

VICINITY MAP
 SCALE 1:50,000
 BOUNDARY OF GILA RIVER DRAINAGE AREA
 BOUNDARY OF CALIFORNIA

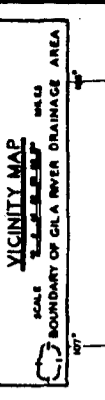
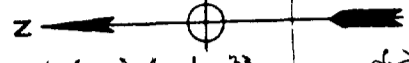
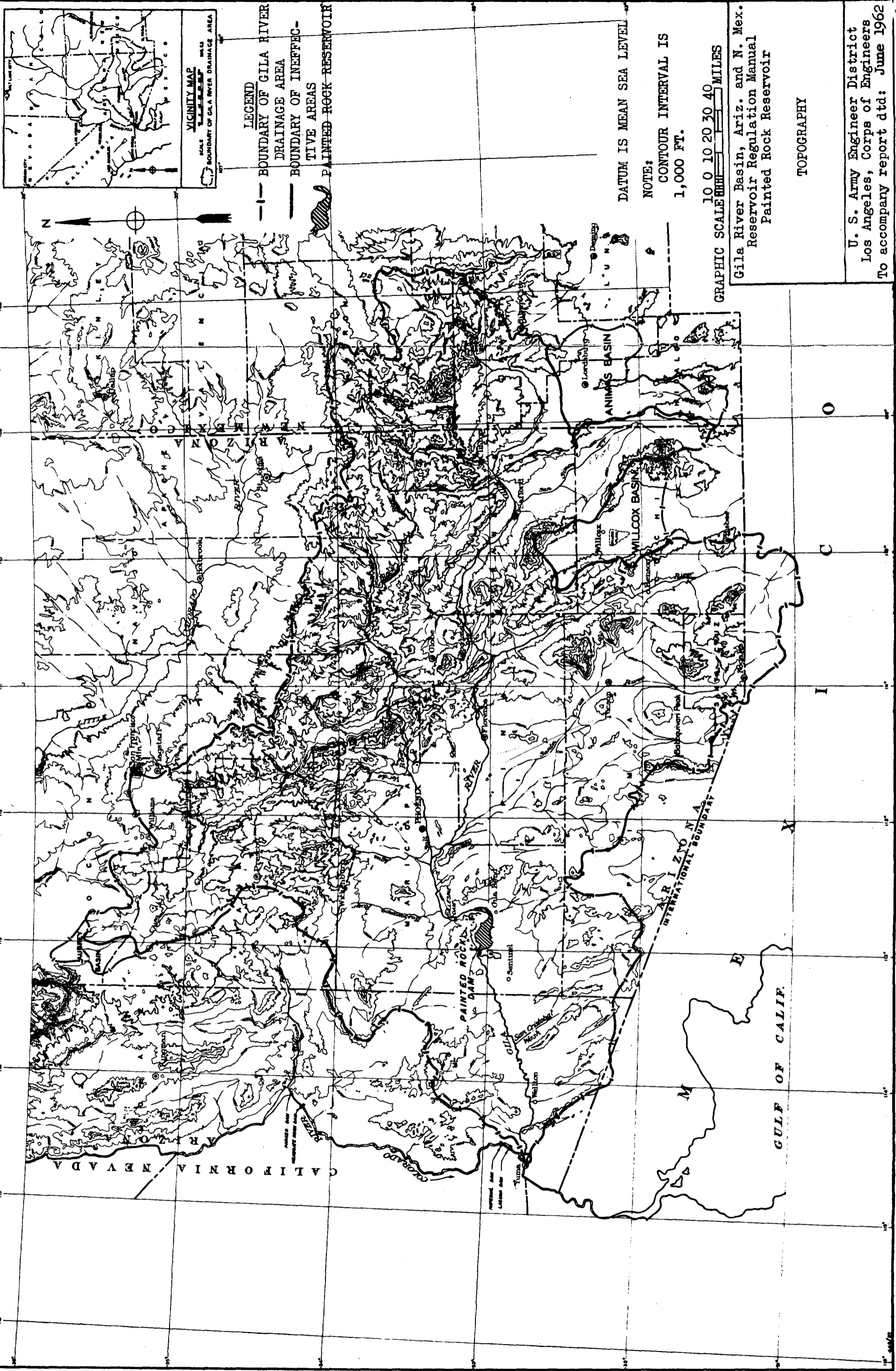
LEGEND
 BOUNDARY OF GILA RIVER DRAINAGE AREA
 BOUNDARY OF CALIFORNIA
 EXISTING RESERVOIR

SCALE 10 0 10 20 30 40 MILES

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir

INDEX MAP

U. S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962



LEGEND
 - - - BOUNDARY OF GILA RIVER DRAINAGE AREA
 - - - BOUNDARY OF INEFFECTIVE AREAS
 PAINTED ROCK RESERVOIR

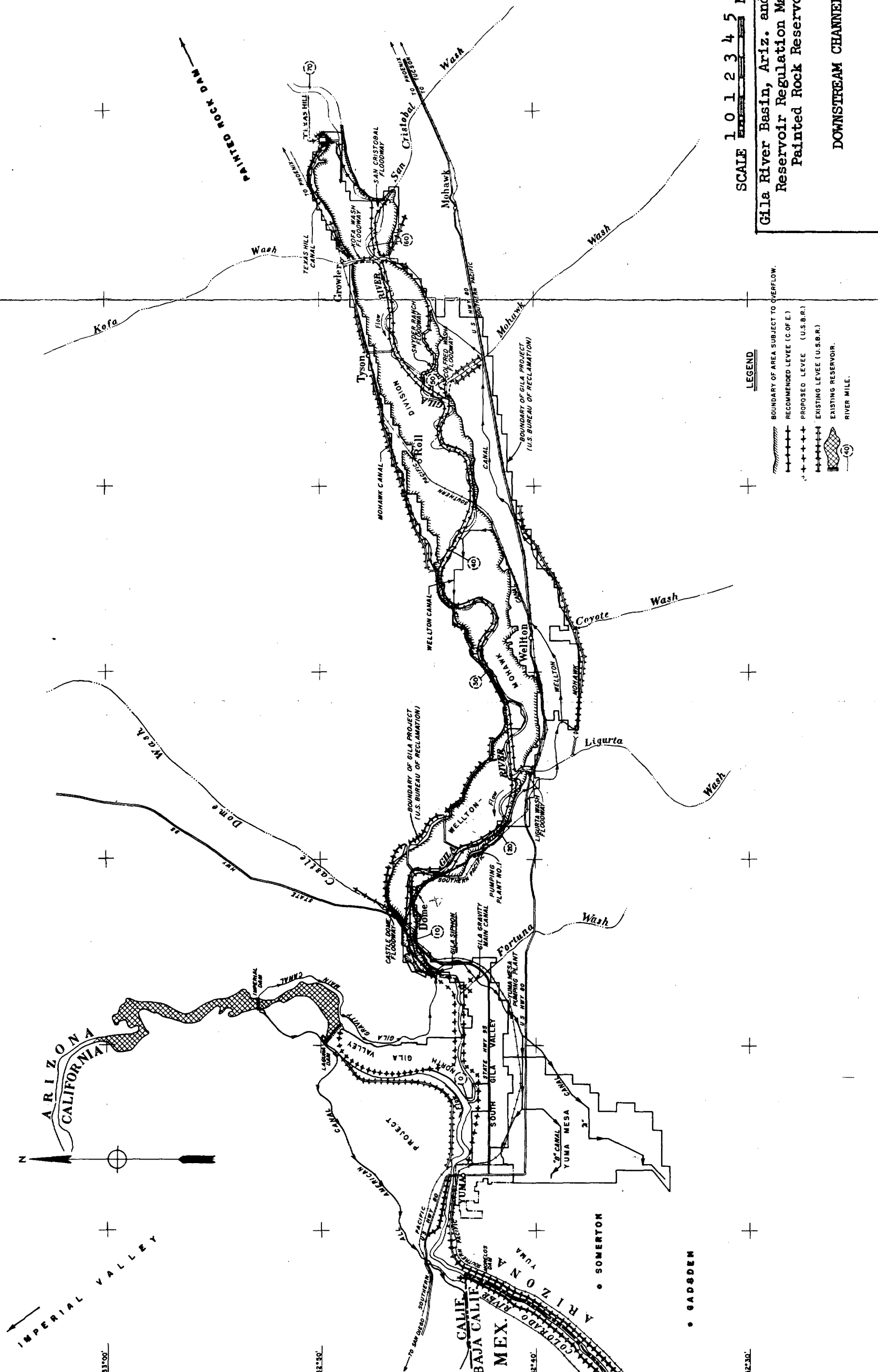
DATUM IS MEAN SEA LEVEL
 NOTE:
 CONTOUR INTERVAL IS 1,000 FT.

GRAPHIC SCALE 10 0 10 20 30 40 MILES

TOPOGRAPHY

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir

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 To accompany report dtd: June 1962



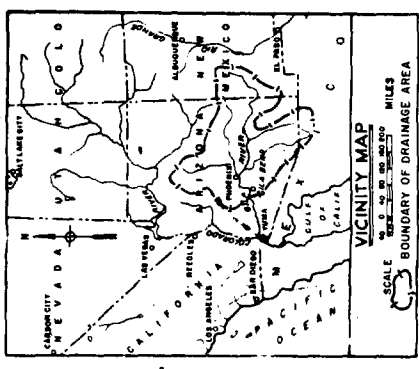
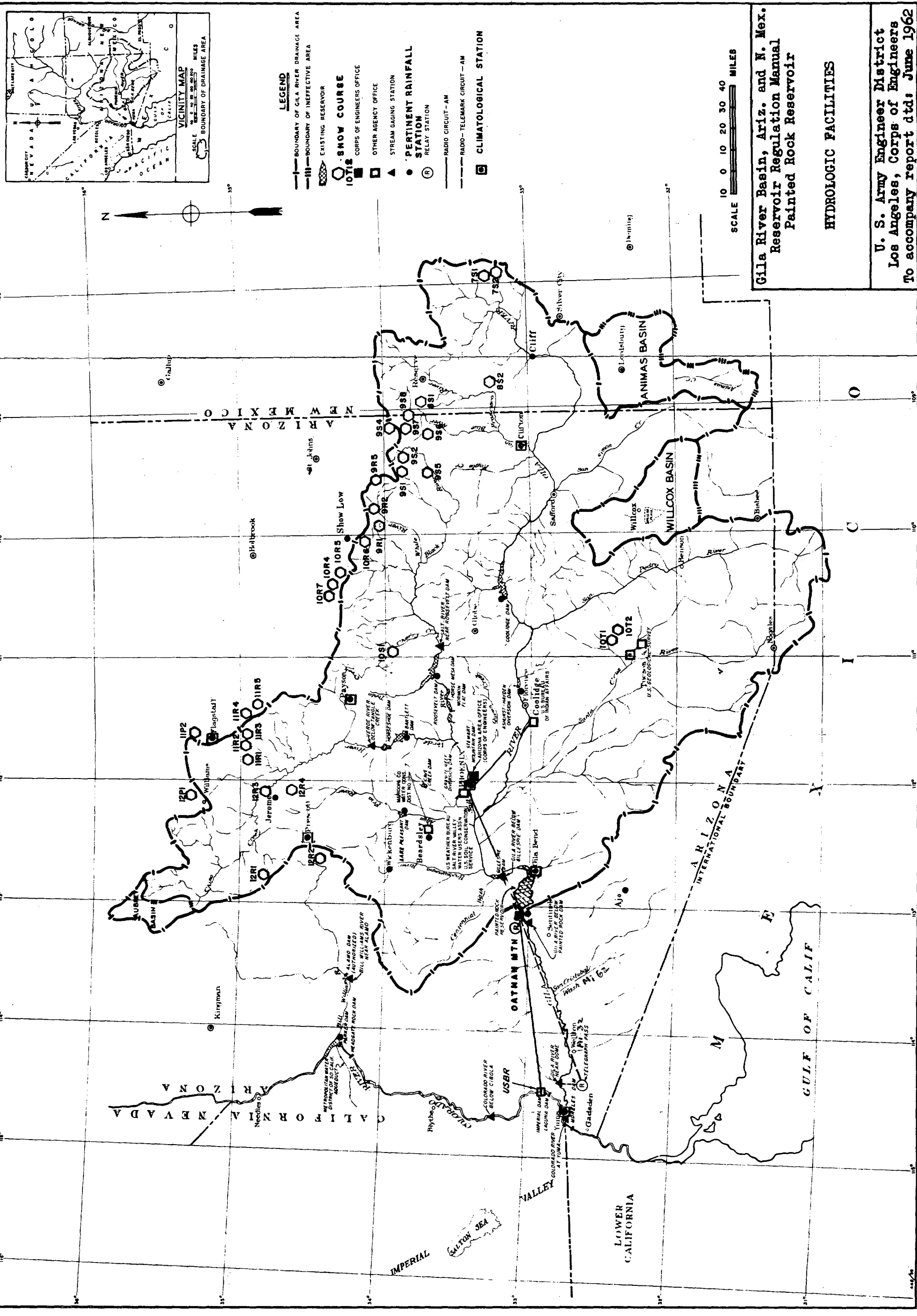
SCALE 1 0 1 2 3 4 5 MILES

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

DOWNSTREAM CHANNEL

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

- LEGEND**
- BOUNDARY OF AREA SUBJECT TO OVERFLOW.
 - RECOMMENDED LEVEL (C OF E.)
 - PROPOSED LEVEL (U.S.B.R.)
 - EXISTING LEVEL (U.S.B.R.)
 - EXISTING RESERVOIR.
 - RIVER MILE.



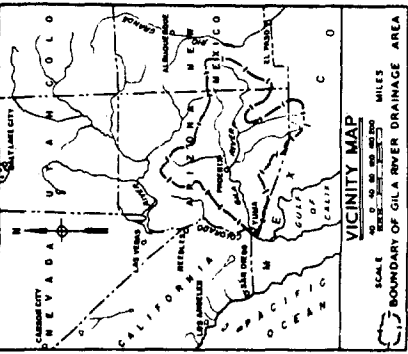
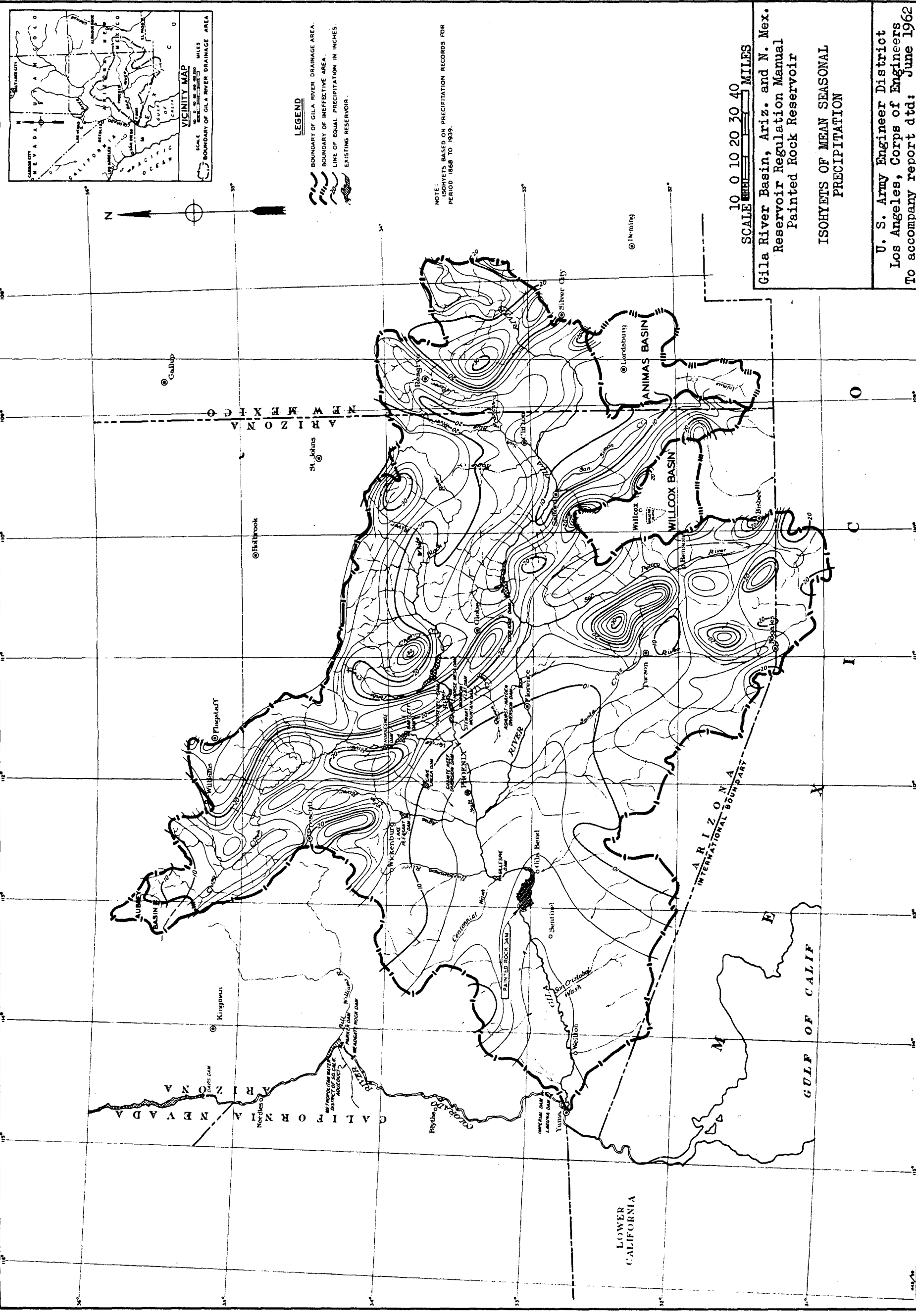
- LEGEND**
- BOUNDARY OF GILA RIVER DRAINAGE AREA
 - - - BOUNDARY OF INEFFECTIVE AREA
 - ◻ EXISTING RESERVOIR
 - SNOW COURSE
 - ◻ CORPS OF ENGINEERS OFFICE
 - ◻ OTHER AGENCY OFFICE
 - ▲ STREAM GAGING STATION
 - PERTINENT RAINFALL STATION
 - RELAY STATION
 - RADIO CIRCUIT - AM
 - RADIO - TELEMARK CIRCUIT - AM
 - ◻ CLIMATOLOGICAL STATION

SCALE 10 0 10 20 30 40 MILES

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

HYDROLOGIC FACILITIES

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962



LEGEND

- BOUNDARY OF GILA RIVER DRAINAGE AREA.
- BOUNDARY OF INEFFECTIVE AREA.
- LINE OF EQUAL PRECIPITATION IN INCHES.
- EXISTING RESERVOIR.

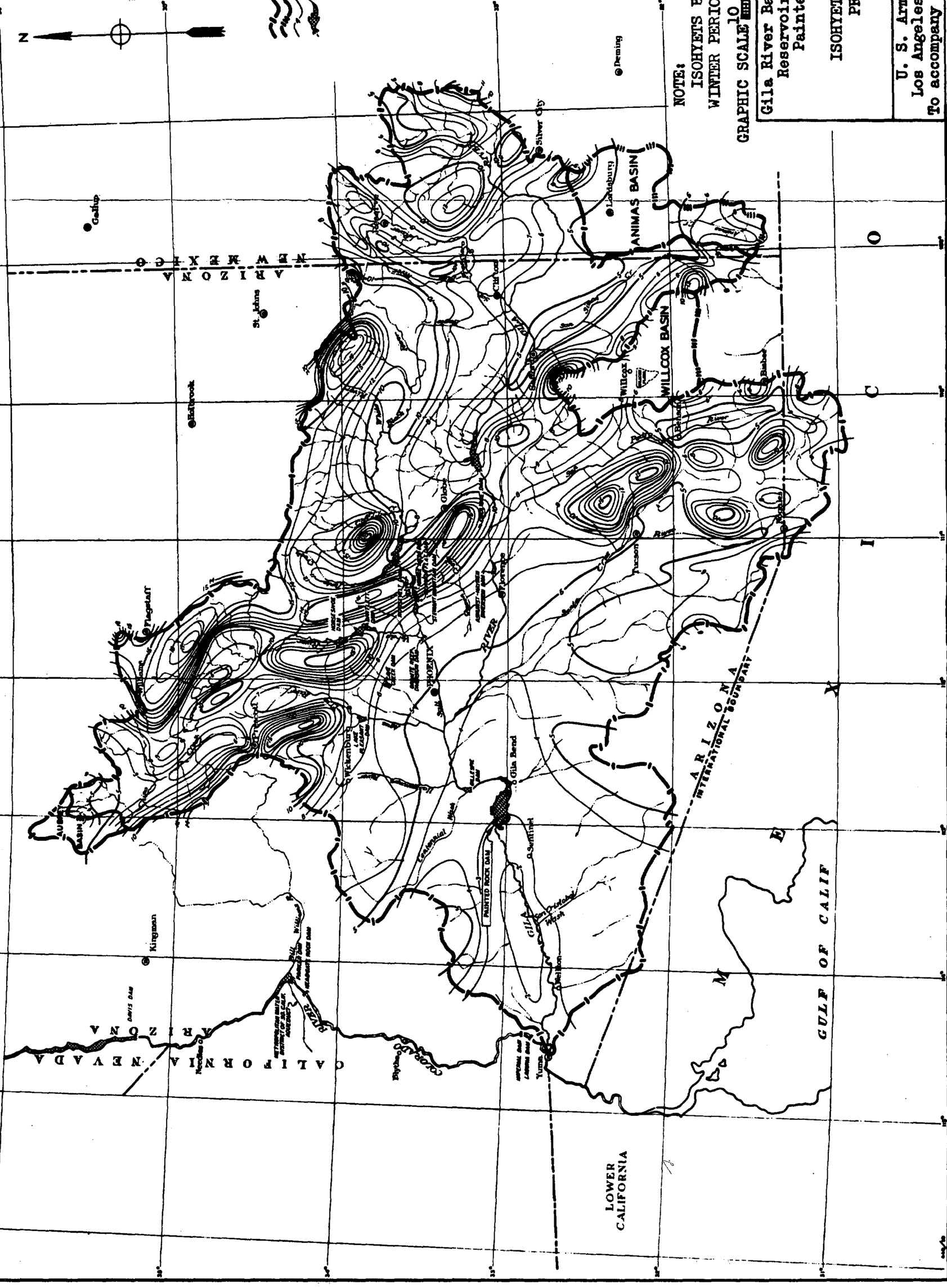
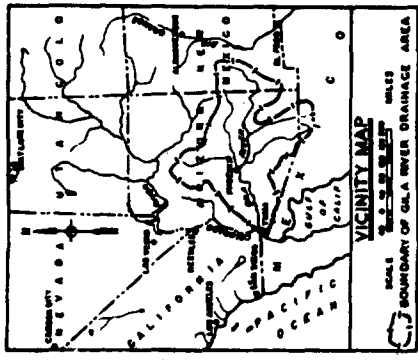
NOTE: ISOHYETS BASED ON PRECIPITATION RECORDS FOR PERIOD 1866 TO 1935.

SCALE 1:50,000 MILES
10 0 10 20 30 40

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

ISOHYETS OF MEAN SEASONAL
PRECIPITATION

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962



LEGEND

- BOUNDARY OF GILA RIVER DRAINAGE AREA.
- BOUNDARY OF ANIMAS BASIN.
- BOUNDARY OF INDEFINITE AREA.
- LINE OF EQUAL PRECIPITATION IN INCHES.
- EXISTING RESERVOIR.

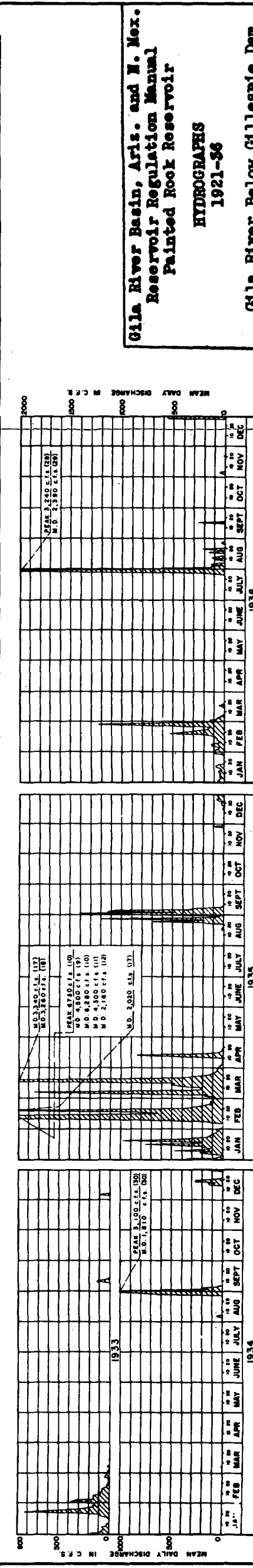
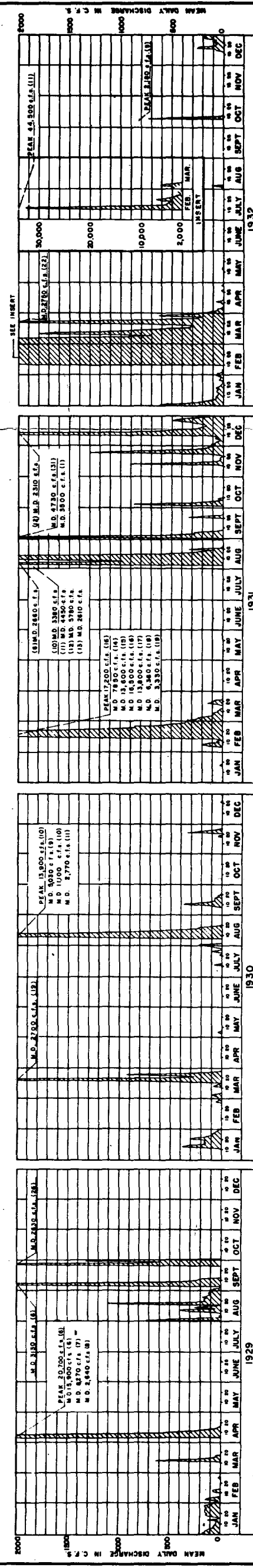
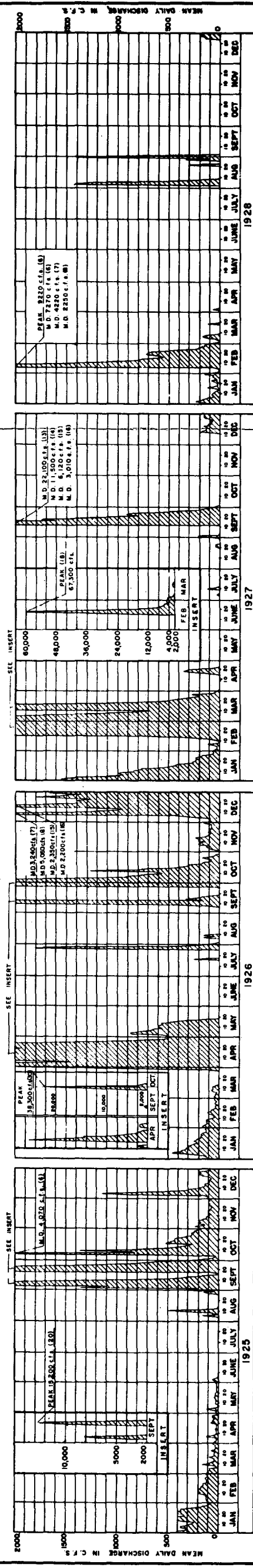
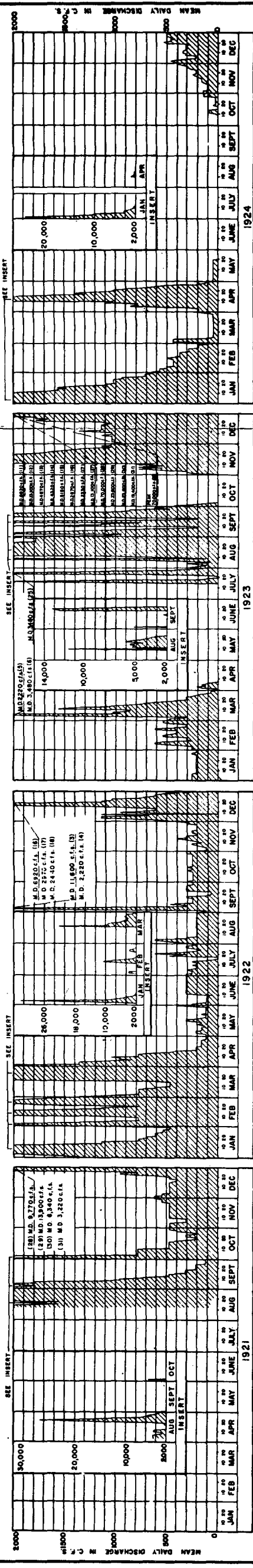
NOTE:
ISOHYETS BASED ON RECORDS FOR
WINTER PERIOD 1868-1939.

GRAPHIC SCALE 10 0 10 20 30 40 MILES

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

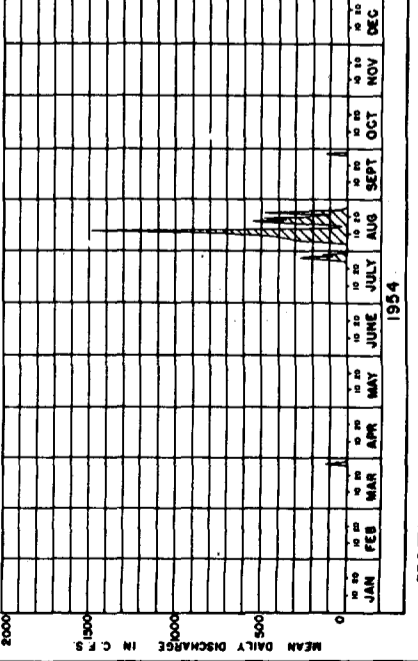
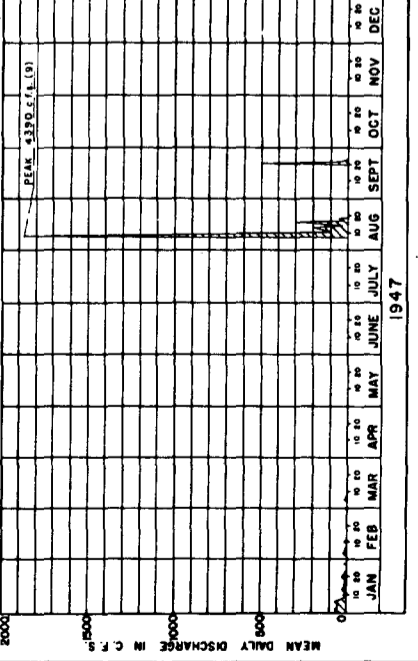
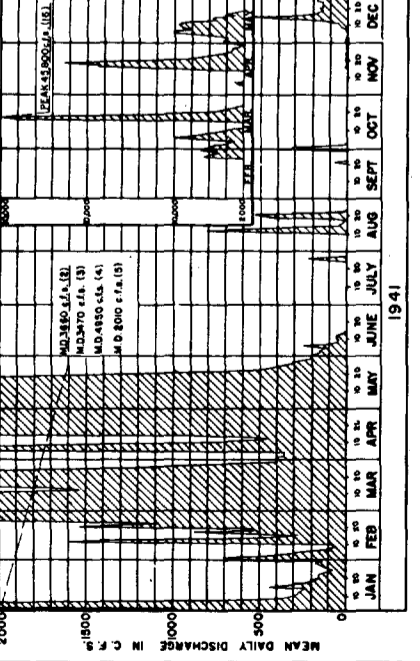
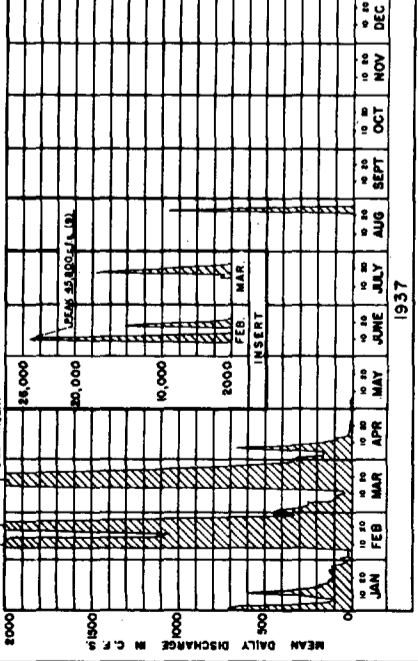
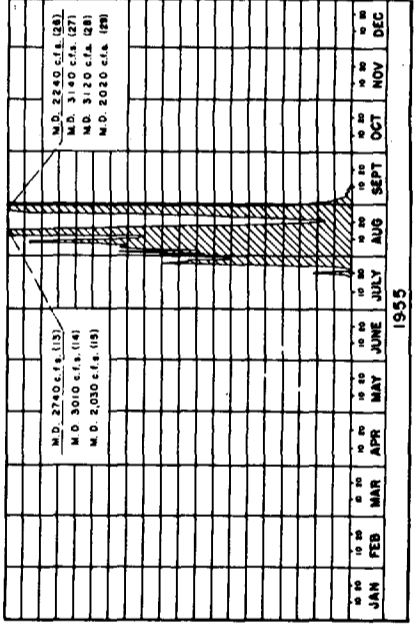
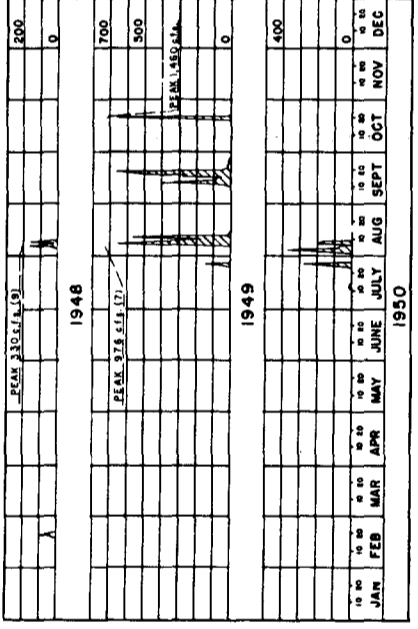
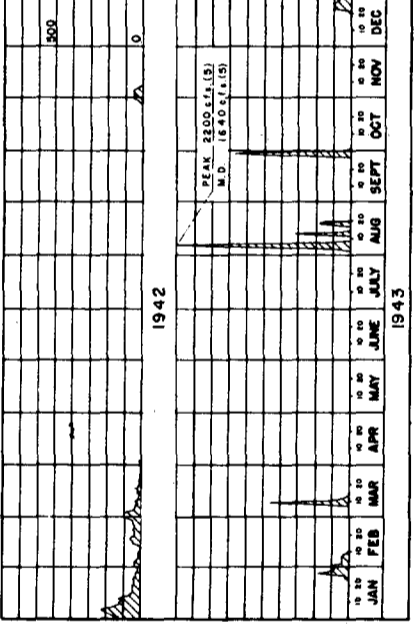
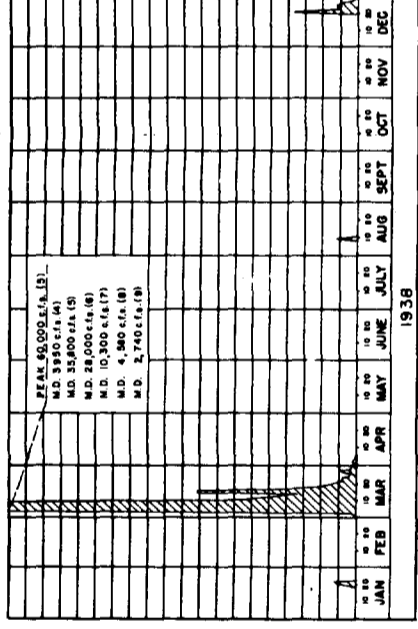
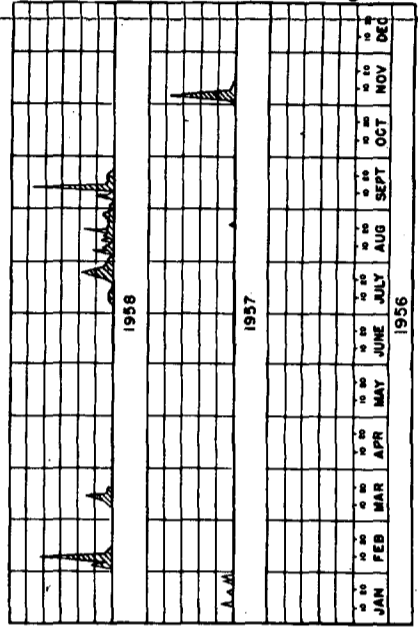
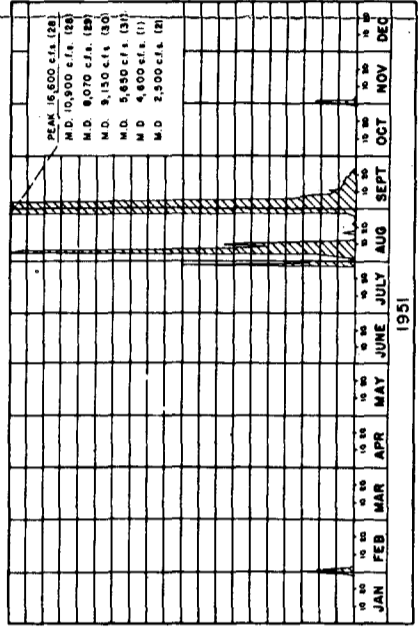
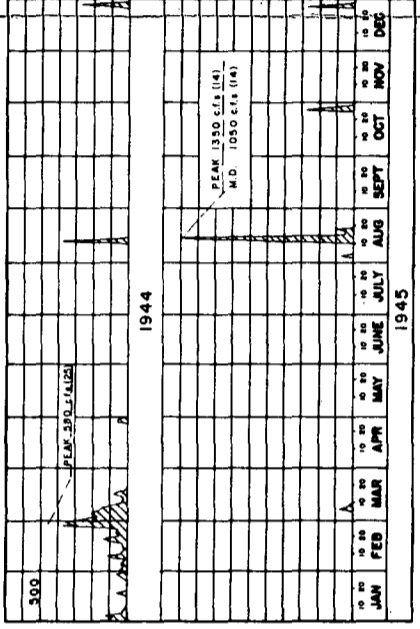
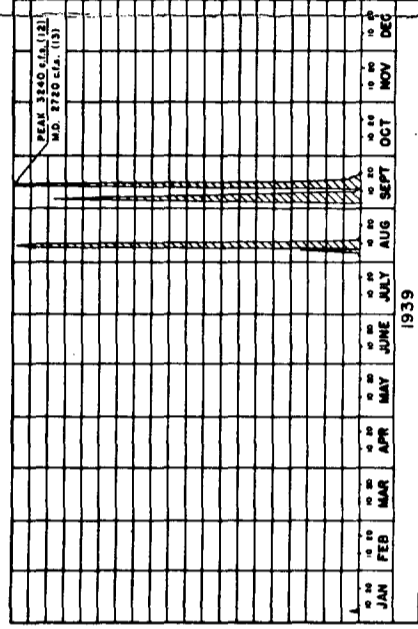
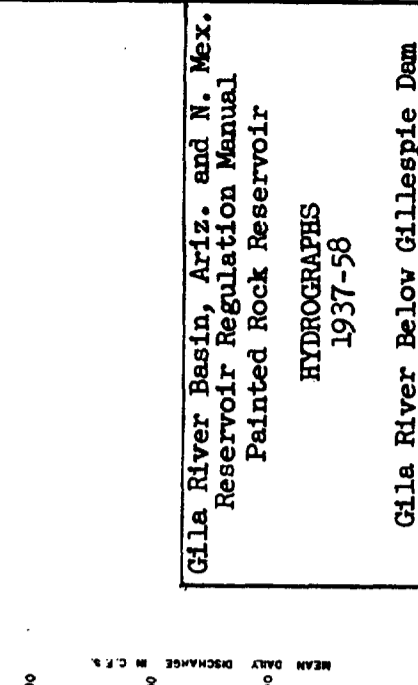
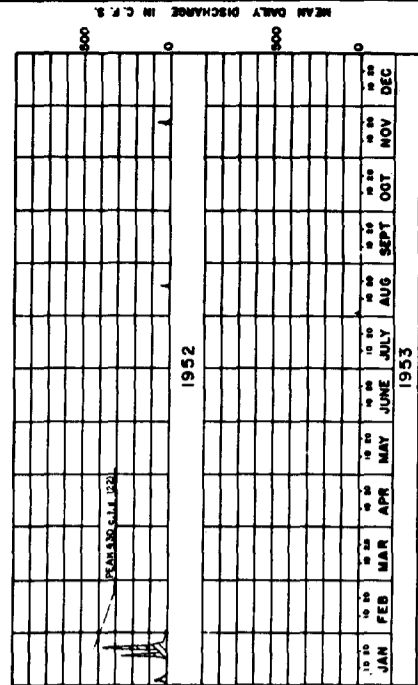
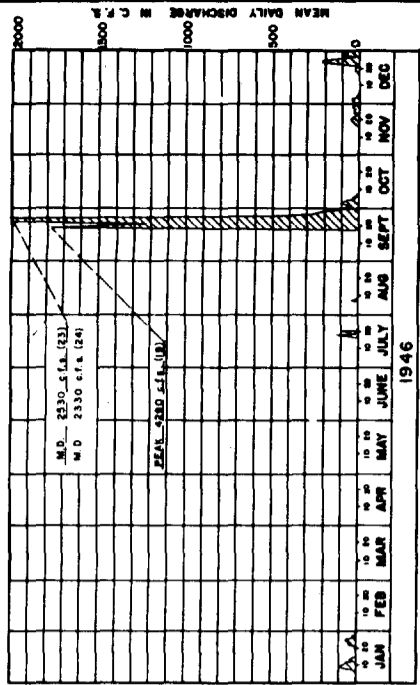
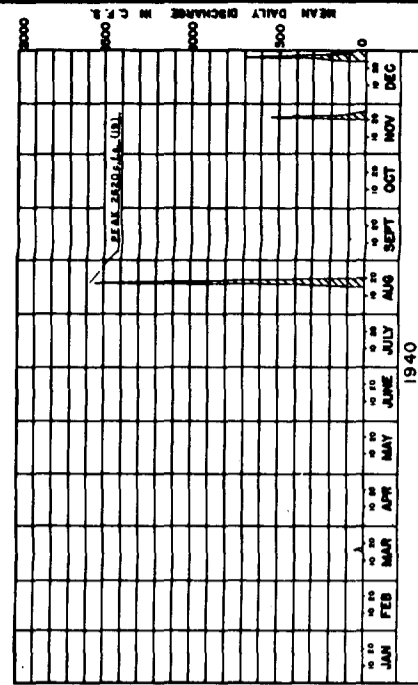
ISOHYETS OF MEAN WINTER
PRECIPITATION

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962



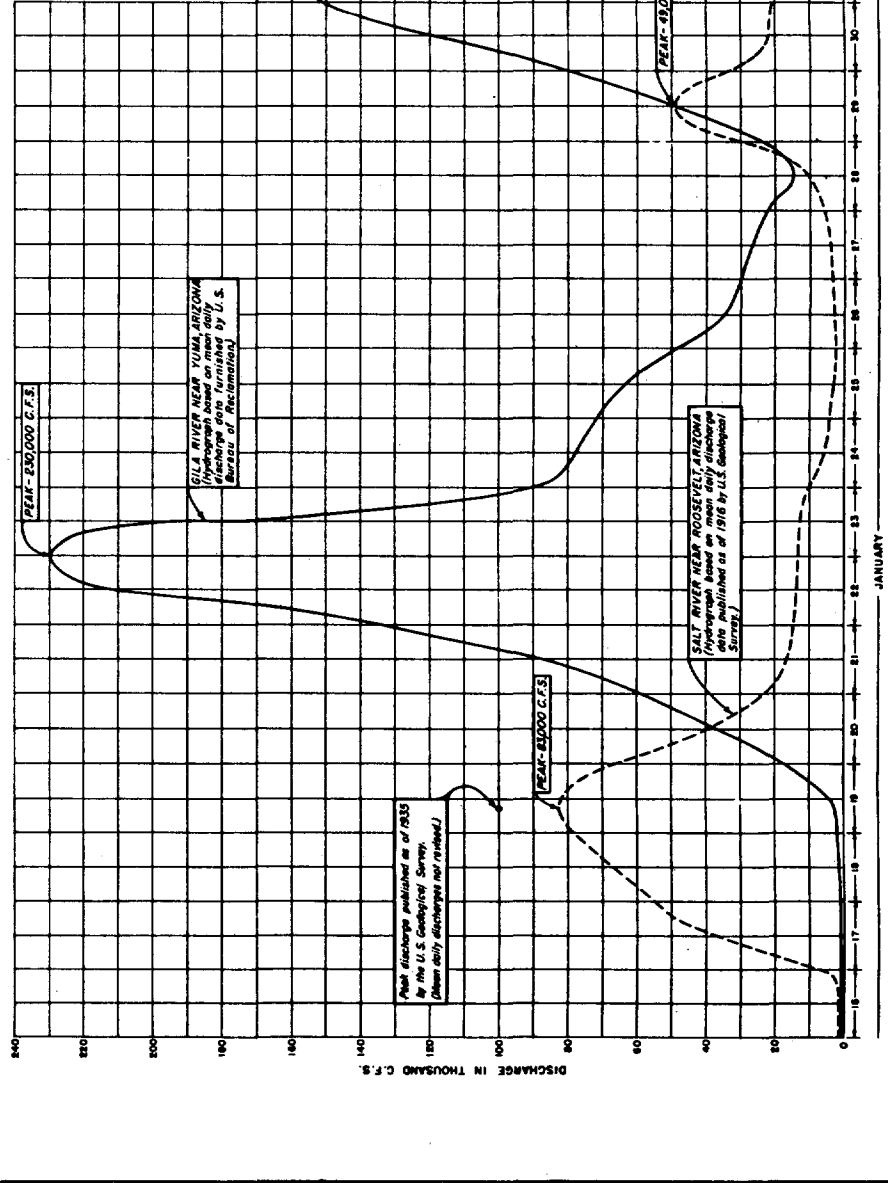
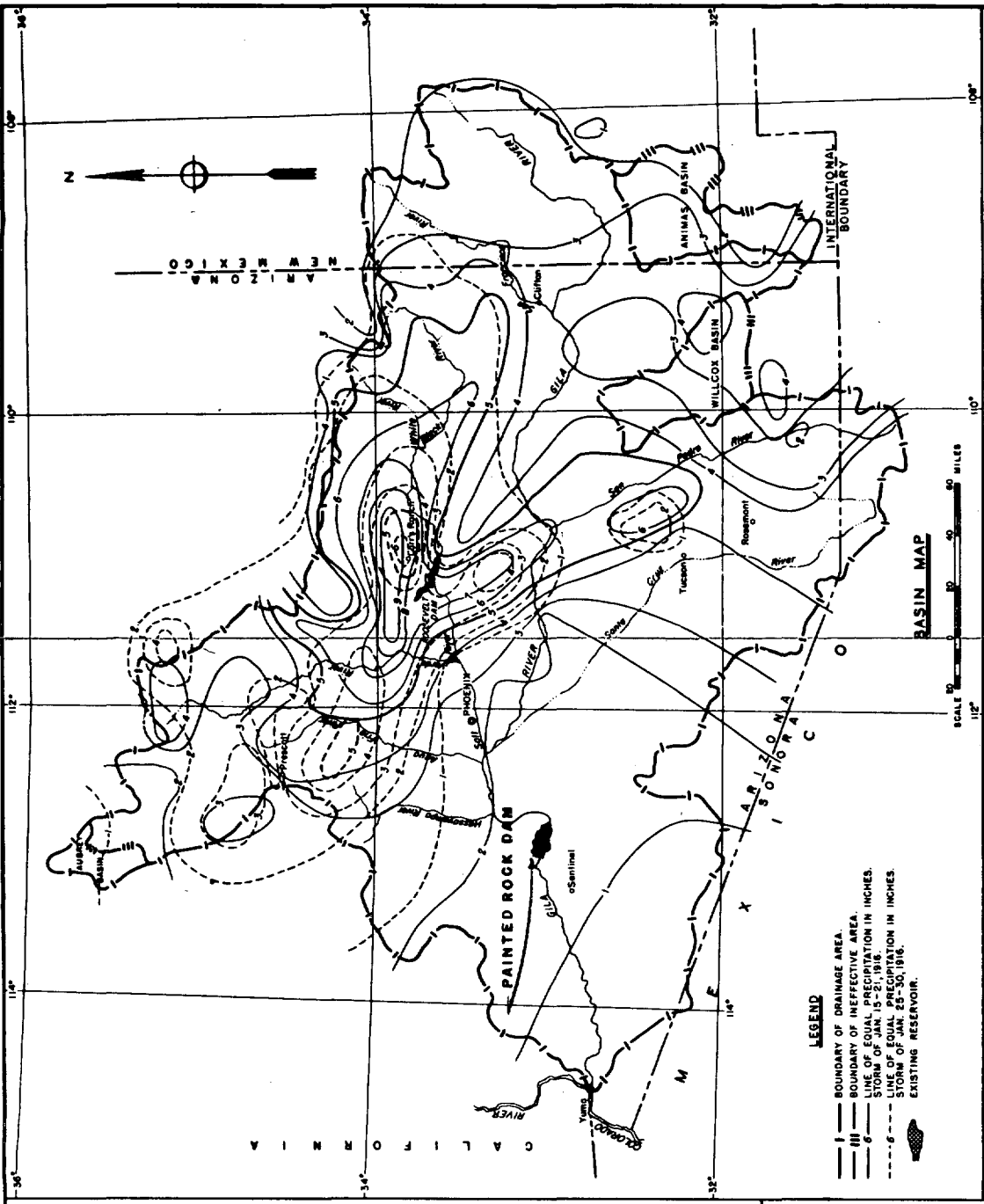
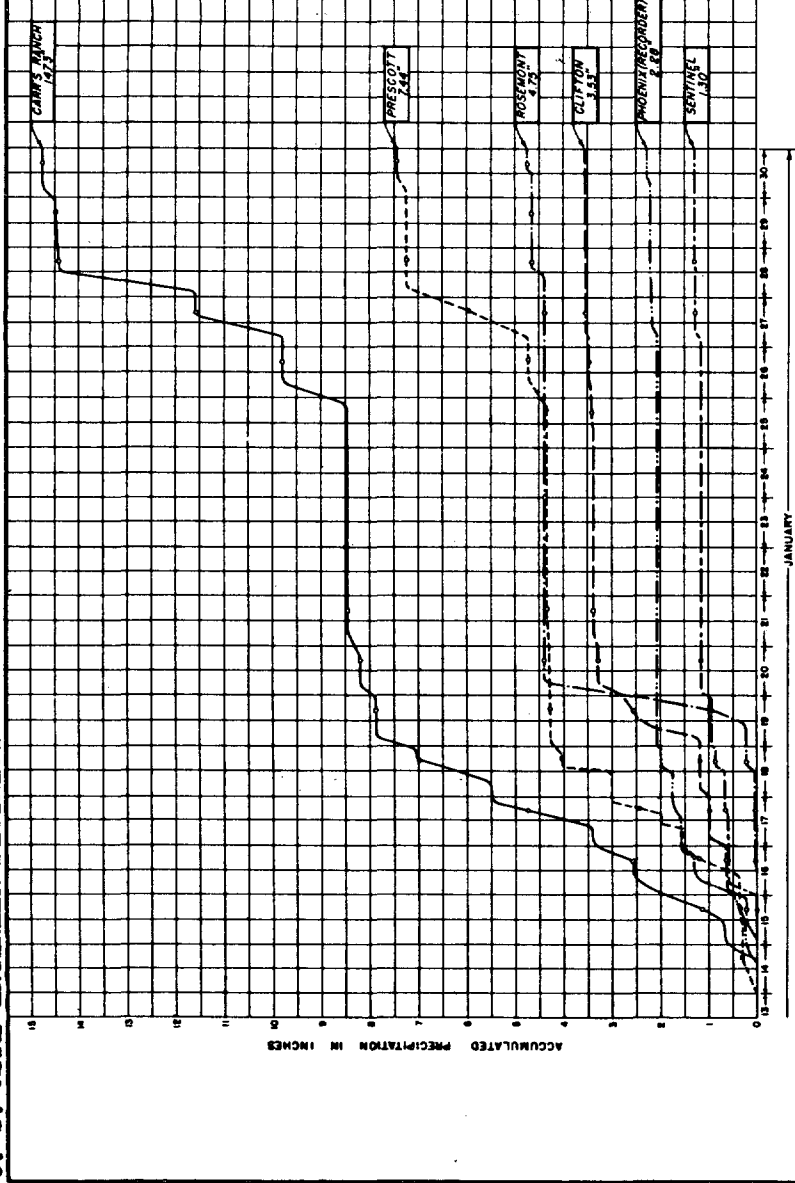
NOTE: HYDROGRAPHS SHOWN HEREON WERE COMPILED FROM U. S. GEOLOGICAL SURVEY RECORDS.

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir
HYDROGRAPHS
1921-36
Gila River Below Gillespie Dam
U. S. Army Engineer District
Los Angeles, Corps of Engineers
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Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir
HYDROGRAPHS
1937-58
Gila River Below Gillespie Dam
U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

NOTE: 1. HYDROGRAPHS SHOWN HEREON WERE COMPILED FROM U. S. GEOLOGICAL SURVEY RECORDS.
2. DURING CALENDAR YEARS 1959 AND 1960, MAXIMUM MEAN DAILY DISCHARGES WERE 530 C. F. S. AND 580 C. F. S., RESPECTIVELY.



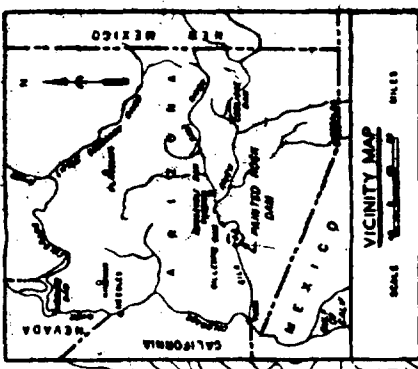
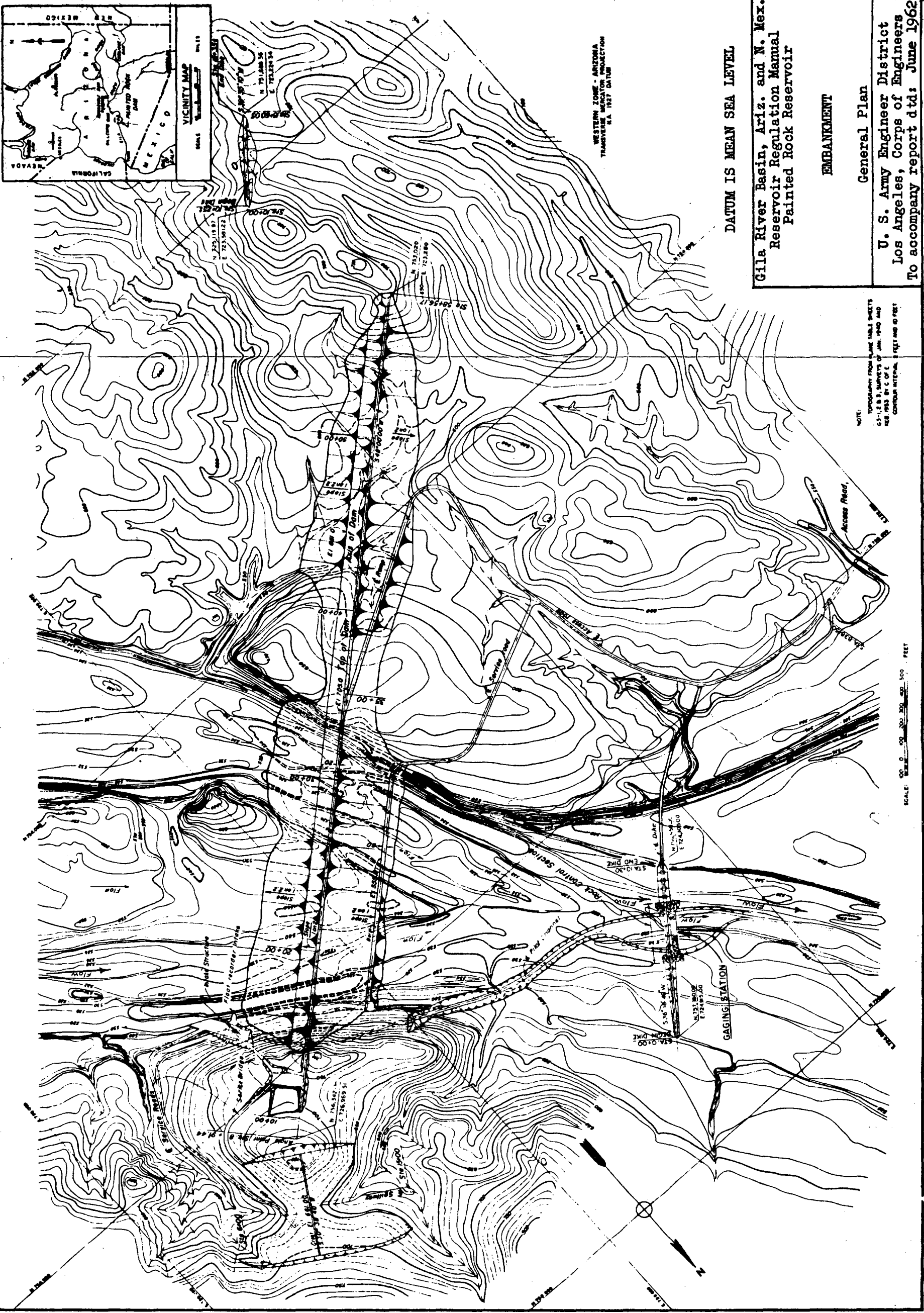
HYDROGRAPHS

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

HYDROLOGIC DATA

Floods of January 1916
U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

PLATE 9



WESTERN ZONE - ARIZONA
TRANSVERSE MERCATOR PROJECTION
N.A. 1927 DATUM

DATUM IS MEAN SEA LEVEL

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

EMBANKMENT

General Plan

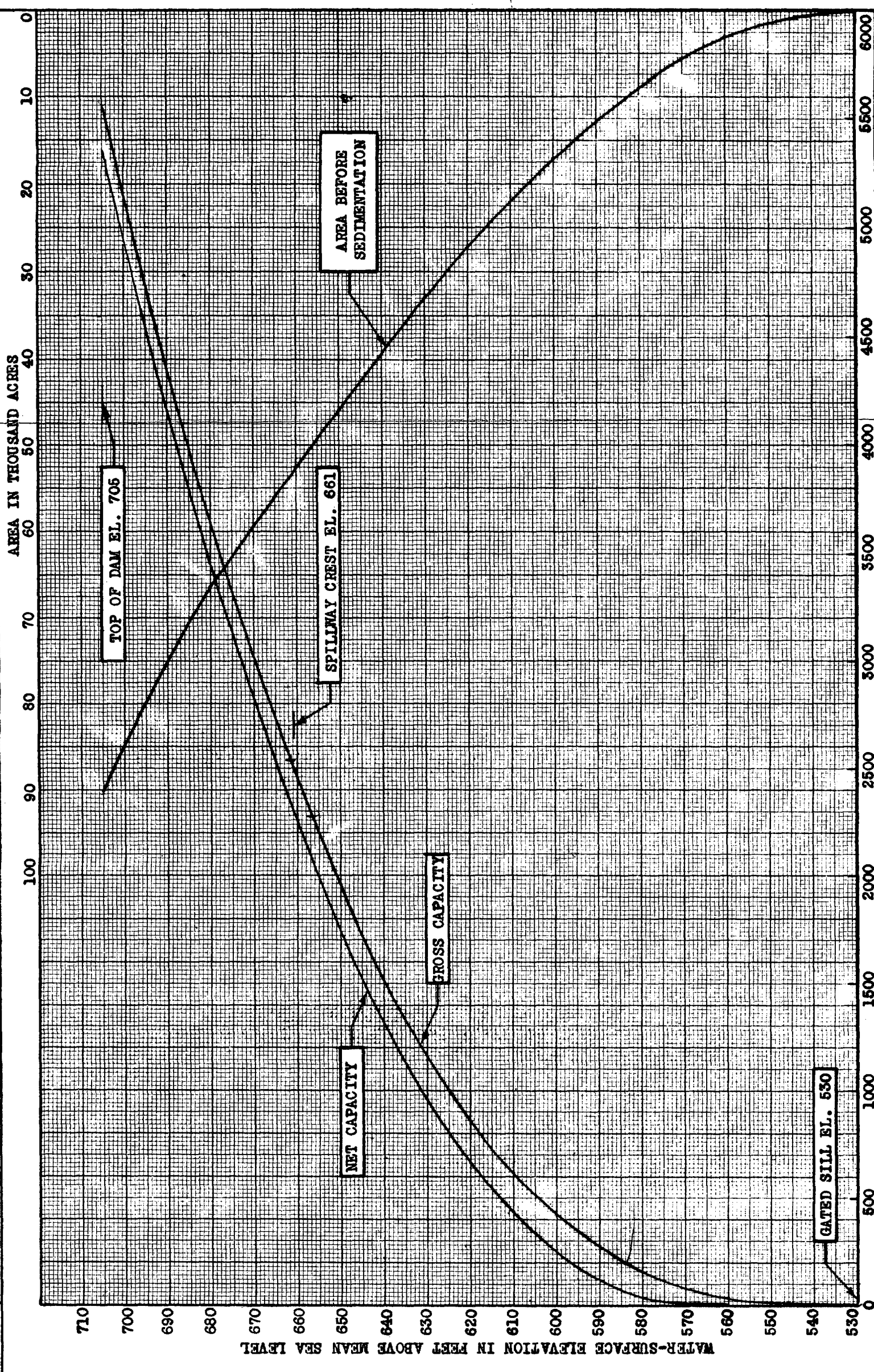
U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

NOTE:
TOPOGRAPHY FROM PLAIN TABLE SHEETS
63-1, 2, 3, SURVEYS OF JUN. 1940 AND
REVISIONS BY C. C. L.
CONTOUR INTERVAL: 1 FT. 1 MO. TO 50 FT.

SCALE: 1" = 500' FEET

Plate 11 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.



Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir

AREA AND CAPACITY CURVES
 FOR PAINTED ROCK RESERVOIR

Survey of March 1953
 U. S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962

NOTE. -- CURVES COMPUTED FROM DATA BASED ON AERIAL SURVEY OF MARCH 1953.

Plate 13 you are attempting to access is not currently available.

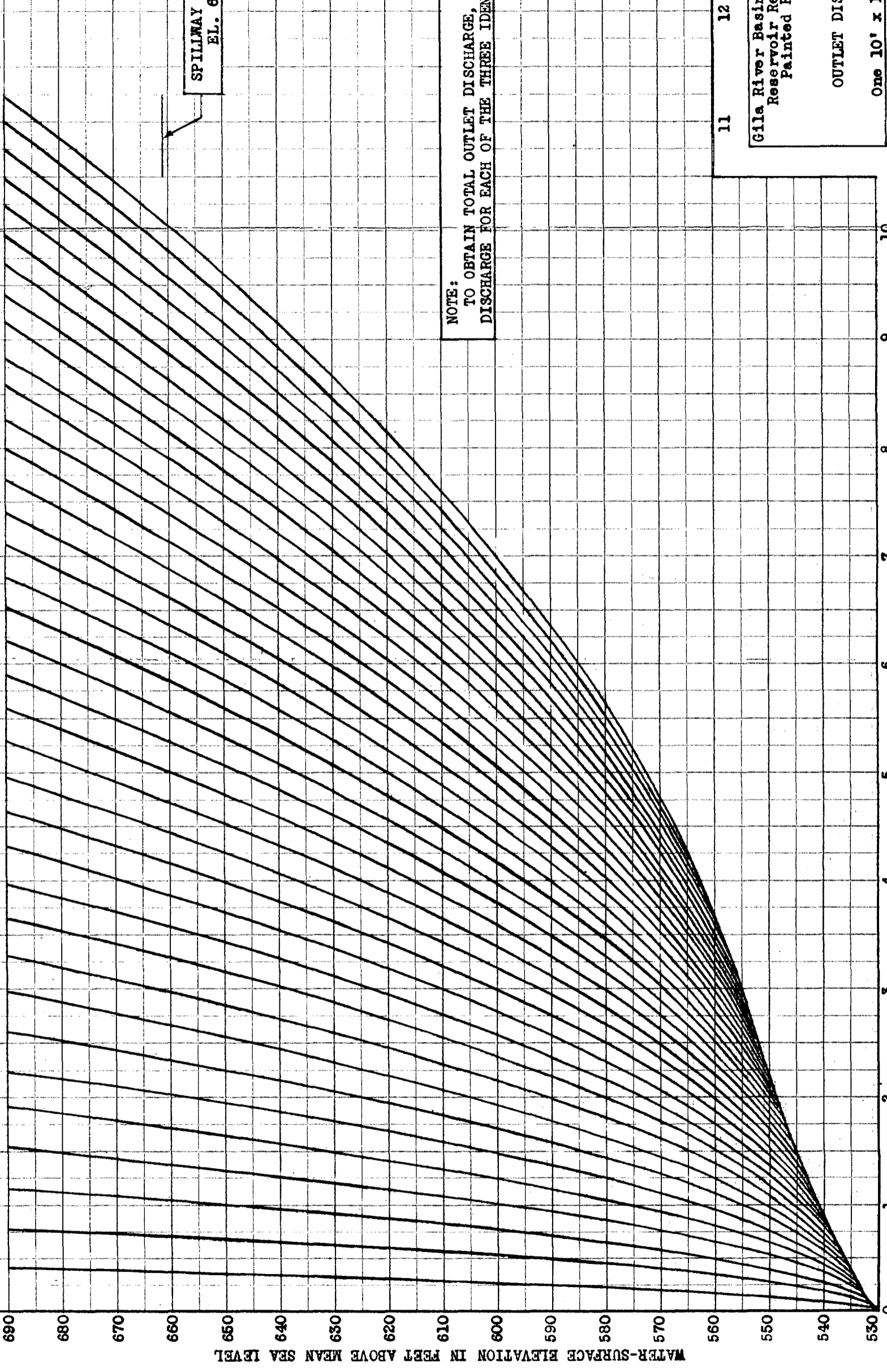
For additional information, please contact the Los Angeles District Public Affairs Office at (213) 452-3908.

Plate 14 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.

GATE OPENING IN FEET

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



WATER-SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL

DISCHARGE IN THOUSAND C. F. S.

SPILLWAY CREST
EL. 661

NOTE:
TO OBTAIN TOTAL OUTLET DISCHARGE, ADD THE
DISCHARGE FOR EACH OF THE THREE IDENTICAL GATES

11 12

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

OUTLET DISCHARGE CURVES

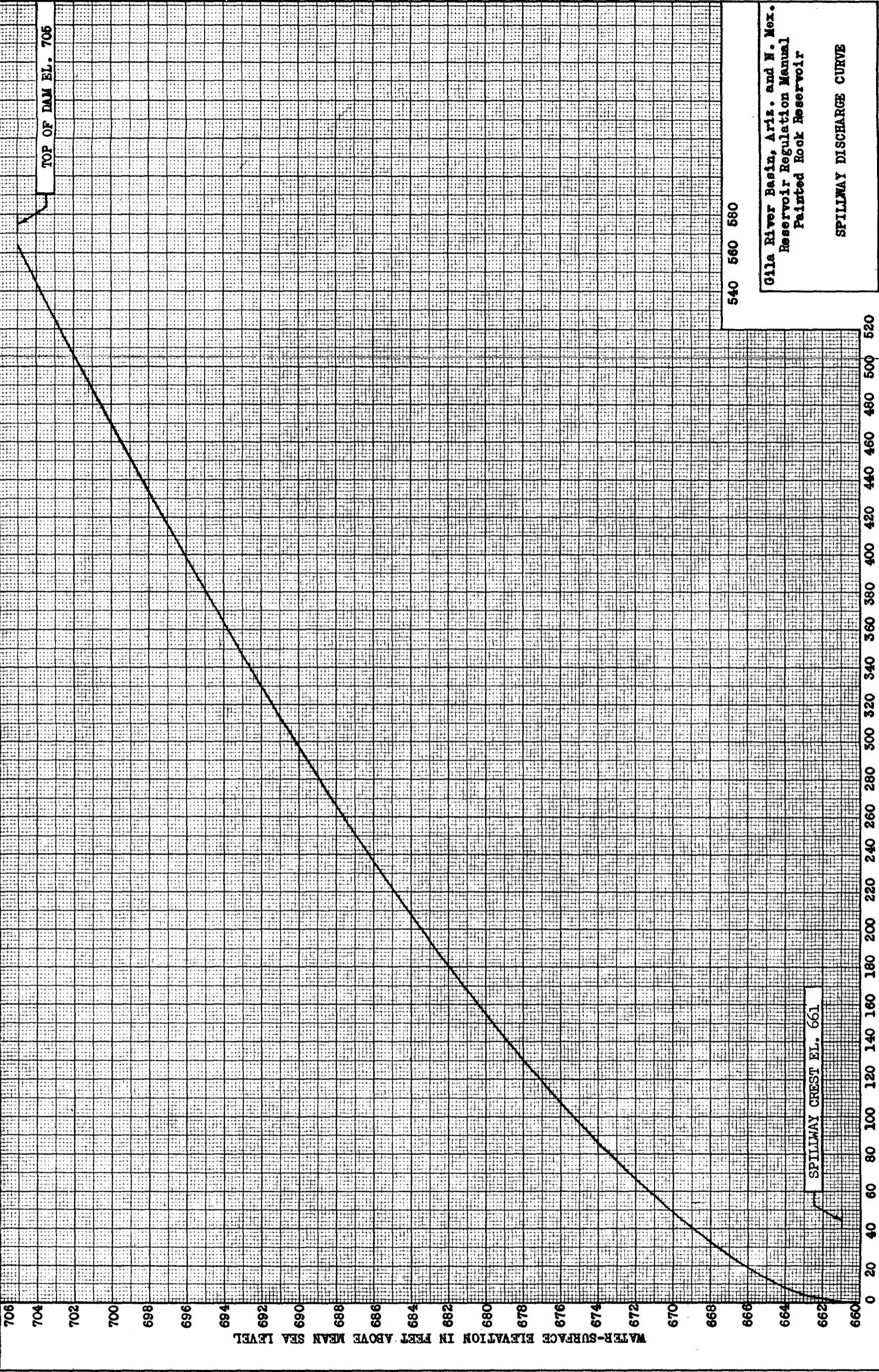
One 10' x 18' Gated Outlet
U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

Plate 16 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.

Plate 17 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.



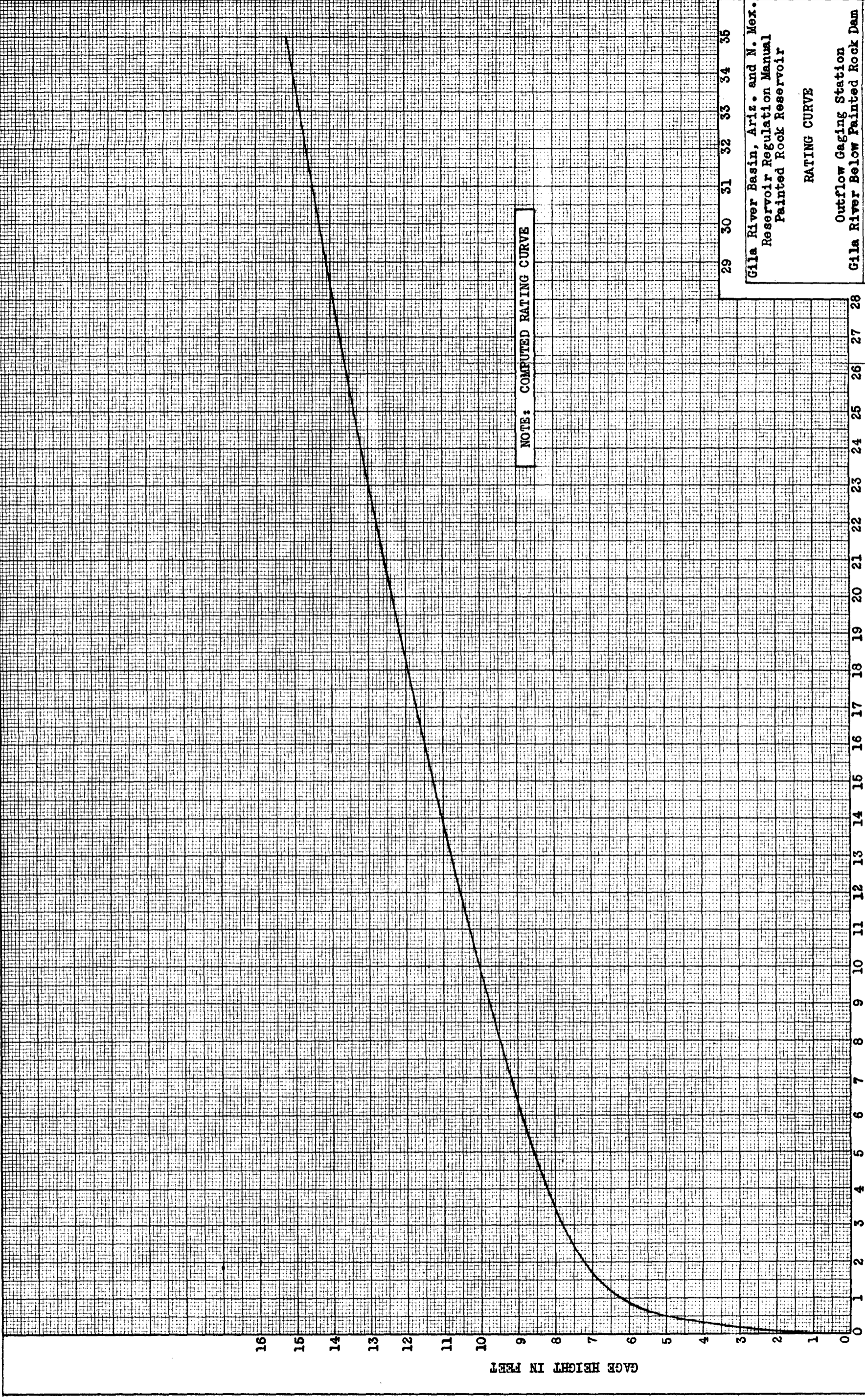
540 560 580

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

SPILLWAY DISCHARGE CURVE

U. S. Army Engineer District
Los Angeles, Corps of Engineers
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DISCHARGE IN THOUSAND C. F. S.



NOTE: COMPUTED RATING CURVE

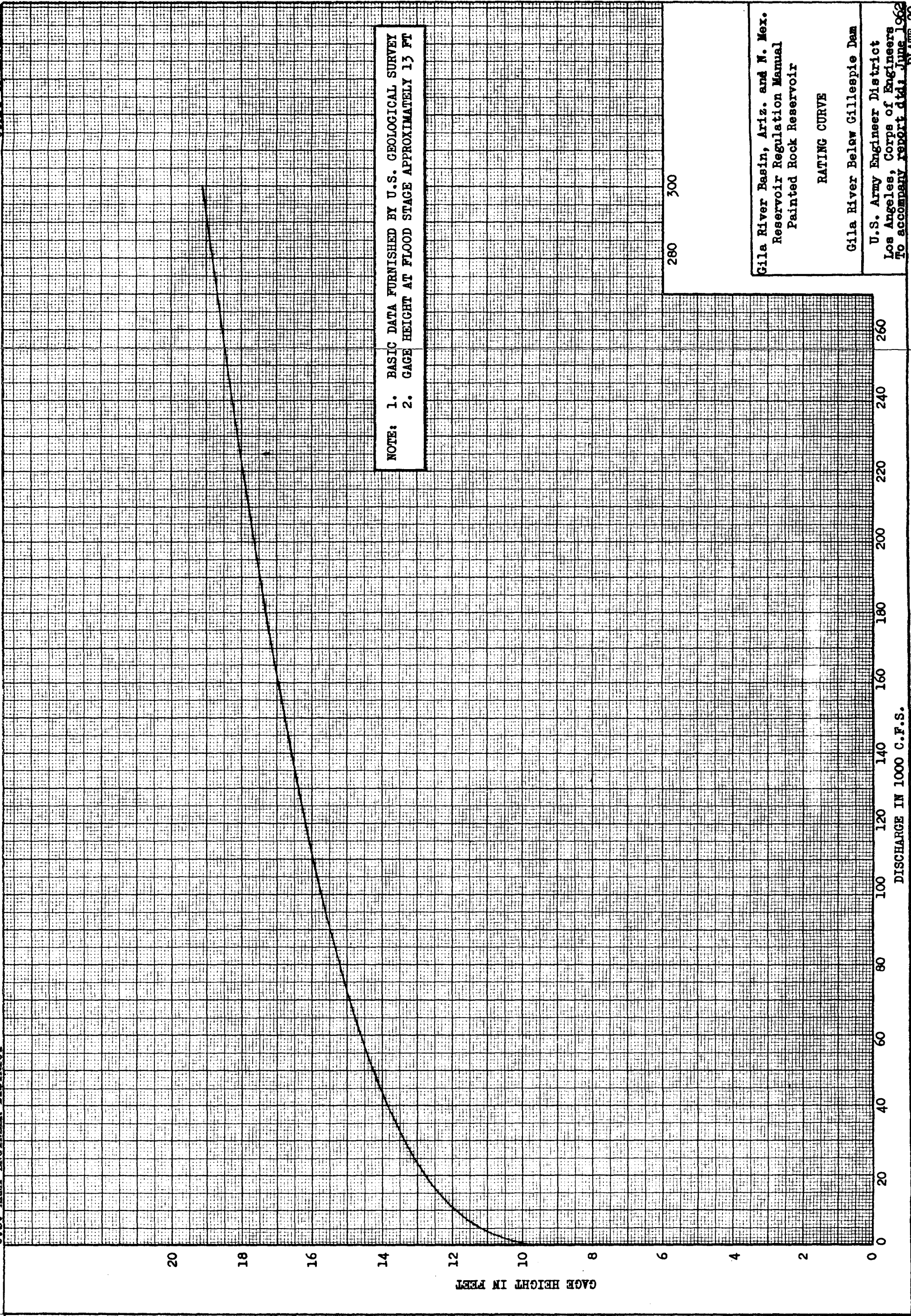
29 30 31 32 33 34 35 36

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir

RATING CURVE

Outflow Gaging Station
 Gila River Below Painted Rock Dam
 U. S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962

DISCHARGE IN THOUSAND C. F. S.



NOTE: 1. BASIC DATA FURNISHED BY U.S. GEOLOGICAL SURVEY
 2. GAGE HEIGHT AT FLOOD STAGE APPROXIMATELY 13 FT

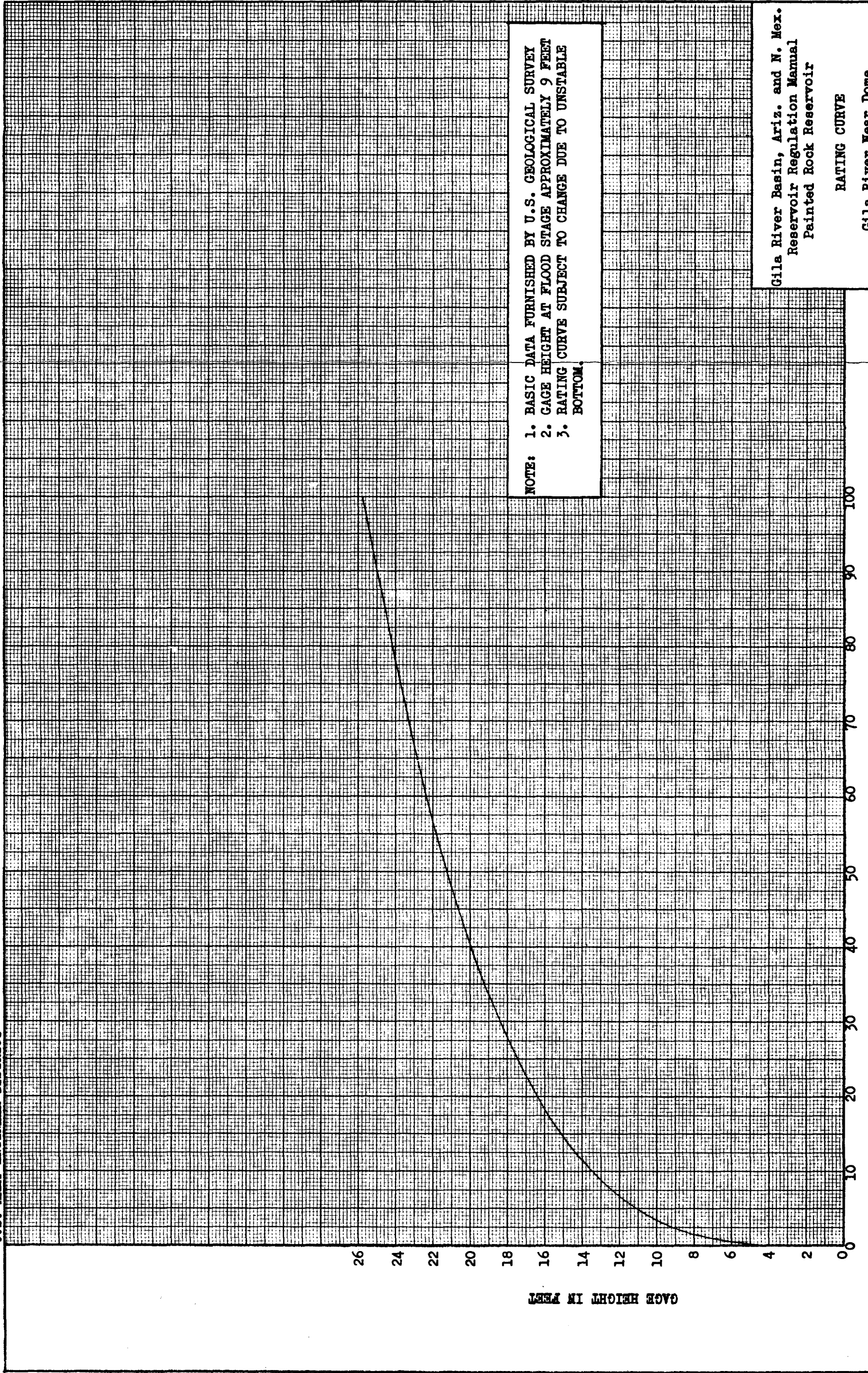
280 300

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir

RATING CURVE

Gila River Below Gillespie Dam
 U.S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd. June 1962

DISCHARGE IN 1000 C.F.S.



GAGE HEIGHT IN FEET

DISCHARGE IN 1000 C.F.S.

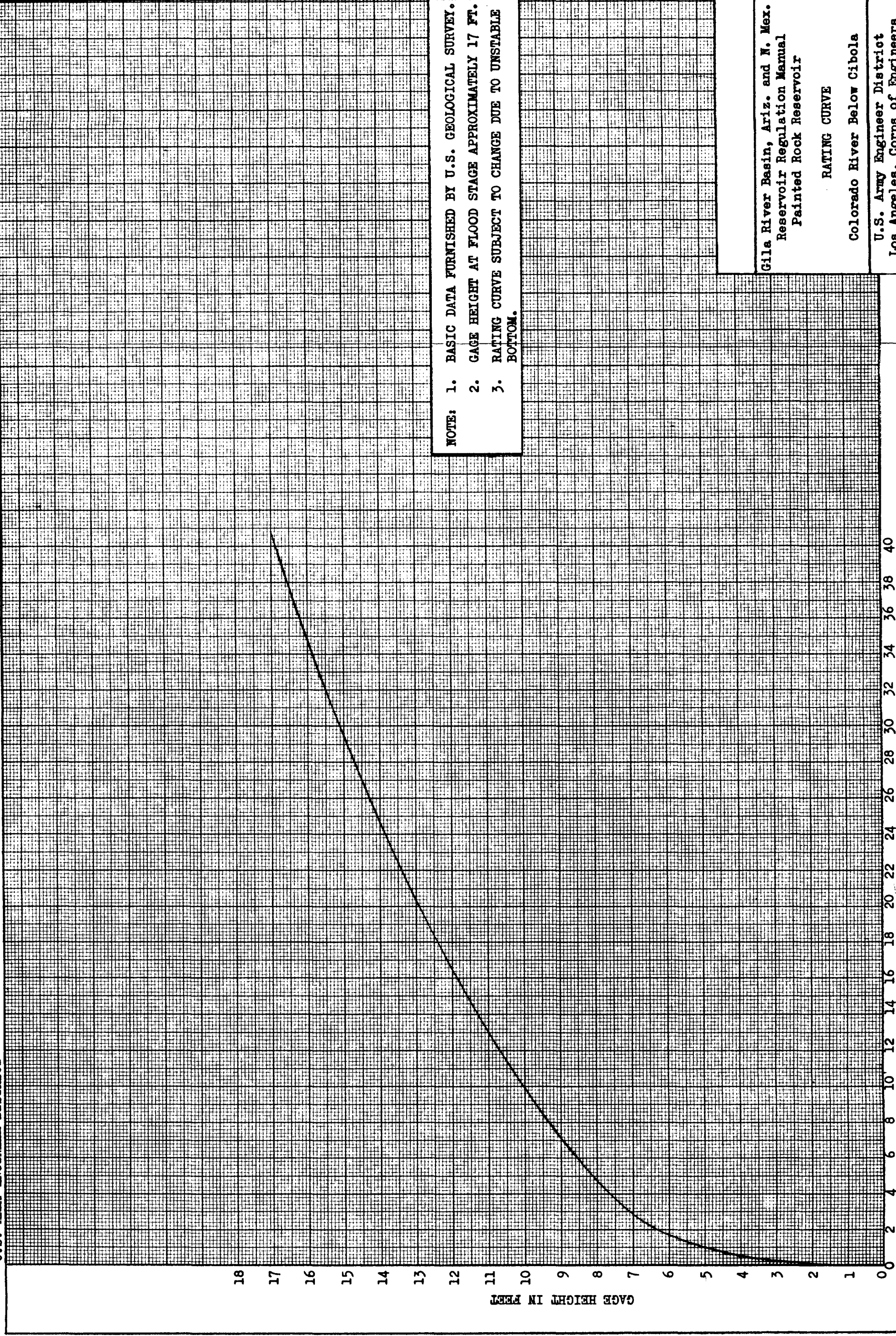
NOTE: 1. BASIC DATA FURNISHED BY U.S. GEOLOGICAL SURVEY
 2. GAGE HEIGHT AT FLOOD STAGE APPROXIMATELY 9 FEET
 3. RATING CURVE SUBJECT TO CHANGE DUE TO UNSTABLE BOTTOM.

Gila River Basin, Ariz. and N. Mex.
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 Painted Rock Reservoir

RATING CURVE

Gila River Near Dome

U.S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962

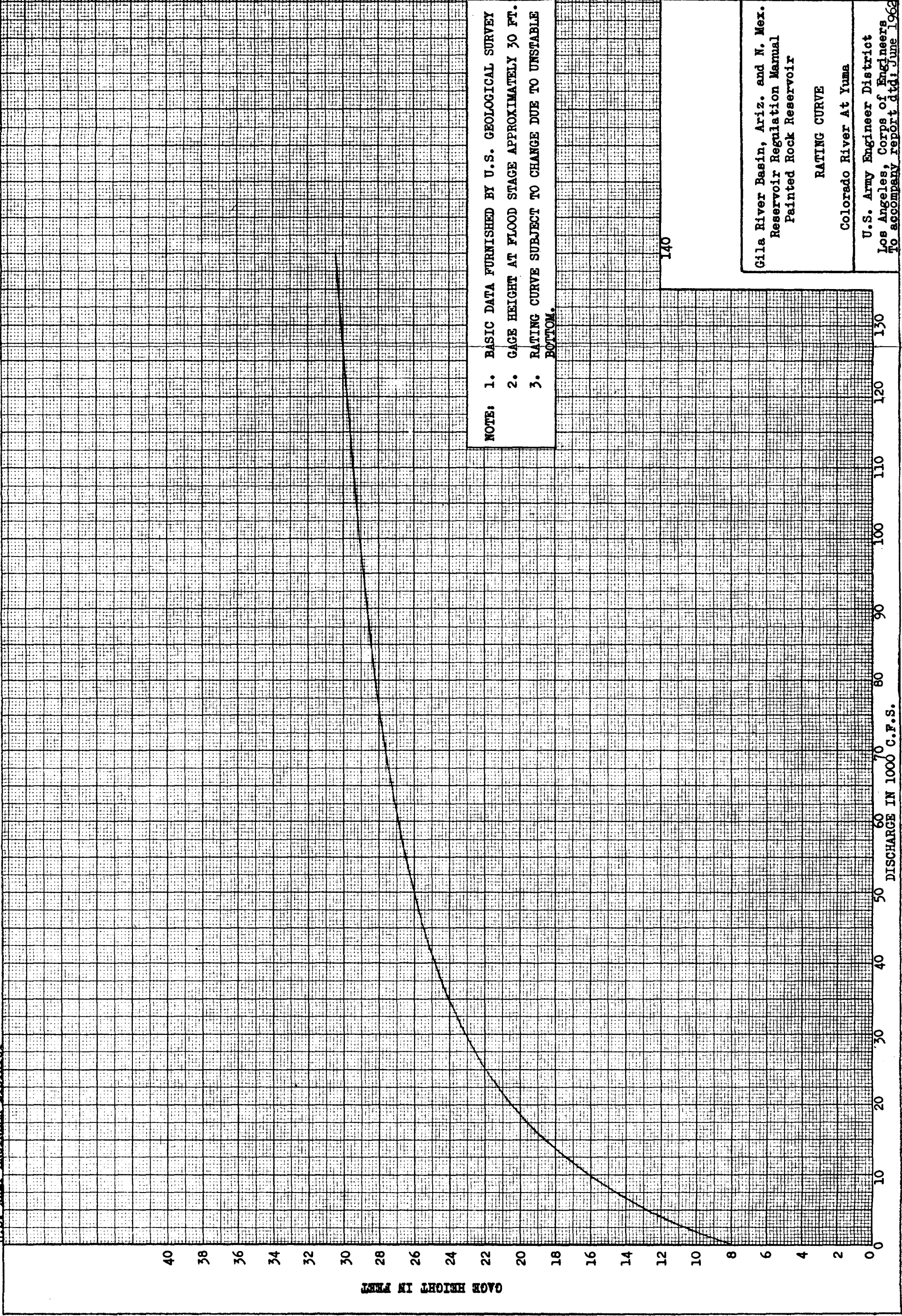


NOTE: 1. BASIC DATA FURNISHED BY U.S. GEOLOGICAL SURVEY.
 2. GAGE HEIGHT AT FLOOD STAGE APPROXIMATELY 17 FT.
 3. RATING CURVE SUBJECT TO CHANGE DUE TO UNSTABLE BOTTOM.

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir
 RATING CURVE
 Colorado River Below Cibola

U.S. Army Engineer District
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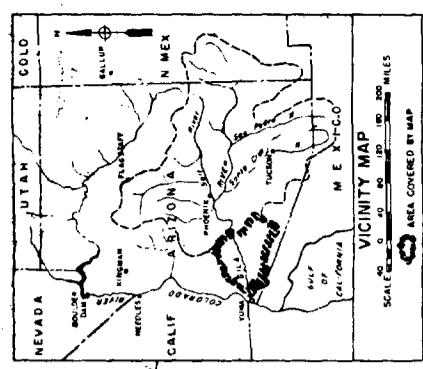
DISCHARGE IN 1000 C.F.S.



NOTE: 1. BASIC DATA FURNISHED BY U.S. GEOLOGICAL SURVEY
 2. GAGE HEIGHT AT FLOOD STAGE APPROXIMATELY 30 FT.
 3. RATING CURVE SUBJECT TO CHANGE DUE TO UNSTABLE BOTTOM.

140

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir
 RATING CURVE
 Colorado River At Yuma
 U.S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962



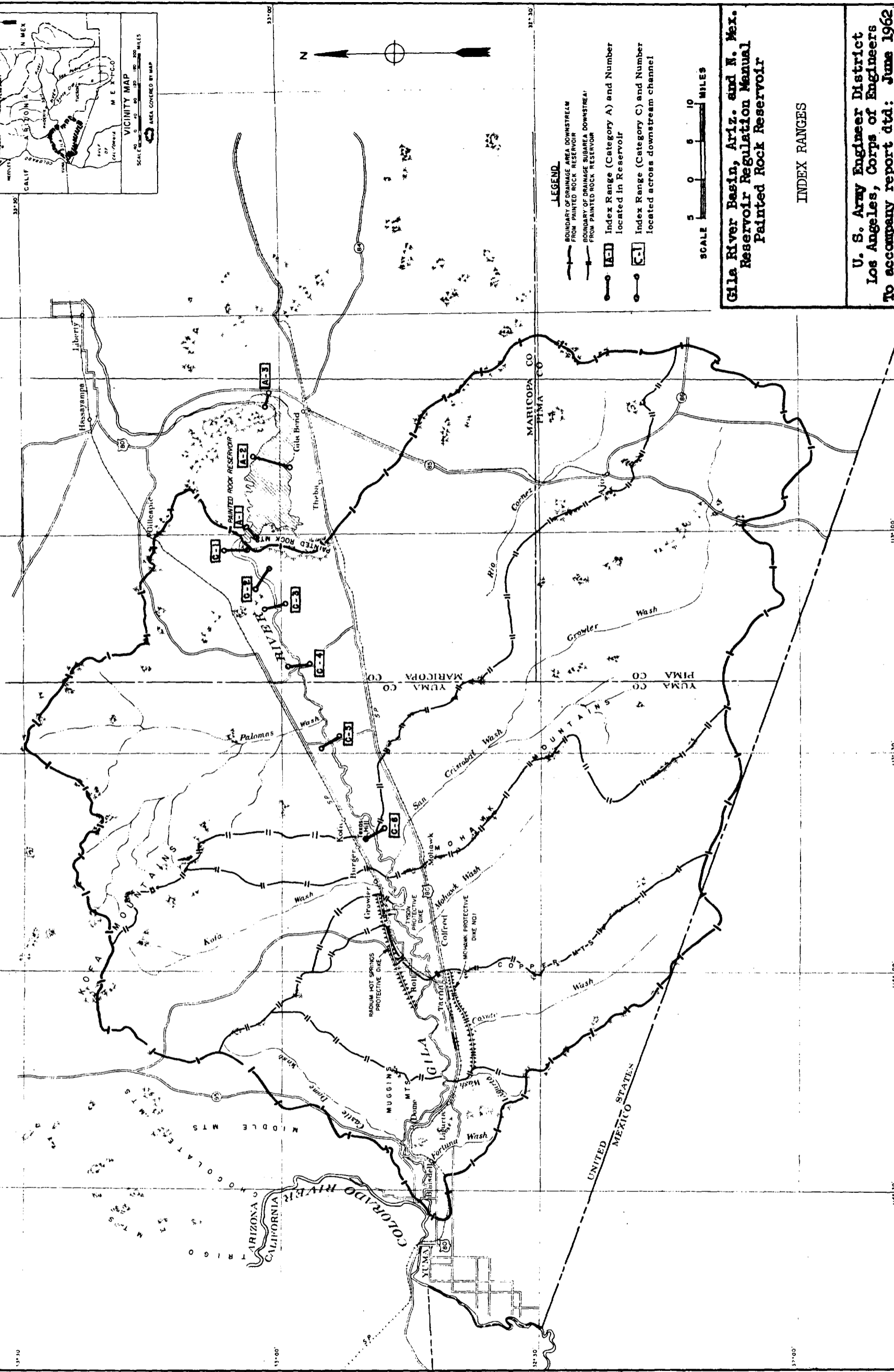
- LEGEND**
- BOUNDARY OF DRAINAGE AREA DOWNSTREAM FROM PAINTED ROCK RESERVOIR
 - BOUNDARY OF DRAINAGE SUBAREA DOWNSTREAM FROM PAINTED ROCK RESERVOIR
 - [A-1] Index Range (Category A) and Number located in Reservoir
 - [C-1] Index Range (Category C) and Number located across downstream channel

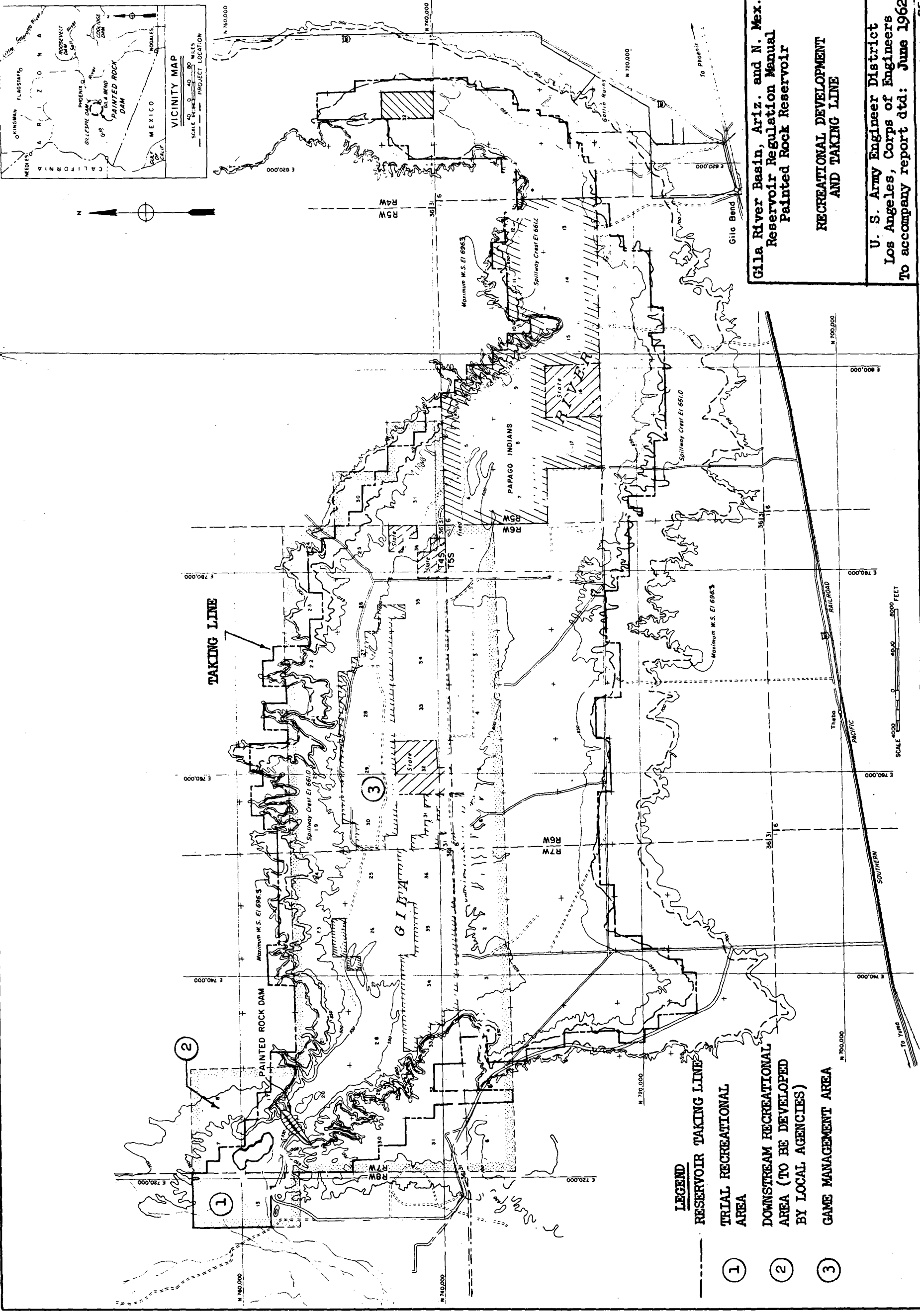


Gila River Basin, Ariz. and N. Mex.
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INDEX RANGES

U. S. Army Engineer District
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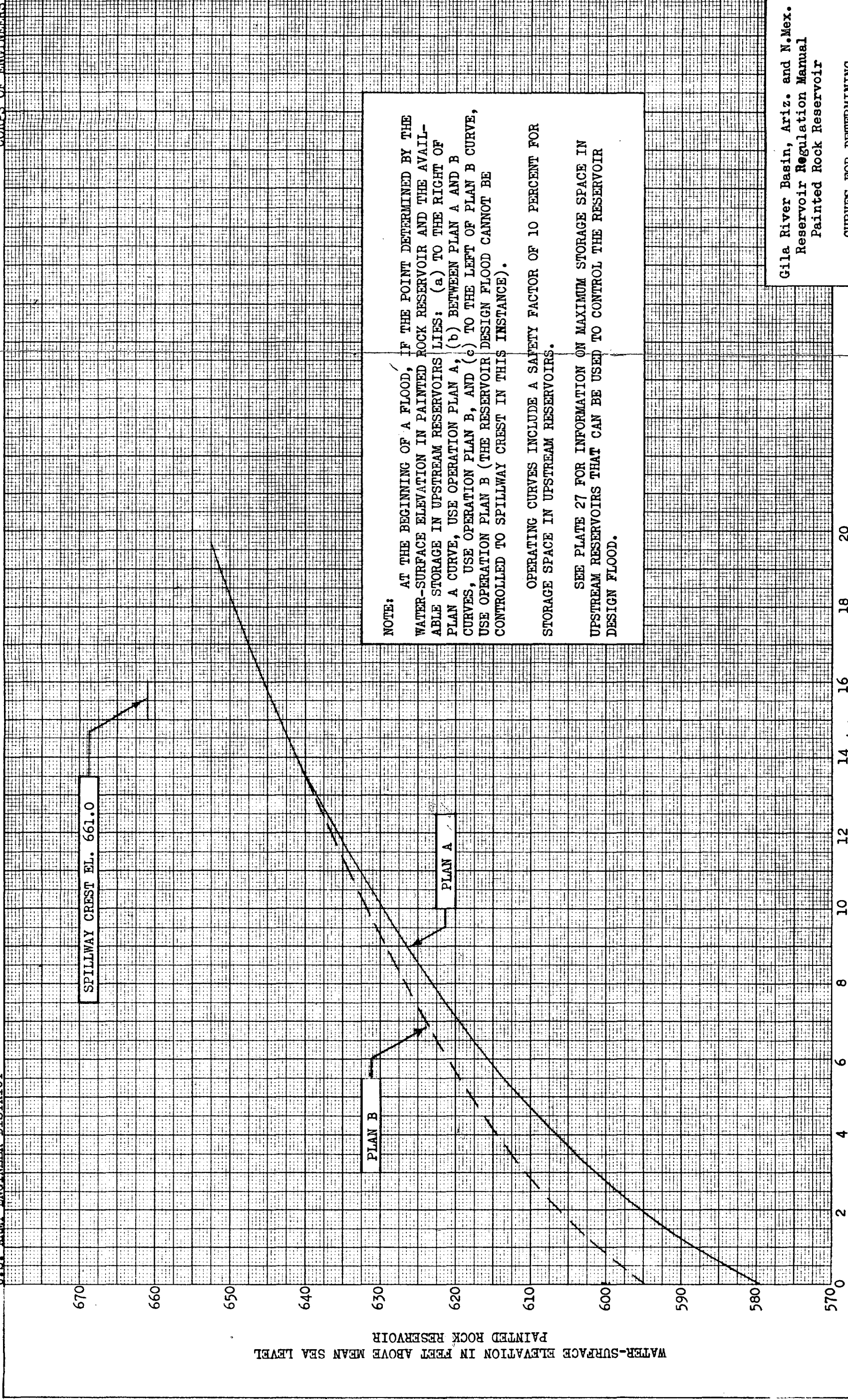
LEGEND

- RESERVOIR TAKING LINE
- ① TRIAL RECREATIONAL AREA
- ② DOWNSTREAM RECREATIONAL AREA (TO BE DEVELOPED BY LOCAL AGENCIES)
- ③ GAME MANAGEMENT AREA

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir

RECREATIONAL DEVELOPMENT
 AND TAKING LINE

U. S. Army Engineer District
 Los Angeles, Corps of Engineers
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WATER-SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
PAINTED ROCK RESERVOIR

STORAGE SPACE AVAILABLE IN UPSTREAM RESERVOIRS IN HUNDRED THOUSAND ACRE- FEET
TO CONTROL RESERVOIR DESIGN FLOOD

NOTE:

AT THE BEGINNING OF A FLOOD, IF THE POINT DETERMINED BY THE WATER-SURFACE ELEVATION IN PAINTED ROCK RESERVOIR AND THE AVAILABLE STORAGE IN UPSTREAM RESERVOIRS LIES: (a) TO THE RIGHT OF PLAN A CURVE, USE OPERATION PLAN A, (b) BETWEEN PLAN A AND B CURVES, USE OPERATION PLAN B, AND (c) TO THE LEFT OF PLAN B CURVE, USE OPERATION PLAN B (THE RESERVOIR DESIGN FLOOD CANNOT BE CONTROLLED TO SPILLWAY CREST IN THIS INSTANCE).

OPERATING CURVES INCLUDE A SAFETY FACTOR OF 10 PERCENT FOR STORAGE SPACE IN UPSTREAM RESERVOIRS.

SEE PLATE 27 FOR INFORMATION ON MAXIMUM STORAGE SPACE IN UPSTREAM RESERVOIRS THAT CAN BE USED TO CONTROL THE RESERVOIR DESIGN FLOOD.

Gila River Basin, Ariz. and N.Mex.
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Painted Rock Reservoir

CURVES FOR DETERMINING
OPERATION PLAN

U.S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

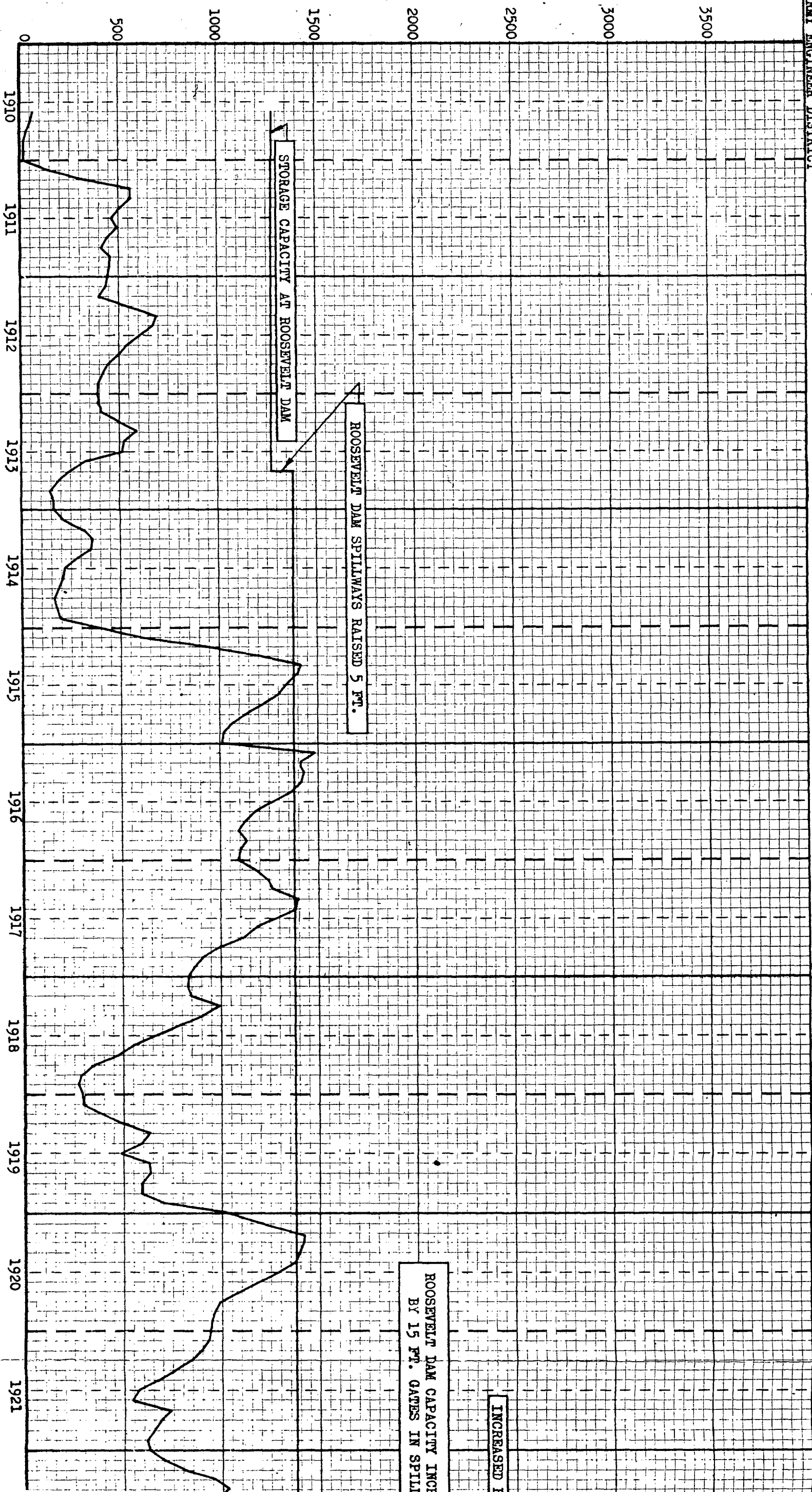
Existing dams above Painted Rock Reservoir
Maximum storage space that can be used to control a reservoir design flood

River system and dam	Usable storage space below spillway crest	Net storage in reservoir	Available storage space	Storage space in system above indicated dam that can be used to control a reservoir design flood	
				Accumulated storage space	Maximum useable storage space*
	<u>Acre-feet</u>	<u>Acre-feet</u>	<u>Acre-feet</u>	<u>Acre-feet</u>	<u>Acre-feet</u>
Gila: Coolidge.....	1,205,000				769,900
Salt: Roosevelt..... Horse Mesa..... Mormon Flat..... Stewart Mt.....	1,382,000 245,000 58,000 70,000				758,500 768,800 783,600 793,900
Verde: Horseshoe..... Bartlett.....	142,800 179,500				142,800 322,300
Agua Fria: Lake Pleasant.....	163,800				89,400
Total storage space above Coolidge, Stewart Mountain, Bartlett, and Lake Pleasant Dams, available to control reservoir design flood					1,975,500

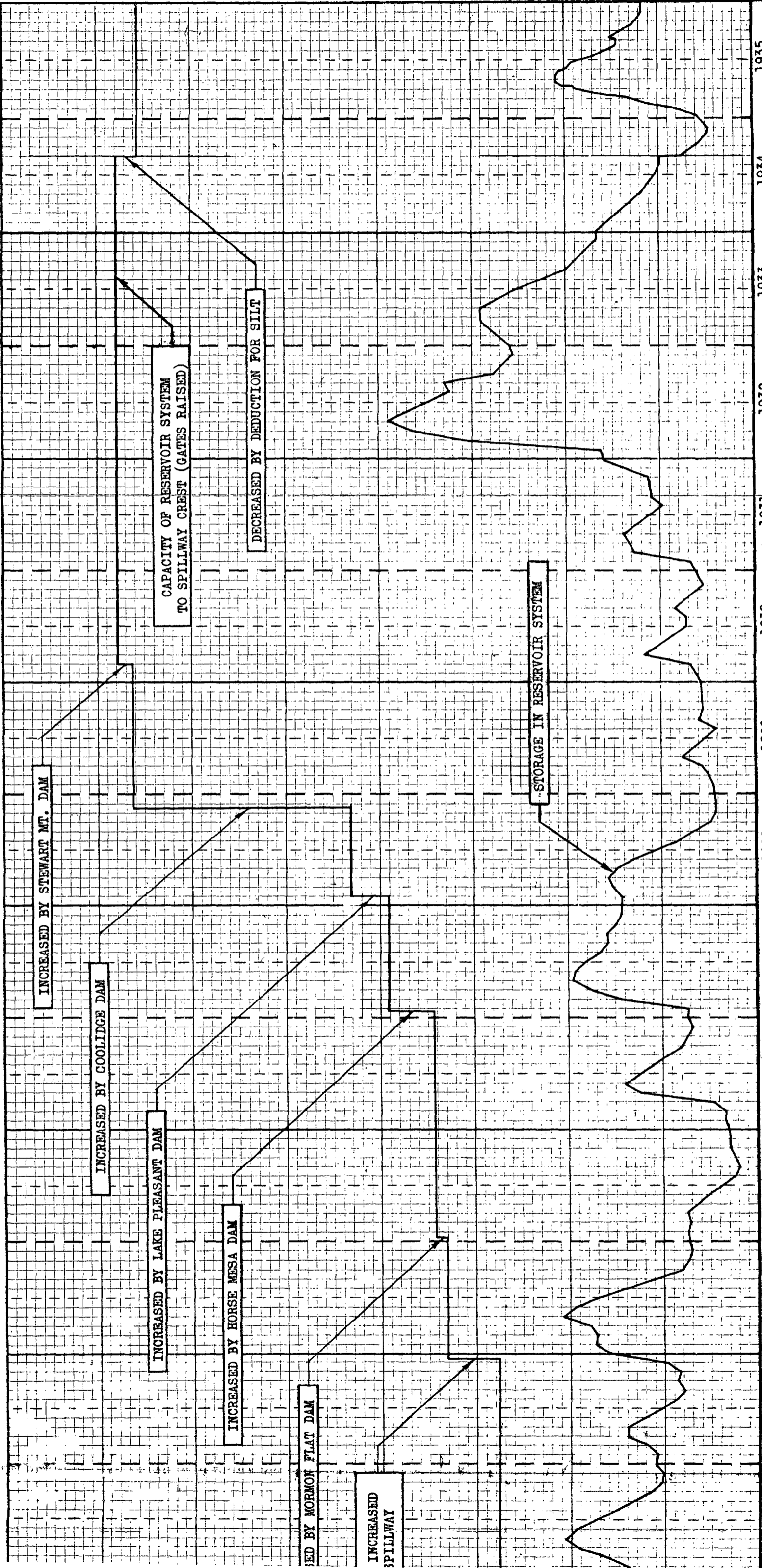
* Based on portion of standard project flood originating above indicated dam.

Note: Of the 50,800 sq. miles in the drainage area above Painted Rock Reservoir, 26,742 sq. miles are controlled by upstream reservoirs. Of the 2,800,000 ac.-ft. of volume in the reservoir design flood, 1,975,500 ac.-ft. can be stored in upstream reservoirs.

NET STORAGE IN THOUSAND ACRE-FEET



NOTE:
SEE
AVAIL.
DPSTRU



1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

STORAGE IN UPSTREAM
RESERVOIR SYSTEM

August 1910 Through December 1935
U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

NOTE:
SEE TABLE 1 FOR DETAILS ON
AVAILABLE STORAGE SPACE IN
STREAM RESERVOIRS.

INCREASED BY HORSESHOE DAM

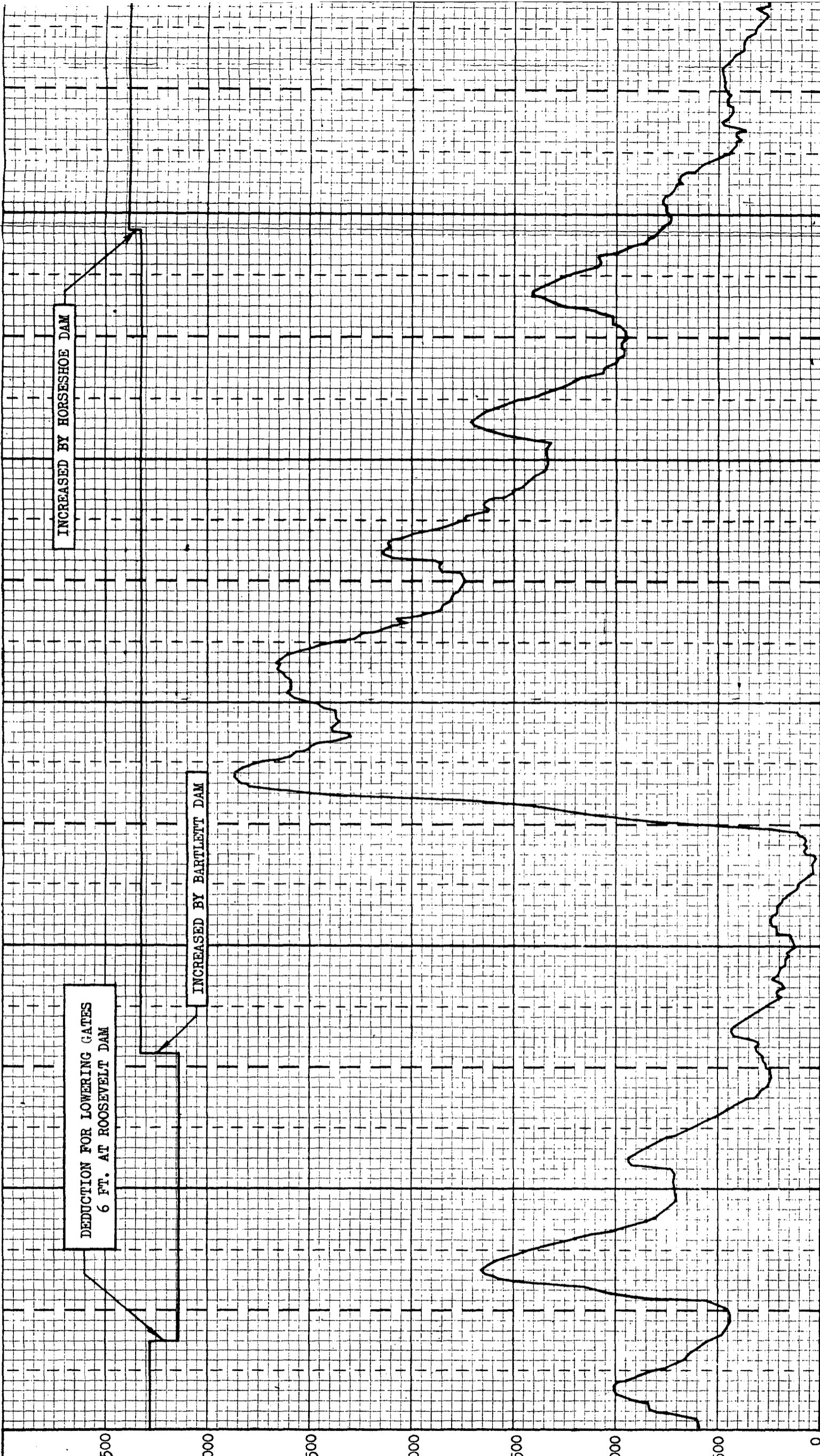
DEDUCTION FOR LOWERING GATES
6 FT. AT ROOSEVELT DAM

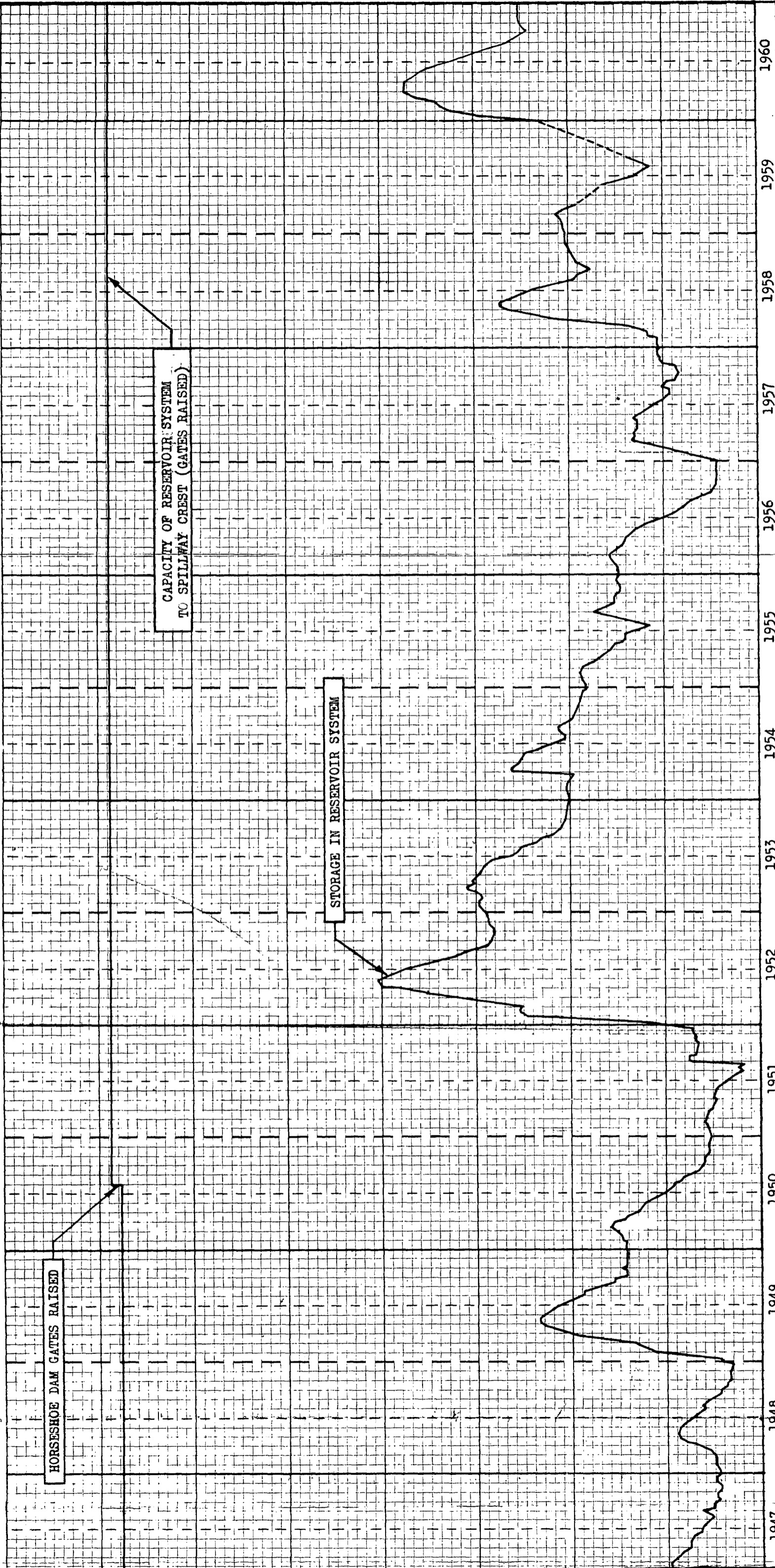
INCREASED BY BARTLETT DAM

NET STORAGE IN THOUSAND ACRE-FEET

1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947

NOTE
SEE
AVAI
UPST





HORSESHOE DAM GATES RAISED

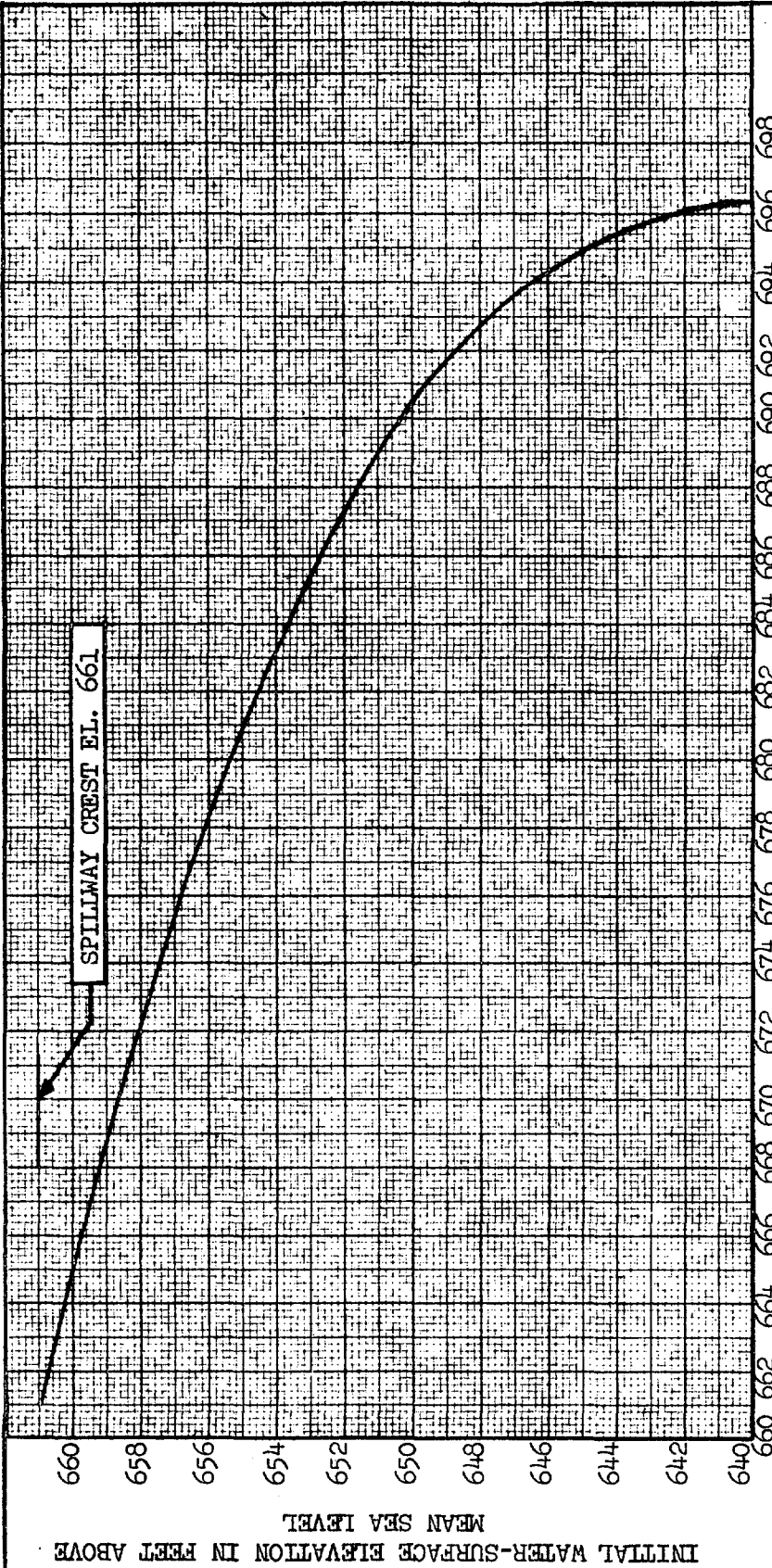
CAPACITY OF RESERVOIR SYSTEM TO SPILLWAY CREST (GATES RAISED)

STORAGE IN RESERVOIR SYSTEM

NOTE:

SEE TABLE 1 FOR DETAILS ON AVAILABLE STORAGE SPACE IN UPSTREAM RESERVOIRS.

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir
 STORAGE IN UPSTREAM RESERVOIR SYSTEM
 January 1936 Through December 1960
 U. S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962



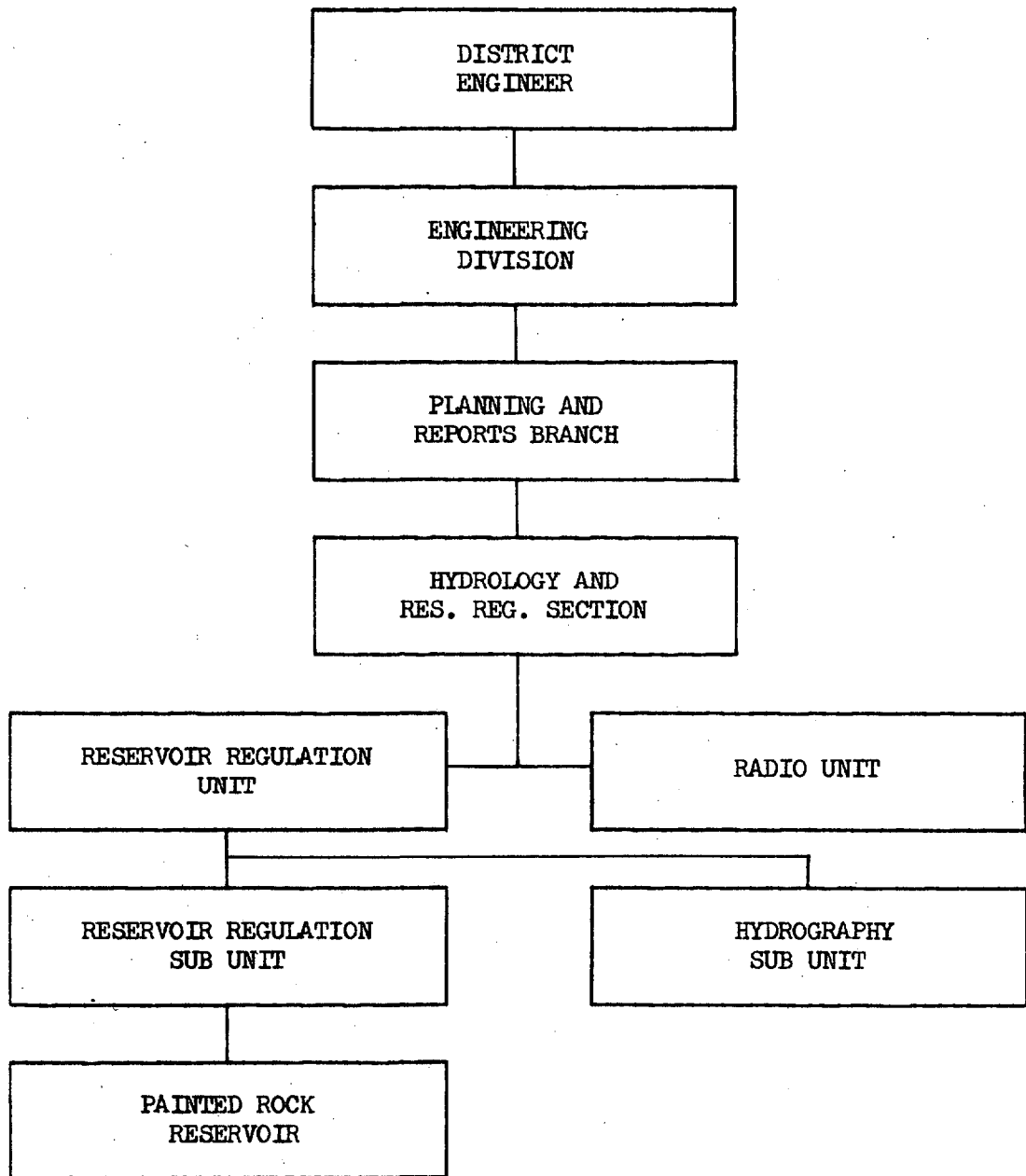
ELEVATION AT WHICH OUTLET GATES MUST BE FULLY OPENED TO CONTROL SPILLWAY FLOOD TO ELEVATION 696.3

NOTE.--IF A SPILLWAY FLOOD SHOULD OCCUR WHEN THE INITIAL RESERVOIR WATER-SURFACE ELEVATION IS 640 OR HIGHER, THE OUTLET GATES MUST BE FULLY OPENED AT THE ELEVATION SHOWN TO CONTROL THE FLOOD TO MAXIMUM WATER-SURFACE ELEVATION 696.3.

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

CURVE FOR DETERMINING OPERATION ABOVE SPILLWAY CREST

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962



NOTE:

SEE PLATE 32 FOR NAMES
AND TELEPHONE NUMBERS

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

ORGANIZATION
FOR NORMAL OPERATION

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

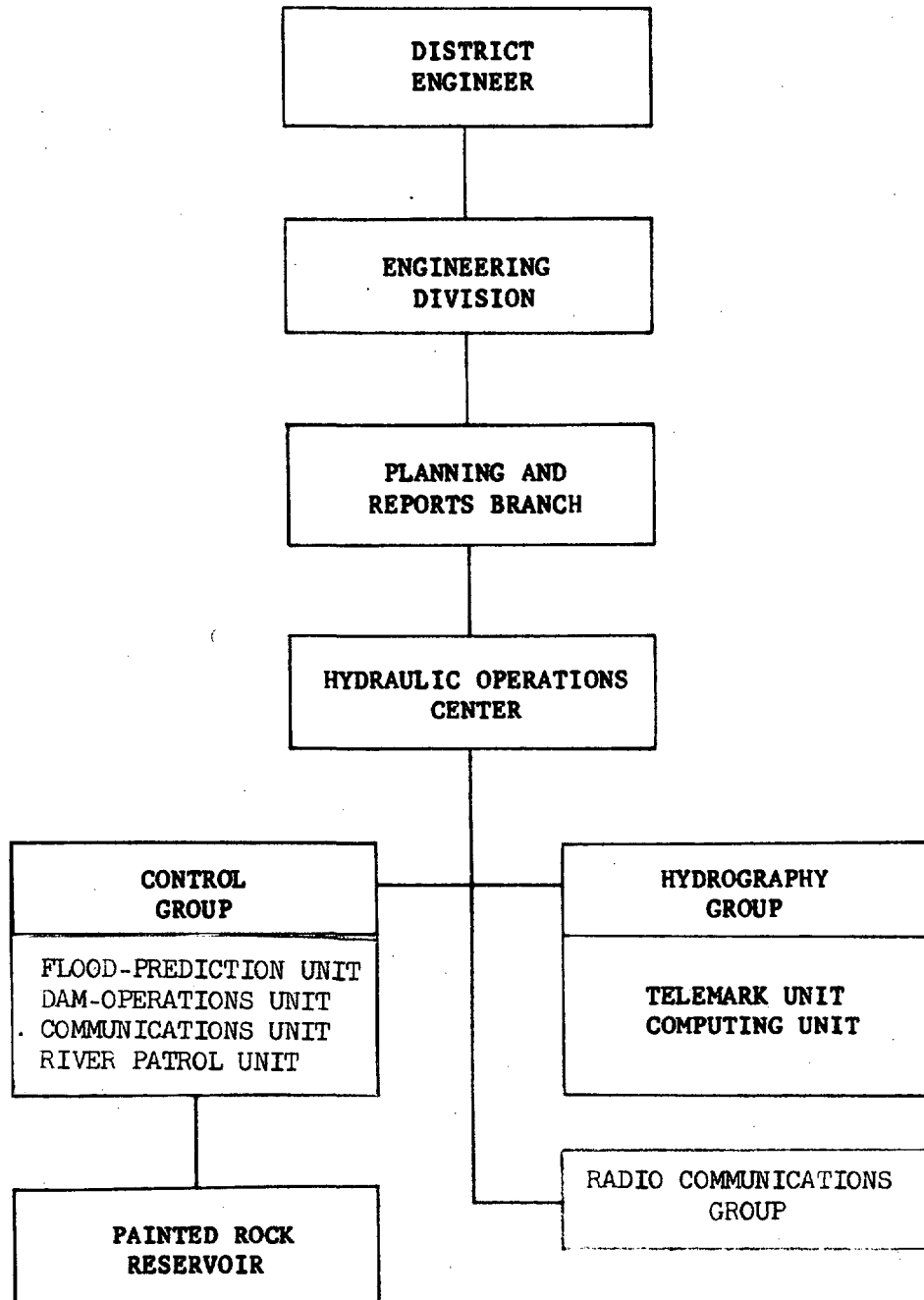
TITLE	NAME	OFFICE TELEPHONE	HOME TELEPHONE
District Engineer	Peacock, E. G., Col.	623-1311 Ext 353 After duty hours: 623-4760 Los Angeles, Calif.	243-0251 Glendale, Calif.
Chief, Engineering Division	Koehm, E.	623-1311 Ext 493 Los Angeles, Calif.	288-4248 San Gabriel, Calif.
Chief, Planning & Reports Branch	Cramer, S..F.	623-1311 Ext 502 Los Angeles, Calif.	769-2422 No. Hollywood, Calif.
Chief, Hydrology & Res. Reg. Section	Tatum, F. E.	623-1311 Ext 491 After duty hours: 623-5141 Los Angeles, Calif.	241-4772 Glendale, Calif.
Chief, Reservoir Regulation Unit *	Levin, G. B.*	623-1311 Ext 345 After duty hours 623-5142 Los Angeles, Calif.	280-9879 Monterey Park, Calif.
Chief, Radio Unit	Robinson, D. A.	623-1311 Ext 344 After duty hours: 623-5141	288-0721 Monterey Park, Calif.
Chief, Hydrography Sub Unit	Oviatt, D. M.	623-1311 Ext 347 After duty hours: 623-5142 Los Angeles, Calif.	398-5973 Los Angeles, Calif.
Dam Operator, Painted Rock Reservoir	Hett, J.	MUtual 3-2592 Gila Bend, Ariz.	MUtual 3-2592 Gila Bend, Ariz.

* Dual assignment, also Chief,
Reservoir Regulation Sub Unit

Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

KEY PERSONNEL
FOR NORMAL OPERATION

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962



NOTE:

SEE PLATE 34 FOR NAMES AND TELEPHONE NUMBERS.

Gila River Basin, Ariz. and N. Mex. Reservoir Regulation Manual
Painted Rock Reservoir

ORGANIZATION FOR FLOOD-EMERGENCY OPERATION

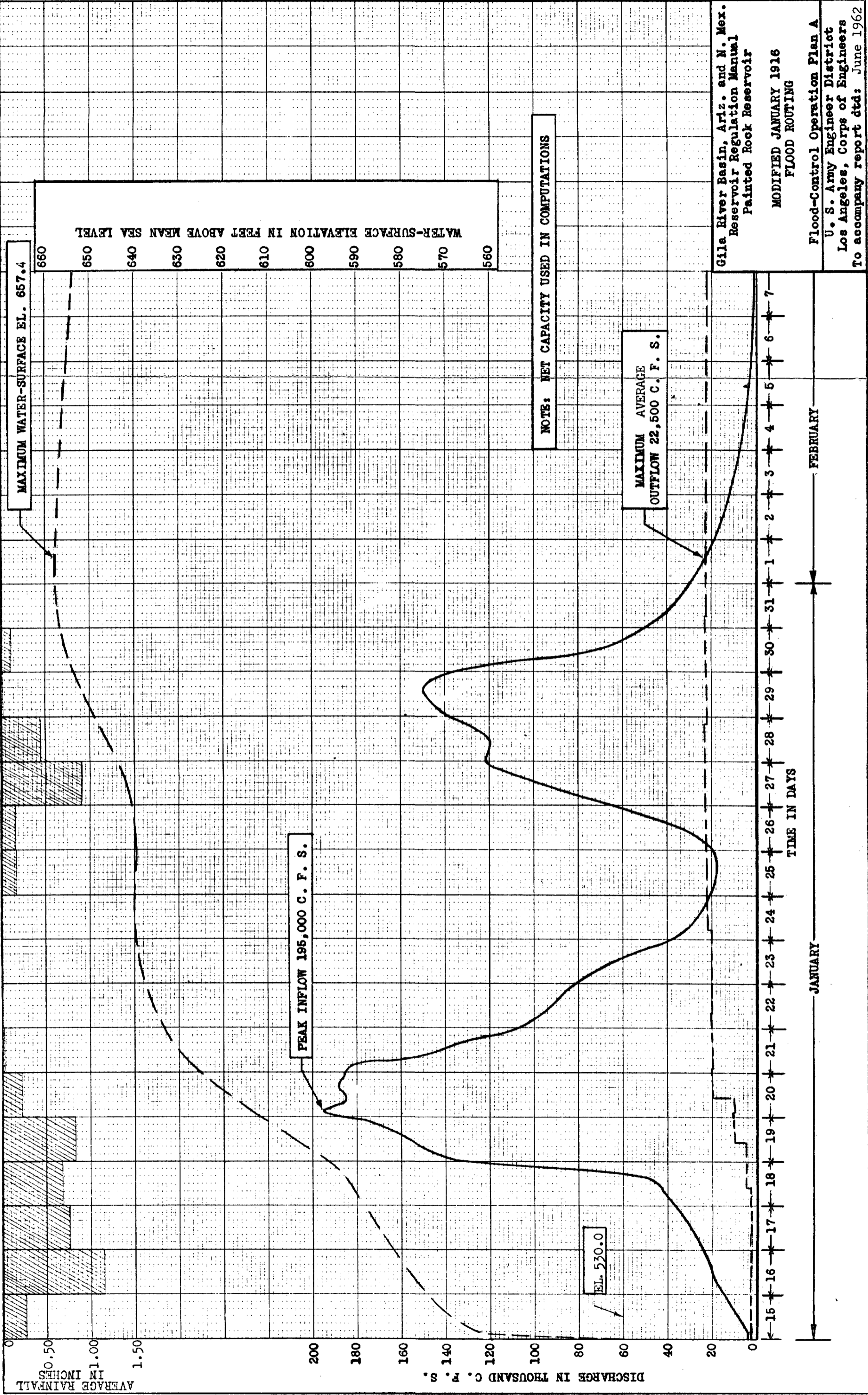
U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962

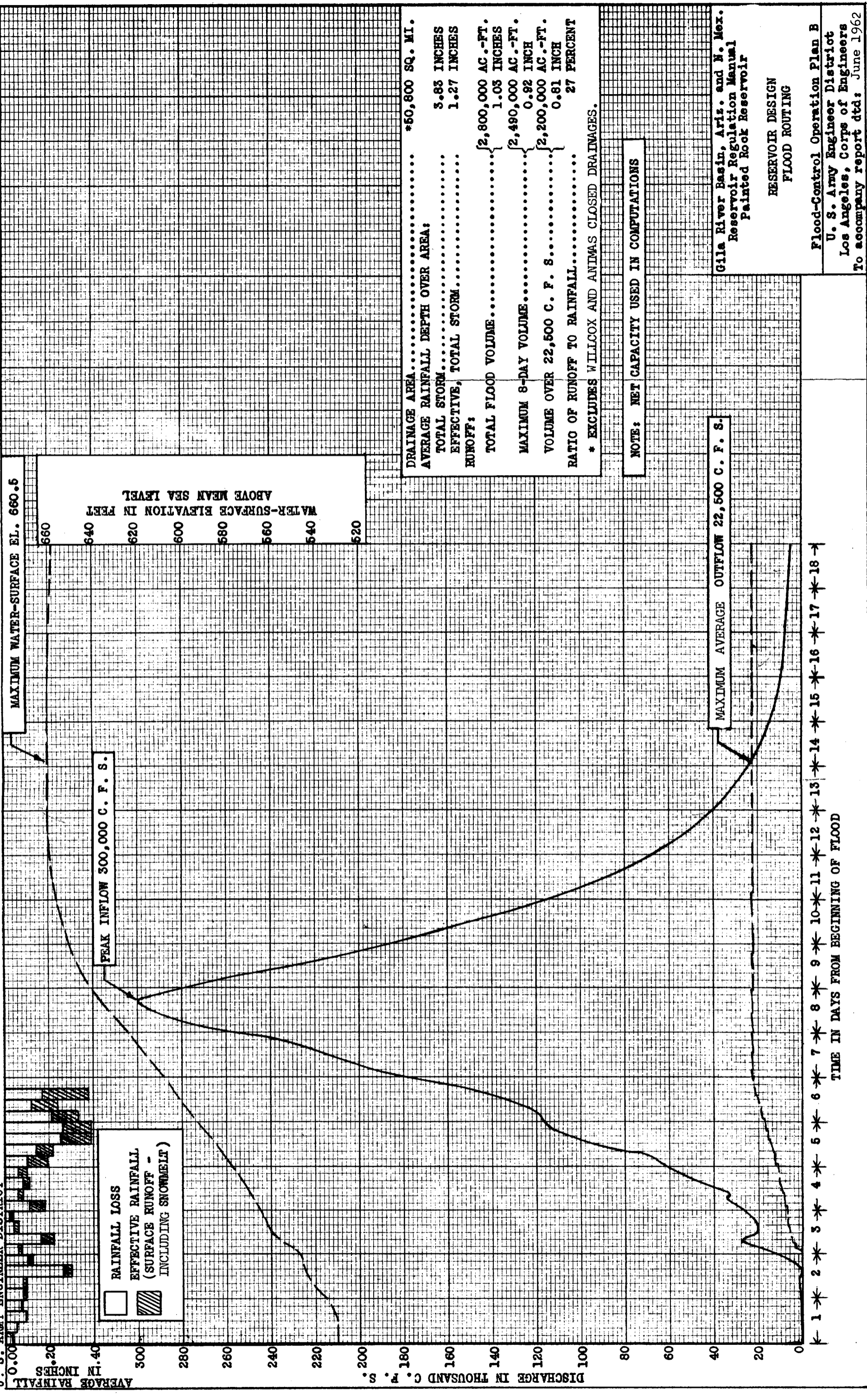
TITLE	NAME	OFFICE TELEPHONE	HOME TELEPHONE
District Engineer	Peacock, E. G., Col.	623-1311 Ext 353 After duty hours: 623-4760 Los Angeles, Calif.	243-0251 Glendale, Calif.
Chief, Engineering Division	Koehm, E.	623-1311 Ext 493 Los Angeles, Calif.	288-4248 San Gabriel, Calif.
Chief, Planning & Reports Branch	Cramer, S. F.	623-1311 Ext 502 Los Angeles, Calif.	769-2422 No. Hollywood, Calif.
Chief, Hydraulic Operations Center	Tatum, F. E.	623-1311 Ext 491 After duty hours: 623-5141 Los Angeles, Calif.	241-4772 Glendale, Calif.
Chief, Control Group	Levin, G. B.	623-1311 Ext 345 After duty hours: 623-5142 Los Angeles, Calif.	280-9879 Monterey Park, Calif.
Chief, Radio Communications Group	Robinson, D. A.	623-1311 Ext 344 After duty hours: 623-5142 Los Angeles, Calif.	288-0721 Monterey Park, Calif.
Chief, Hydrography Group	Oviatt, D. M.	623-1311 Ext 347 After duty hours: 623-5142 Los Angeles, Calif.	398-5973 Los Angeles, Calif.
Dam Operator, Painted Rock Reservoir	Hett, J.	MUtual 3-2592 Gila Bend, Ariz.	MUtual 3-2592 Gila Bend, Ariz.

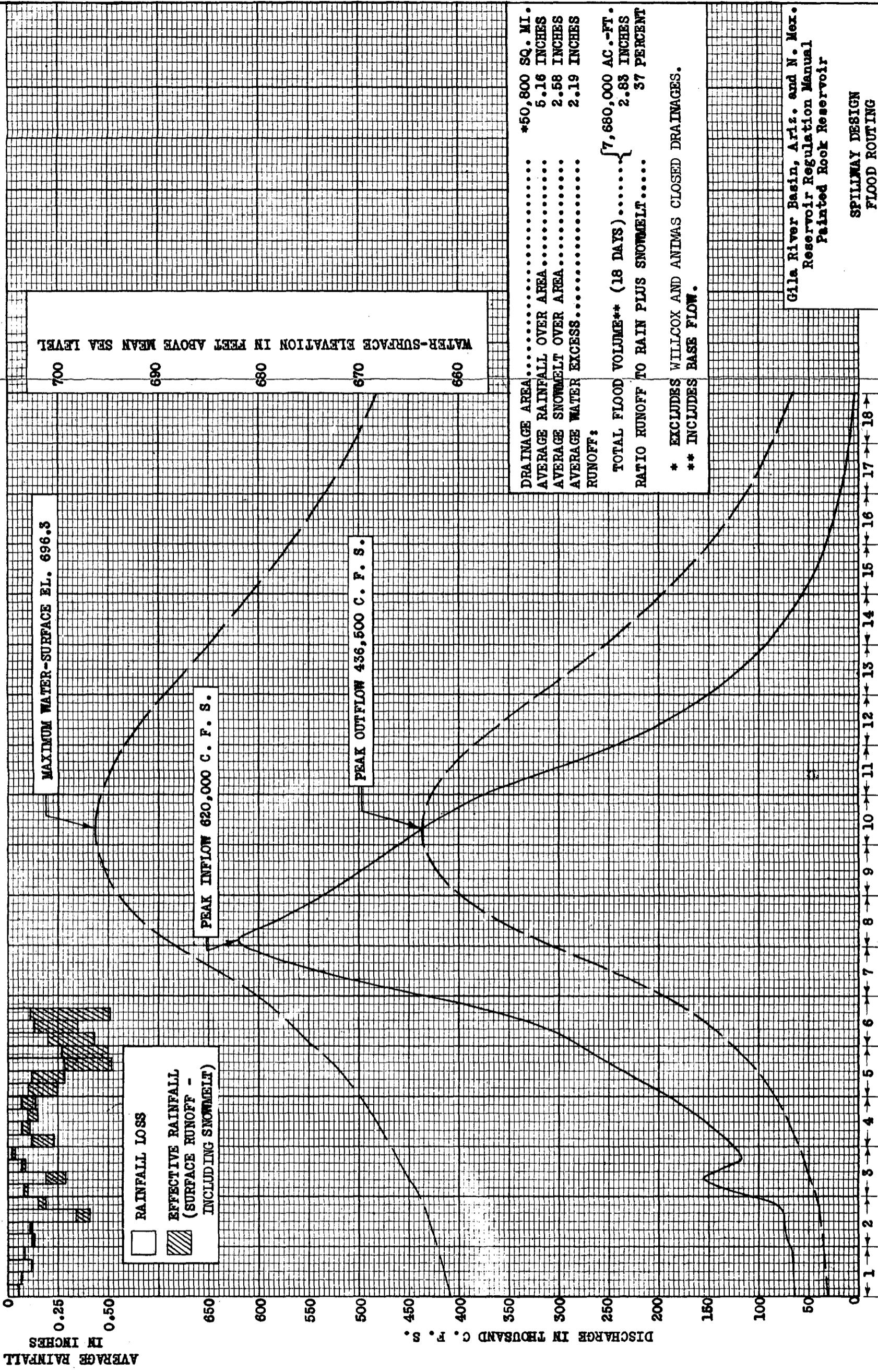
Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

KEY PERSONNEL
FOR FLOOD-EMERGENCY OPERATION

U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: June 1962







WATER-SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL

MAXIMUM WATER-SURFACE EL. 696.3

PEAK INFLOW 620,000 C. F. S.

PEAK OUTFLOW 436,500 C. F. S.

RAINFALL LOSS
EFFECTIVE RAINFALL (SURFACE RUNOFF - INCLUDING SNOWMELT)

DRAINAGE AREA..... *50,800 SQ. MI.
 AVERAGE RAINFALL OVER AREA..... 5.16 INCHES
 AVERAGE SNOWMELT OVER AREA..... 2.58 INCHES
 AVERAGE WATER EXCESS..... 2.19 INCHES
 RUNOFF:

TOTAL FLOOD VOLUME** (18 DAYS)..... { 7,680,000 AC.-FT.
 RATIO RUNOFF TO RAIN PLUS SNOWMELT..... 37 PERCENT

* EXCLUDES WILLCOX AND ANIMAS CLOSED DRAINAGES.
 ** INCLUDES BASE FLOW.

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir

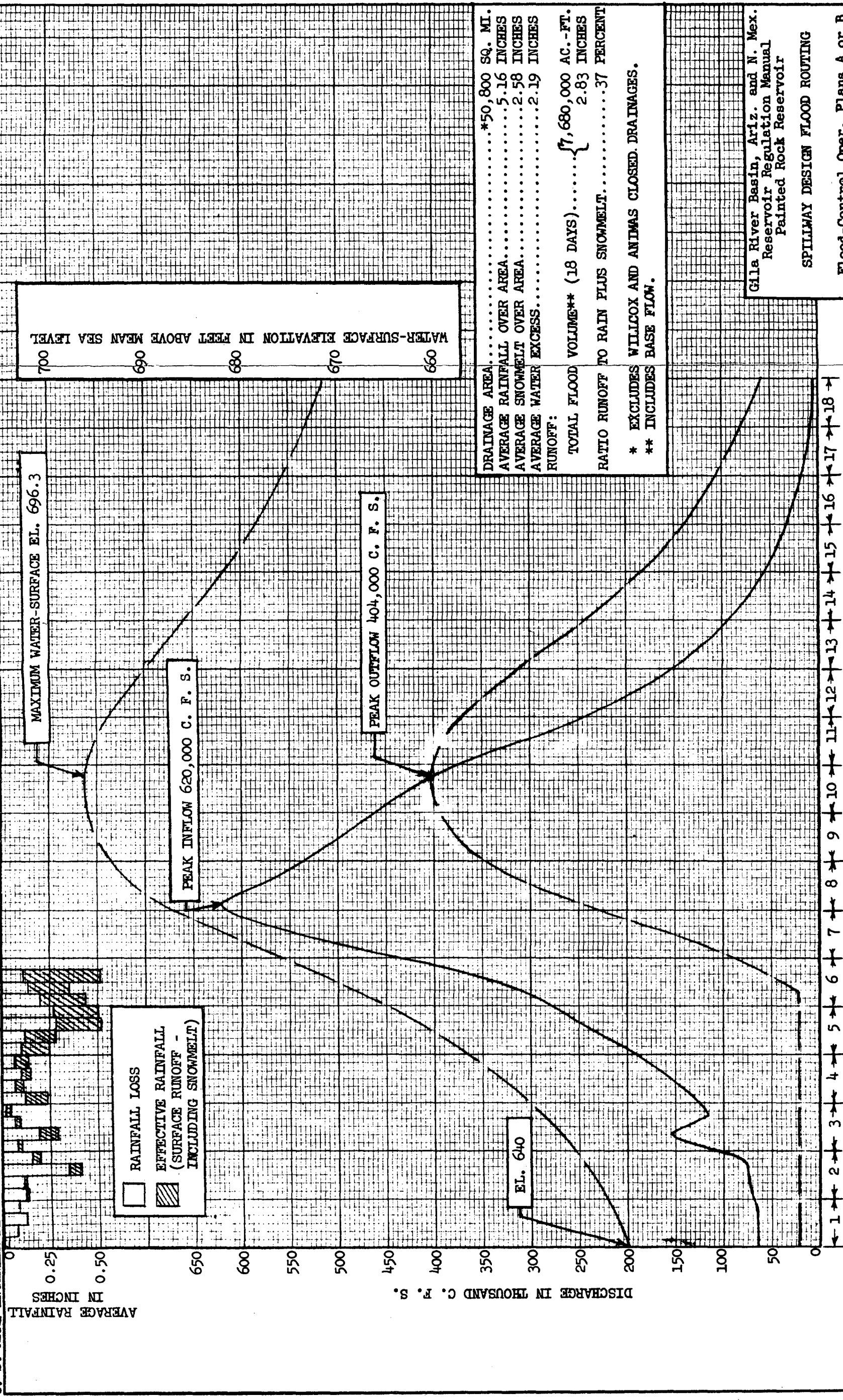
SPILLWAY DESIGN
 FLOOD ROUTING

Outlets Fully Open

U. S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962

TIME IN DAYS FROM BEGINNING OF STORM

NOTE: NET CAPACITY USED IN COMPUTATIONS.



WATER-SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL

MAXIMUM WATER-SURFACE EL. 696.3

PEAK INFLOW 620,000 C. F. S.

PEAK OUTFLOW 404,000 C. F. S.

DRAINAGE AREA.....*50,800 SQ. MI.
 AVERAGE RAINFALL OVER AREA.....5.16 INCHES
 AVERAGE SNOWMELT OVER AREA.....2.58 INCHES
 AVERAGE WATER EXCESS.....2.19 INCHES
 RUNOFF:
 TOTAL FLOOD VOLUME** (18 DAYS).....{ 7,680,000 AC.-FT.
 2.83 INCHES
 RATIO RUNOFF TO RAIN PLUS SNOWMELT......37 PERCENT

* EXCLUDES WILLCOX AND ANIMAS CLOSED DRAINAGES.
 ** INCLUDES BASE FLOW.

Gila River Basin, Ariz. and N. Mex.
 Reservoir Regulation Manual
 Painted Rock Reservoir
 SPILLWAY DESIGN FLOOD ROUTING

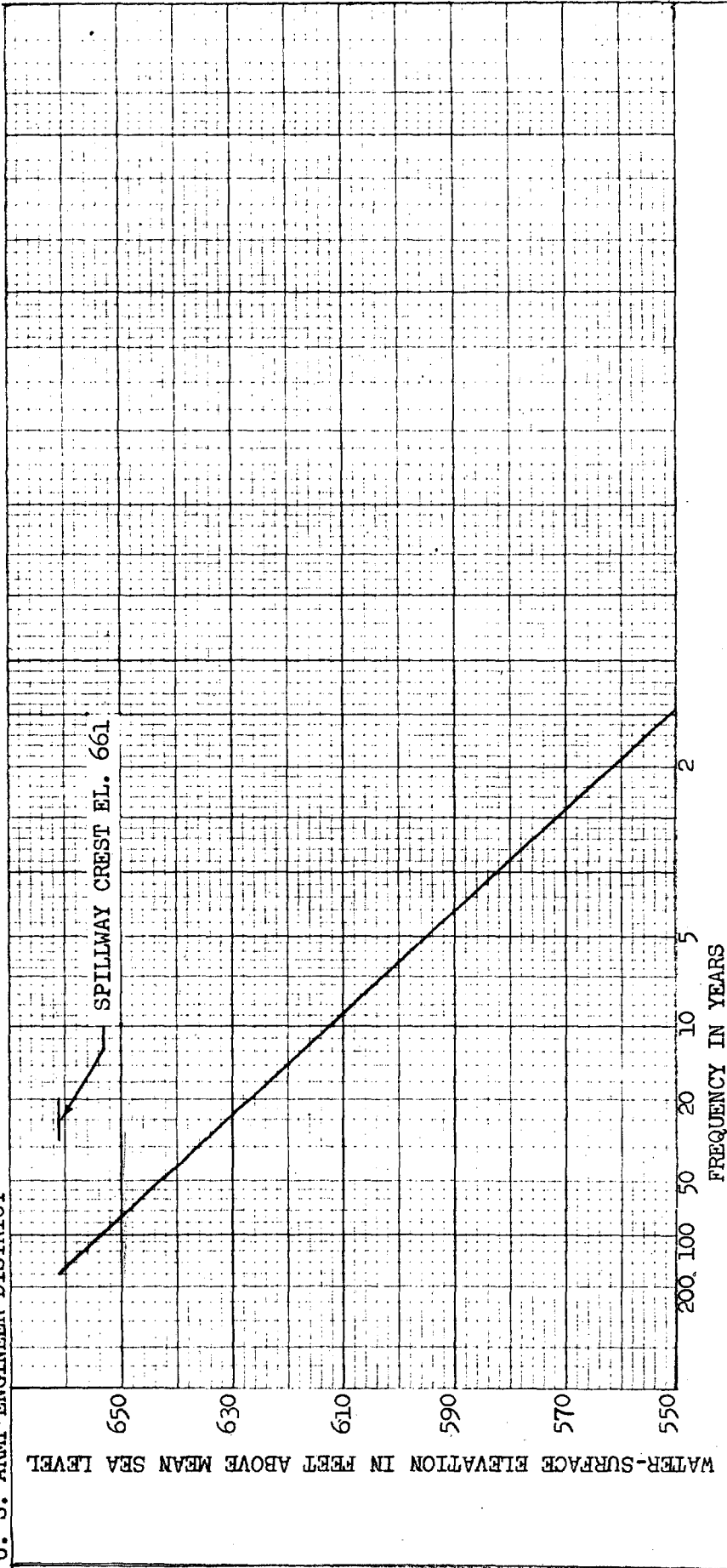
Flood-Control Oper. Plans A or B

U. S. Army Engineer District
 Los Angeles, Corps of Engineers
 To accompany report dtd: June 1962

NOTE: 1 NET CAPACITY USED IN COMPUTATIONS.
 2 FLOOD-CONTROL OPERATION PLANS A AND B IDENTICAL ABOVE ELEVATION 640.

CORPS OF ENGINEERS

U. S. ARMY ENGINEER DISTRICT



Gila River Basin, Ariz. and N. Mex.
Reservoir Regulation Manual
Painted Rock Reservoir

FILLING FREQUENCY CURVE

Flood-Control Operation Plan A
U. S. Army Engineer District
Los Angeles, Corps of Engineers
To accompany report dtd: **June 1962**

NOTE:

NET CAPACITY USED IN COMPUTATIONS.

RAINFALL REPORTING NETWORK

OBSERVER'S DAILY REPORTS

Station:					Month:		Year:		
Day	Normal time	Exact time	Reading	Emp- tied	Seasonal total	Temperature		Observer	Remarks
						Wet	Dry		
1	0800								
2	0800								
3	0800								
4	0800								
5	0800								
6	0800								
7	0800								
8	0800								
9	0800								
10	0800								
11	0800								
12	0800								
13	0800								
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21	0800								
22	0800								
23	0800								
24	0800								
25	0800								
26	0800								
27	0800								
28	0800								
29	0800								
30	0800								
31	0800								
TOTAL									

RESERVOIR OPERATION REPORT

RADIO CALL SIGN	DAM	TIME OF READING HRS.	RESERVOIR WATER-SURFACE ELEVATION FT. MSL	OUTFLOW GAGE HEIGHT		GATE			GATE SETTINGS *
				FEET	INCHES	SINCE LAST REPORT INCHES	RAINFALL		
							SEASON TOTAL	INCHES	
WUK 424	Sepulveda								Gates Open 9.0 ft.
WUK 410	Hansen								Gates Closed
WUK 423	Santa Fe								Gates Closed
WUK 405	Brea								Gates Open 1.0 ft.
WUK 431	Fullerton								Gates Open 0.2 ft.
WUK 426	Carbon Canyon								Gates Closed
WUK 419	Prado								Gate No. ___ Open 2.0 ft.
WUK 415	San Antonio								Gates Closed
WUK 417	Rio Hondo Pool		W. Pit E. Pit Comb.						LACFCD Diversion Gate Open ___ ft. Gate 1 Open ___ ft. Gates 2,3, & 4 Open ___ ft.
	Mission Creek Pool					X X X	X X X		Upper Gate Open ___ ft. Lower Gate Open ___ ft.
	San Gabriel Pool		W. Staff E. Staff Comb.			X X X	X X X		Gates 1,4,6 & 9 Open ___ ft.
	Lopez					X X X	X X X		Gate Open ___ ft.
WUK 429	Painted Rock								Gates Open 0.5 ft.

*Printed values show initial settings of gates prior to flood runoff

REMARKS

RESERVOIR COMPUTATIONS

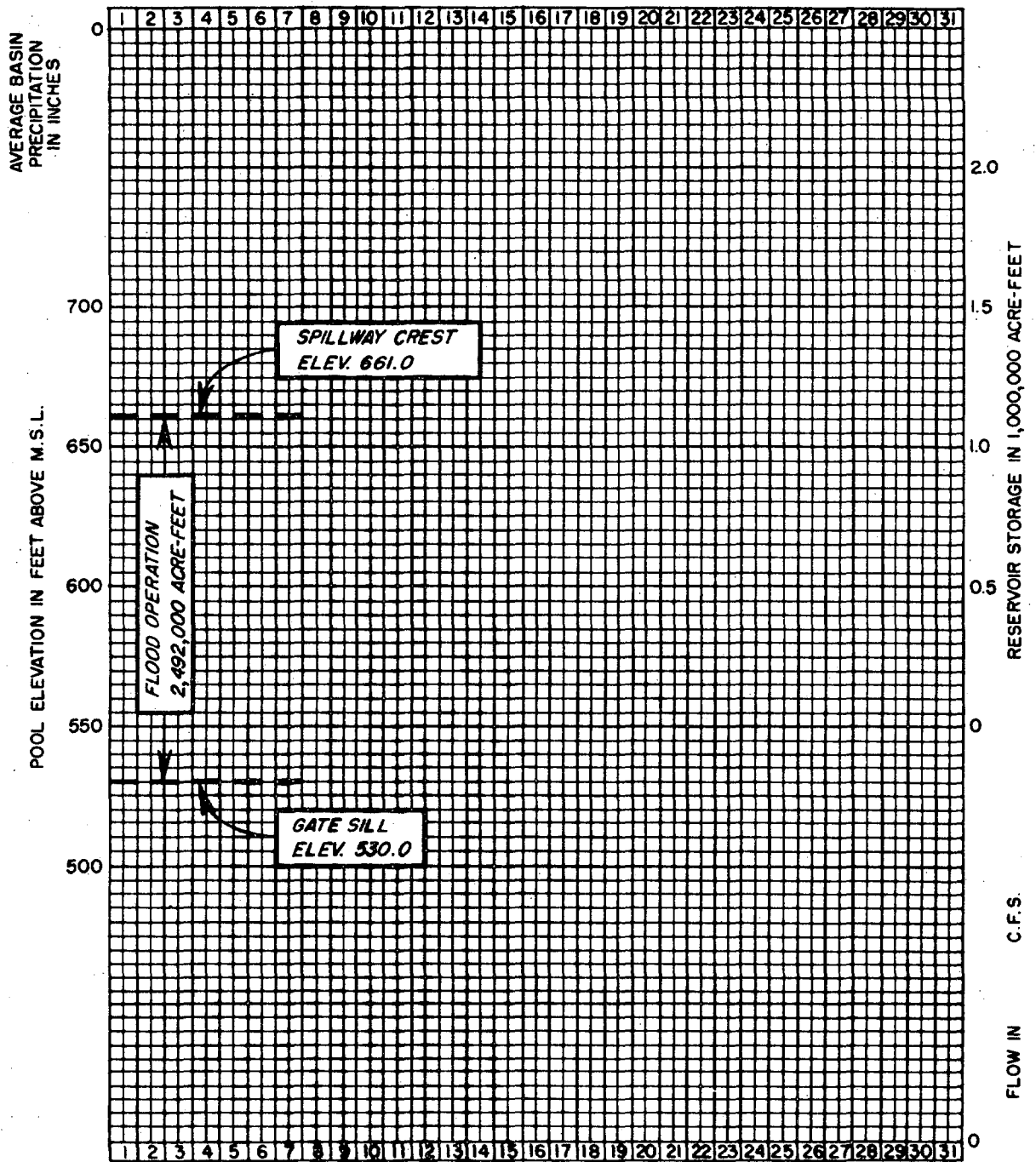
HOURLY DAILY

DAM						TIME OF READING (IF DAILY)			DATE				
COMPUTED BY				CHECKED BY		DATA SOURCE							
HR.	DA.	WATER SURFACE ELEV. FT.	STORAGE AC. FT.	GATE STEP NO.	INST. OUTFLOW			HRS.	STORAGE CHANGE		AV. OUTFLOW CFS	AV. INFLOW CFS	GATE SETTINGS FT.
					OUT. LETS CFS	DOWNSTREAM G. HT. FT.	FLOW CFS		ACRE- FEET	CFS			
PREVIOUS REPORT													
0100	1												
0200	2												
0300	3												
0400	4												
0500	5												
0600	6												
0700	7												
0800	8												
0900	9												
1000	10												
1100	11												
1200	12												
1300	13												
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2300	23												
2400	24												
	25												
	26												
	27												
	28												
	29												
	30												
	31												
REMARKS								<i>TOTAL</i>					
								<i>MEAN</i>					

FLOOD SITUATION REPORT

GILA RIVER BASIN					Date	Report Time	By		
RESERVOIR DATA									
Dams	Drainage Area Sq. Mi.	Time of Obs. Hrs.	W.S. Elev. Ft.	Instant Outflow C.F.S.	Average Inflow		Storage Ac. Ft.	Storage at Spwy Crest Ac. Ft.	Remarks
					hrs	C.F.S.			
Coolidge	12,886							1,205,000	
Ashurst-Hayden Div.	-								
Roosevelt	5,830							1,382,000	
Horse-Mesa	5,940							245,000	
Mormon Flat	6,100							58,000	
Stewart Mountain	6,211							70,000	
Horseshoe	5,991							142,800	
Bartlett	6,185							179,500	
Lake Pleasant	1,460							163,800	
Painted Rock	50,800							2,491,700	
Parker	178,800							619,400	
Imperial Div.	-							-	
STREAMFLOW DATA									
Stream	Location	Time of Obs. Hrs.	Discharge C.F.S.	Gage Height Ft.	Max. Disch. of Record	Max. Gage Height of Record	Remarks		
Gila River	Below Gillespie Dam				85,000	16.0			
Gila River	Near Dome				20,700	16.8			
Salt River	Near Roosevelt				117,000	24.4			
Verde River	Below Tangle Creek				81,600	17.6			
Colorado River	Below Cibola Valley				21,800	13.6			
PRECIPITATION DATA									
Station	Station Elev. Ft.	Mean Seasonal In.	Time of Obs. Hrs.	Amt. Since Last Obs. In.	Storm Total In.	Season Total In.	Snow on Ground In.	Remarks	
Painted Rock Dam	572	5.6							
Tucson	2,584	10.7							
Flagstaff	6,993	18.5							
Yuma	199	4.0							
Ajo	1,763	9.1							
Phoenix	1,109	7.2							
Showlow	6,382	21.0							
Clifton	3,465	12.6							
Pavson	4,848	21.4							
Wickenburg	2,070	10.8							
Prescott	5,014	16.0							
Jerome	5,245	16.0							
Cliff, N. Mex.	4,600	15.5							
Lake Pleasant Dam	1,600	16.0							
Roosevelt Dam	2,200	16.0							
Horse Mesa Dam	2,000	20.0							
Mormon Flat Dam	1,715	14.0							
Stewart Mountain Dam	1,422	12.4							
Horseshoe Dam	2,020	19.0							
Bartlett Dam	1,650	16.0							
Coolidge Dam	3,300	12.9							
Ashurst-Hayden Div.	1,638	10.9							
Parker Dam	425	4.7							
Imperial Div.	167	4.0							
SNOWFALL DATA									
Station	Station Elev. Ft.	Date	Snow on Ground In.	Water Content In.	Avg. Water Content on Indicated Dates				Remarks
					15 Jan.	1 Feb.	1 Mar.	1 Apr.	
Nutrioso	8,500				1.4	2.0	1.7	0.5	
Beaver Head	8,000				2.1	2.9	2.3	.7	
Fort Apache	9,160				4.4	6.1	6.8	6.4	
Baldy	9,125				3.6	5.5	5.9	3.4	
Mormon Mountain	7,500				3.0	5.1	4.6	2.4	
Mingus Mountain	7,100				.8	1.7	1.1	0	
Gaddes Canyon	7,600				1.3	3.4	2.7	1.6	
Bear Wallow	8,100				2.2	3.0	2.6	.9	

ENGCW-E-6



RESERVOIR STORAGE BASED ON SURVEY DATED MAR. 1953

MONTH OF	19	
	ELEV.	GROSS STORAGE (ACRE- FT.)
Conservation Pool		NONE
Full Pool	661	2,492,000
Outlet Capacity at Full Pool 30,500 c. f. s.		

MONTHLY RESERVOIR OPERATION
 PAINTED ROCK FLOOD-CONTROL BASIN
 GILA RIVER BASIN, ARIZ. AND NEW MEXICO
 DRAINAGE AREA 50,800 SQ. MILES
 SOUTH PACIFIC DIVISION
 LOS ANGELES DISTRICT