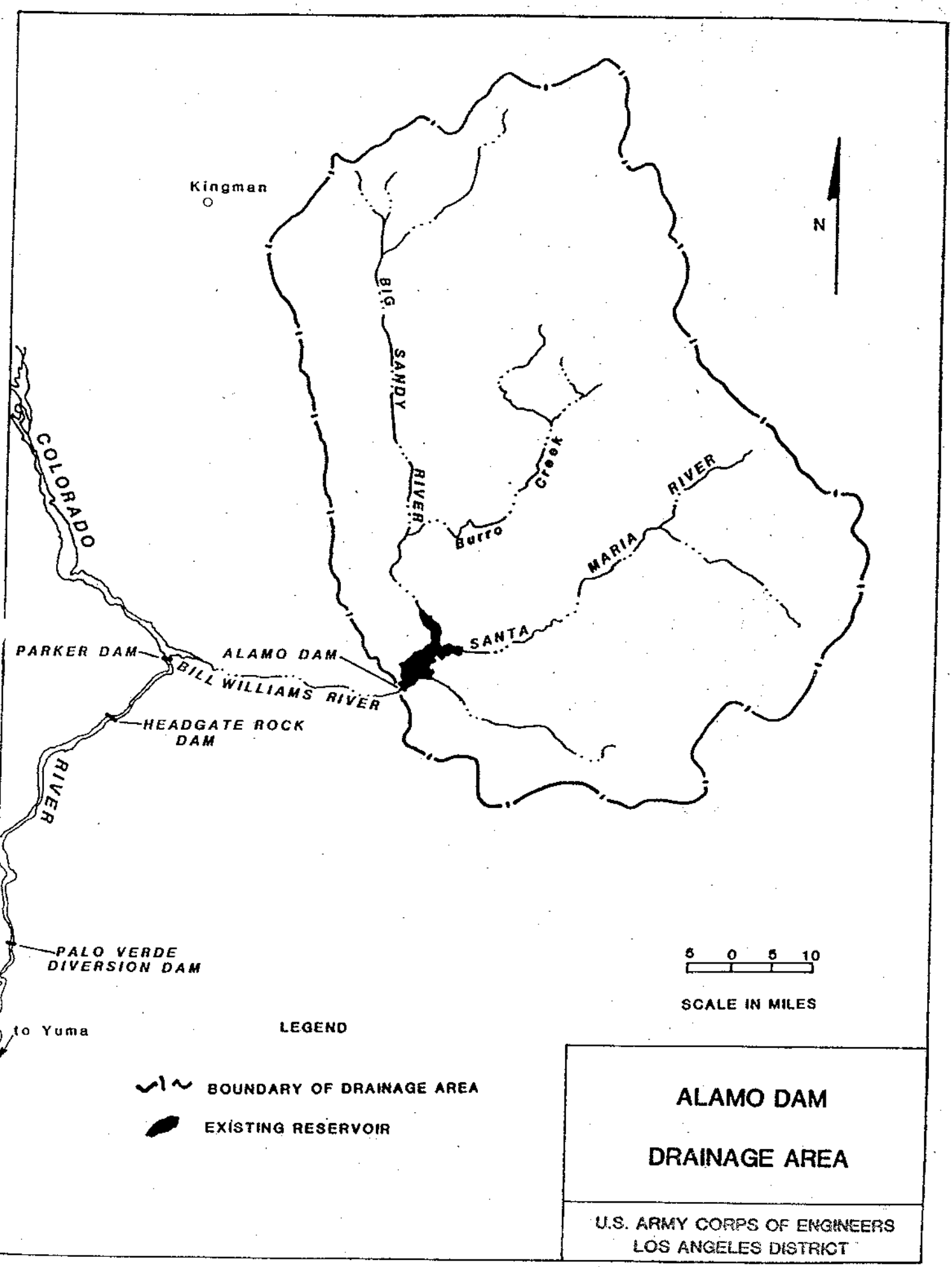

Kingman
N
BIG SANDY RIVER
Burro Creek
MARIA RIVER
SANTA
COLORADO
PARKER DAM
ALAMO DAM
BILL WILLIAMS RIVER
HEADGATE ROCK DAM
RIVER
PALO VERDE DIVERSION DAM
to Yuma
6 0 6 10
SCALE IN MILES
LEGEND
BOUNDARY OF DRAINAGE AREA
EXISTING RESERVOIR
ALAMO DAM
DRAINAGE AREA
U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

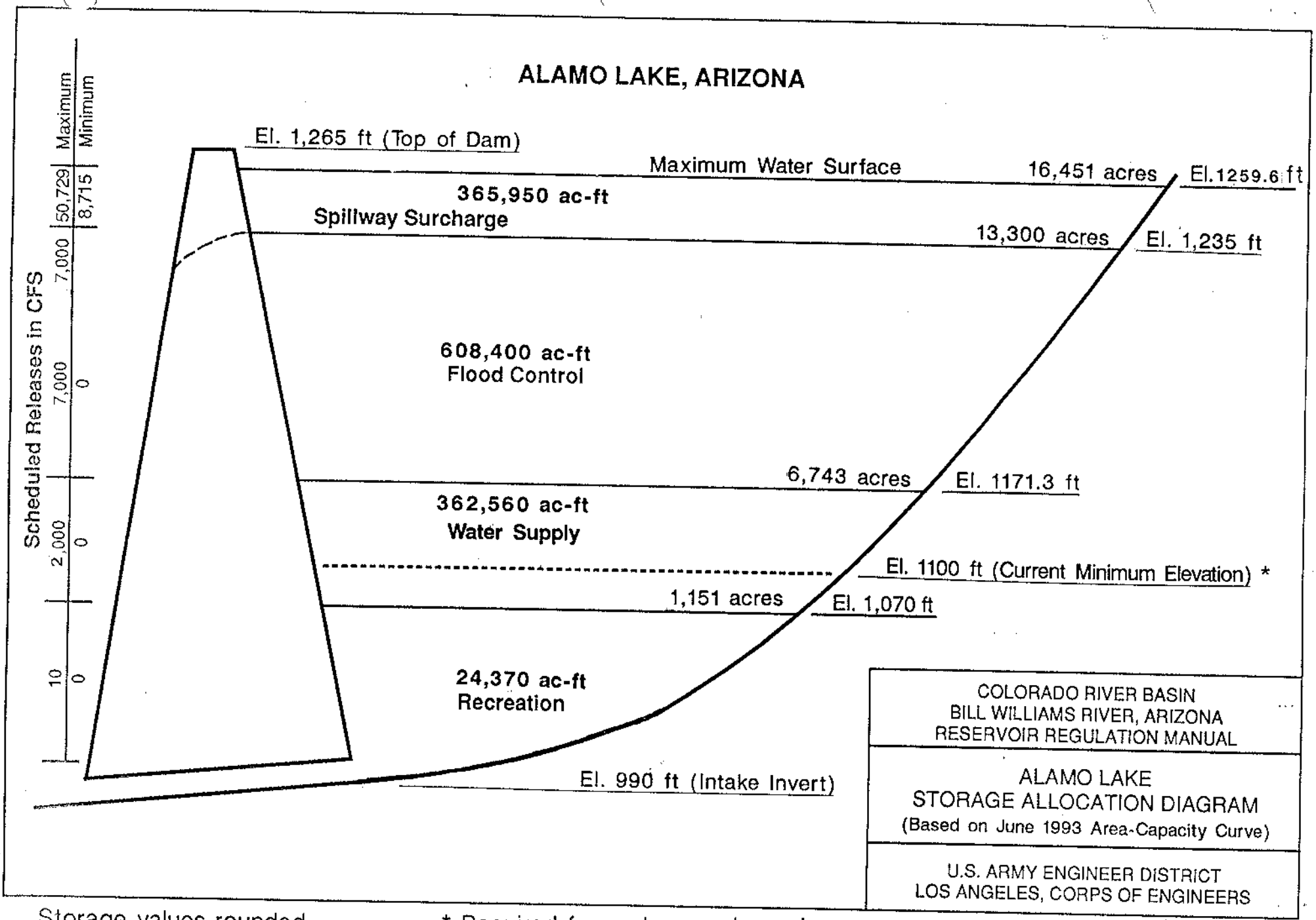
ALAMO DAM AND RESERVOIR
MOHAVE COUNTY AND LA PAZ COUNTY, ARIZONA

PERTINENT DATA
MAY 1983

Stream System	Bill Williams River
Drainage area, sq. miles	4,770
Reservoir:	
Elevation	
Recreation water supply pool, ft., m.s.l.	1,046
Water supply pool, ft., m.s.l.	1,174
Flood control pool (spillway crest), ft., m.s.l.	1,235
Spillway design surcharge level, ft., m.s.l.	1,259.6
Top of dam, ft., m.s.l.	1,265
Area	
Recreation water supply pool, acres	547.8
Water supply pool, acres	7,044.5
Spillway crest, acres	13,307
Spillway design surcharge level, acres	16,452
Top of dam, acres	17,040
Capacity, gross	
Recreation water supply pool, acre-feet	9,762.4 (0.04*)
Water supply pool, acre-feet	437,303 (1.72*)
Spillway crest, acre-feet	1,046,314 (4.11*)
Spillway design surcharge level, acre-feet	1,412,474 (5.55*)
Top of dam, acre-feet	1,503,064 (5.91*)
Allowance for sediment (100-year), acre-feet	200,000 (0.79*)
Dam: - Type	Rolled Earth
Height above original streambed, ft.	283
Top length, ft.	975
Top width, ft.	30
Freeboard, ft.	5.4
Spillway: - type	Ungated, broad-crested
Crest length, ft.	110
Design surcharge, ft.	1,259.6
Design Discharge, c.f.s.	41,500
Outlets:	
Tunnel -	
Length (including gate chamber and transition sections), ft.	1,290
Intake invert elevation, ft., m.s.l.	990
Outlet invert elevation, ft., m.s.l.	980
Discharge at spillway crest, c.f.s.	8,700
Gates - type	Slide, tandem
Number and size -	
Service (downstream)	3 - 5.5'W x 8.5'H
Emergency (upstream)	3 - 5.5'W x 8.5'H
Low-flow bypass around gate No. 3 -	
Pipe size, I.D., in.	18
Control valve - type	Butterfly
Maximum discharge capacity, c.f.s.	25
Water-surface elevation to initiate operation, ft., m.s.l.	1,002.3
Standard project flood:	
Duration (inflow), days	7
Total volume, acre-feet	613,000 (2.41*)
Inflow peak, c.f.s.	389,000
Probable maximum flood:	
Duration (inflow), days	3
Total volume, acre-feet	1,390,000 (5.46*)
inflow peak, c.f.s.	859,000
Historic Maximums:	
Maximum release on record, c.f.s.	4,730
Date	2-27-69
Maximum water surface elevation, ft., m.s.l.	1207.4
Date	2-23-80

*inches of runoff

Figure 1-2



Storage values rounded.

* Required for endangered species.

Alamo Dam Outlet Gate Operation Schedule
(For rising or falling stages)

Step No.	When reservoir water surface is between elevations	Gate setting for gates as indicated			Computed discharge	Downstream gage height###
		No. 1	No. 2	No.3		
	Feet above mean sea level	Feet of Opening	Feet of Opening	Feet of Opening	Cubic feet per second	Feet
1....	990 - 1046*	0	0	0	0 - 10**	5.50 - 6.15
2....	1046 - 1047	0.70	0.70	0.70	525 - 530	8.64 - 8.65
3....	1047 - 1048	1.35	1.35	1.35	1,015 - 1,020	9.26 - 9.26
4....	1048 - 1049	2.00	2.00	2.00	1,495 - 1,505	8.82 - 9.63
5....	1049 - 1058	2.60	2.60	2.60	1,915 - 2,065	9.87 - 9.95
6....	1058 - 1068	2.40	2.40	2.40	1,915 - 2,040	9.87 - 9.94
7....	1068 - 1083	2.25	2.25	2.25	1,915 - 2,080	9.87 - 9.96
8....	1083 - 1103	2.05	2.05	2.05	1,910 - 2,090	9.87 - 9.96
9....	1103 - 1126	1.85	1.85	1.85	1,900 - 2,090	9.86 - 9.96
10...	1126 - 1147	1.70	1.70	1.70	1,920 - 2,060	9.87 - 9.95
11...	1147 - 1172	1.60	1.60	1.60	1,940 - 2,090	9.88 - 9.96
12...	1172 - 1173	2.75	2.75	2.75	3,515 - 3,530	11.2 - 11.2
13...	1173 - 1174	4.00	4.00	4.00	4,970 - 5,000	11.9 - 12.1
14...	1174# - 1194	5.70	5.70	5.70	6,800 - 7,150	11.9 - 12.1
15...	1194 - 1214	5.40	5.40	5.40	6,840 - 7,170	11.9 - 12.1
16...	1214 - 1235	5.10	5.10	5.10	6,825 - 7,140	11.8 - 12.3
17...	1235## - 1237.9	4.60	4.60	4.60	6,525 - 7,565	11.8 - 12.2
18...	1237.9 - 1239.5	3.70	3.70	3.70	6,400 - 7,410	11.8 - 12.2
19...	1239.5 - 1240.7	3.00	3.00	3.00	6,460 - 7,470	11.8 - 12.2
20...	1240.7 - 1241.8	2.30	2.30	2.30	6,470 - 7,480	11.8 - 12.2
21...	1241.8 - 1242.7	1.70	1.70	1.70	6,590 - 7,600	11.8 - 12.2
22...	1242.7 - 1243.6	1.00	1.00	1.00	6,550 - 7,560	11.8 - 12.2
23...	1243.6 - 1244.5	0.30	0.30	0.30	6,470 - 7,470	11.8 - 12.2
24...	1244.5 - 1245.1	0	0	0	7,000 - 7,850	12.0 - 12.3
25...	1245.1 - 1245.8	2.00	2.00	2.00	10,900 - 11,860	13.4 - 13.7
26...	1245.8 - 1246.5	4.10	4.10	4.10	14,820 - 15,780	14.7 - 15.0
27...	Above 1246.5	8.50	8.50	8.50	18,750 Up	16.0 - ----

*Top of recreation pool elevation 1,046.
**Release made through low-flow outlet (outflow = inflow up to 10 cfs)
#Bottom of flood-control pool elevation 1,174.
##Spillway crest elevation 1,235.
###Derived from USGS rating no. 7 (extrapolated above 5000 cfs)
NOTE: Discharges from the conservation pool (elevations 1,046 to 1,174) may be less than scheduled value, dependent on Colorado River System requirements.

FIGURE 2

1. Communication with the District Office is available.

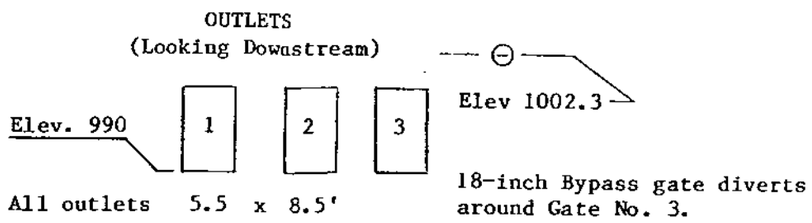
a. Notify the Reservoir Operations Center when a gate change will be required according to the schedule.

b. Notify the Reservoir Operations Center if unable to set the gates as instructed.

2. Communication with the District Office is not available.

a. Allow a period of four hours to pass to reestablish communication with the District Office. Do not operate gates except as follows in 2.b. If after four hours communication is not reestablished send an alternate operator to the nearest public telephone to reestablish communications. If alternate cannot leave project, maintain current discharge and wait for district employee to reach the project.

b. Adjust the gates gradually and uniformly to maintain current downstream gage height until communication is reestablished.



JULY 1982
Figure 1-4

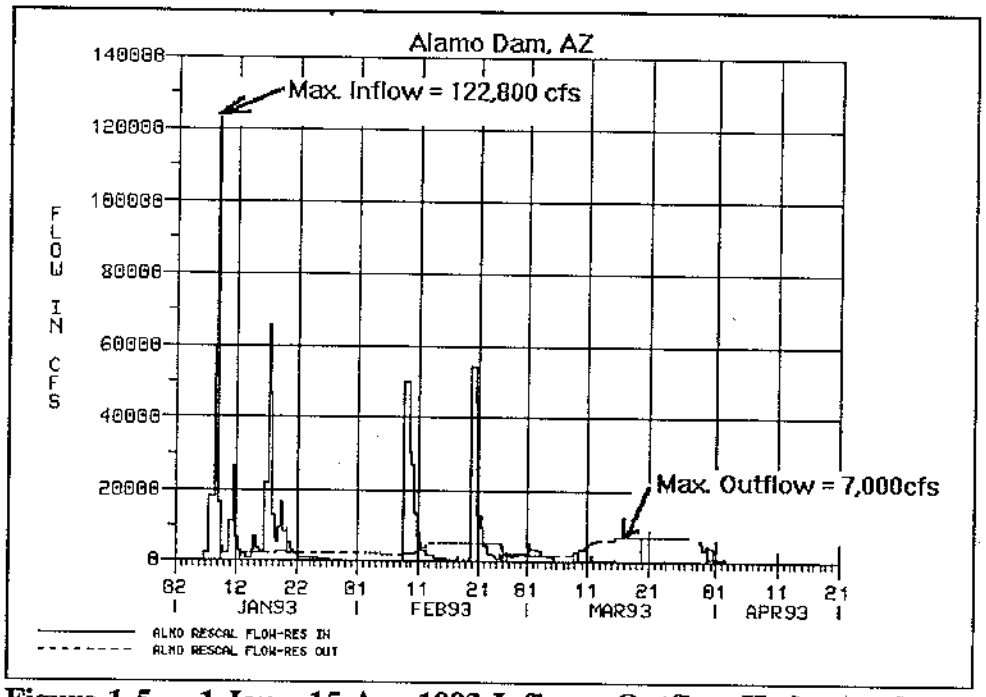


Figure 1-5. 1 Jan - 15 Apr 1993 Inflow - Outflow Hydrograph at Alamo Dam

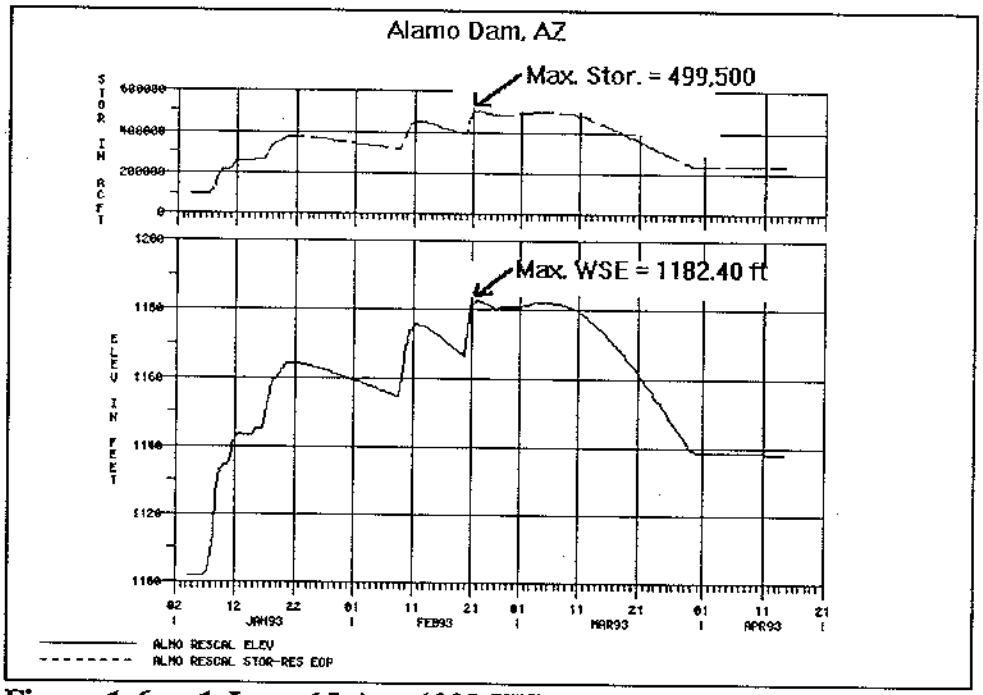


Figure 1-6. 1 Jan - 15 Apr 1993 WSE and Storage at Alamo Dam