH

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



NOTE: SPILLWAY CREST ELEV. 496 FT

MAXIMUM WATER SURFACE ELEVATION 461.0 FT

MAXIMUM CONTROLLED OUTFLOW 27,600 FT³/S

PEAK INFLOW 26,900 FT³/S

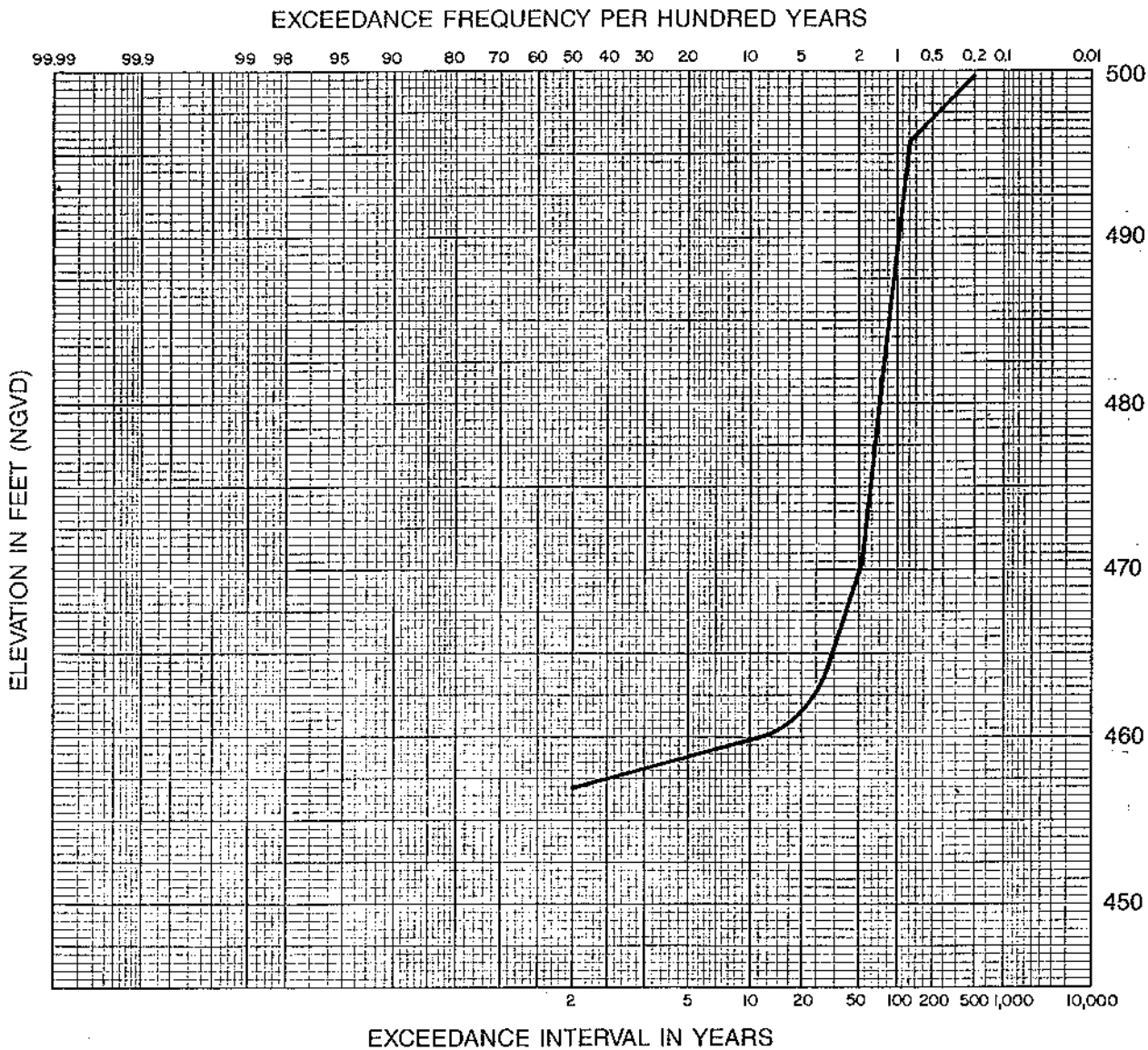
NOTE: Based on total upstream storage space of 43,500 ac-ft, with Santa Fe Reservoir assumed full to elevation 456 at the beginning of the routing.

TOTAL DRAINAGE AREA	236 MI ²
AVERAGE RAINFALL DEPTH OVER AREA:	
MAXIMUM 24-HOUR	10.62 INCHES
TOTAL STORM	17.93 INCHES
RUNOFF:	
MAXIMUM 24-HOUR	42,240 AC-FT 3.4 INCHES
MAXIMUM 48-HOUR	69,470 AC-FT 5.5 INCHES

SANTA FE DAM
WATER CONTROL MANUAL

SANTA FE DAM
FEBRUARY 1969
FLOOD HYDROGRAPH

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT



TOP OF DAM	513.0 FT.(NGVD)
	53,088 AC-FT
SPILLWAY CREST	496.0 FT.(NGVD)
	32,109 AC-FT
DEBRIS POOL	456.0 FT.(NGVD)
OUTLET SILL	421.0 FT.(NGVD)

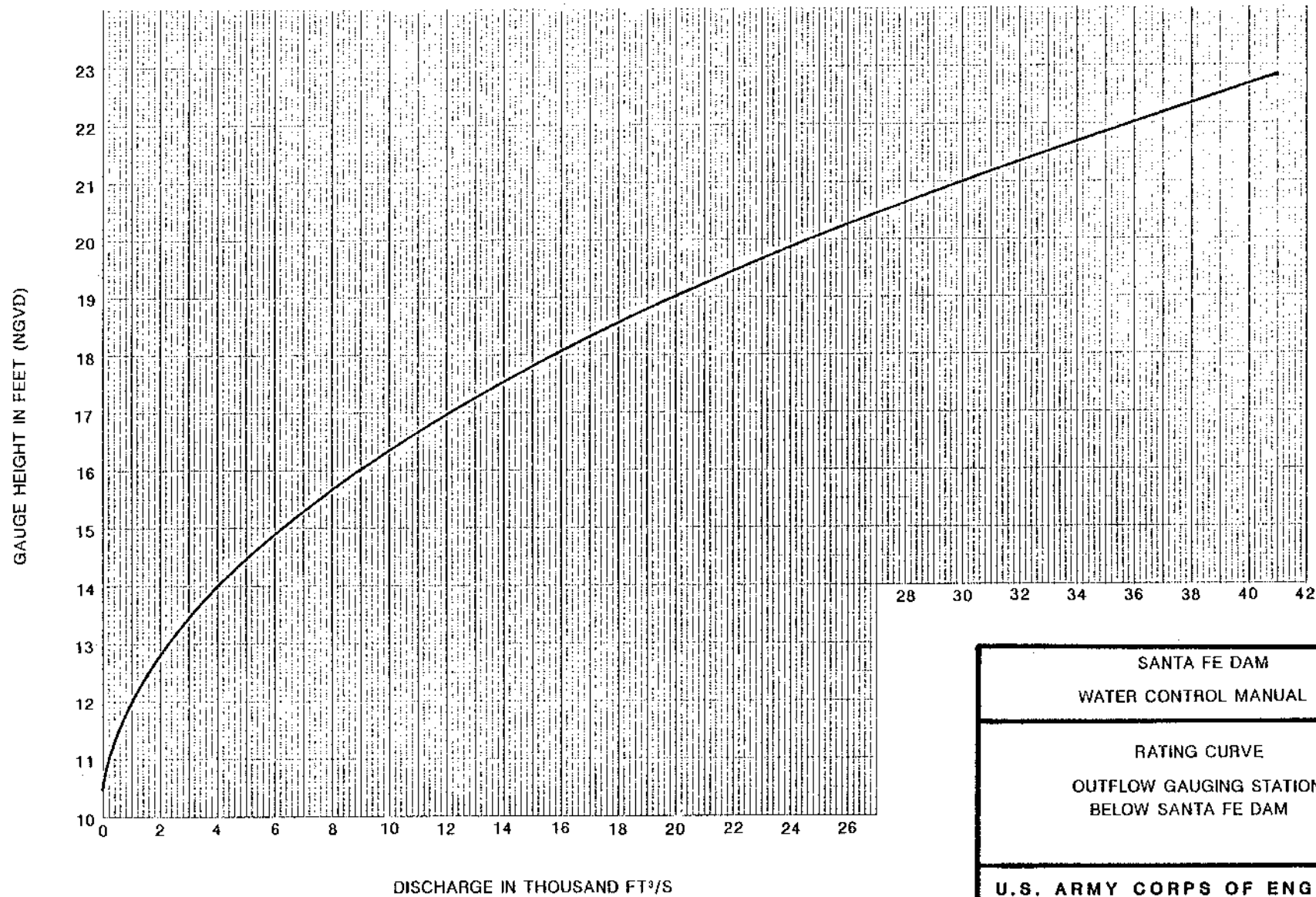
SANTA FE DAM
WATER CONTROL MANUAL

ELEVATION-FREQUENCY CURVE
SANTA FE DAM

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

ELEVATION IN FEET (NGVD)

EXCEEDANCE INTERVAL IN YEARS



SANTA FE DAM
WATER CONTROL MANUAL
RATING CURVE
OUTFLOW GAUGING STATION
BELOW SANTA FE DAM
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT