

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

FULLERTON FLOOD CONTROL BASIN  
NAME OF RESERVOIR

70-16  
DATA SHEET NO.

DAM	1. OWNER Corps of Engineers			2. STREAM Fullerton Creek			3. STATE California									
	4. SEC. 24 TWP. 3S RANGE 10W			5. NEAREST P.O. Brea			6. COUNTY Orange									
	7. LAT. 33° 53' 49" LONG. 117° 53' 10"			8. TOP OF DAM ELEVATION 307			9. SPILLWAY CREST ELEV. 290									
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL CAPACITY, ACRE-Feet		14. GROSS STORAGE, ACRE-Feet		15. DATE STORAGE BEGAN					
	a. FLOOD CONTROL		290		61.3		753.5		753.5		11 Mar 41					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY															
	e. IRRIGATION										16. DATE NORMAL OPER. BEGAN					
	f. CONSERVATION															
	g. INACTIVE										11 Mar 41					
17. LENGTH OF RESERVOIR 0.8			MILES			AV. WIDTH OF RESERVOIR 0.1			MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 5.05 1/				SQ. MI.				22. MEAN ANNUAL PRECIPITATION 15.5				INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA 4.95 1/				SQ. MI.				23. MEAN ANNUAL RUNOFF 0.82				INCHES			
	20. LENGTH 4.6		MILES		AV. WIDTH 1.1		MILES		24. MEAN ANNUAL RUNOFF 222(20)				AC. FT.			
	21. MAX. ELEV. 1,300				MIN. ELEV. 261				25. ANNUAL TEMP. MEAN 62.2° RANGE 48.8°-75.6°							
	26. DATE OF SURVEY		27. PERIOD YEARS		28. ACCL. YEARS		29. TYPE OF SURVEY		30. NO. OF RANGES OR CONTOUR INT.		31. SURFACE AREA, ACRES		32. CAPACITY, ACRE-Feet		33. C/I RATIO, AC. FT. PER AC. FT.	
Oct 41		Orig		0		Contour		2'		61.3		753.5		3.39		
Nov 44		3.1		3.1		Range		31		61.0		743.0		3.35		
Mar 62		17.3		20.4		Contour		2'		60.1		706.3		3.18		
Jun 70		8.25		28.65		"		2'		60.7		763.8		3.44		
26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-Feet				36. WATER INFL. TO DATE, AC.-FT.								
				a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		a. MEAN ANNUAL		b. TOTAL TO DATE				
Oct 41		Original Survey														
Nov 44		15.2		310		651		930		310		930				
Mar 62		12.3		221		1210		3817		233		4747				
Jun 70		13.24		515		2710		4246		314		8993				
26. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, ACRE-Feet				38. TOTAL SED. DEPOSITS TO DATE, ACRE-Feet										
		a. PERIOD TOTAL		b. AV. ANNUAL		c. PER SQ. MI. YEAR		d. TOTAL TO DATE		e. AV. ANNUAL		f. PER SQ. MI. YEAR				
Oct 41		Original Survey														
Nov 44		10.5		3.4		1.11		10.5		3.4		1.11				
Mar 62		37.0		2.1		0.42		47.5		2.3		.46				
Jun 70		Capacity increased by excavation.														
26. DATE OF SURVEY		39. AV. DRY WGT. LBS. PER CU. FT.		40. SED. DEP. TONS PER SQ. MI.-YR		41. STORAGE LOSS, PCT		42. SED. INFLOW, PPM								
		a. PERIOD		b. TOTAL TO DATE		c. AV. ANNUAL		d. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE				
Oct 41		Original Survey														
Nov 44						0.45		1.39								
Mar 62						.31		6.26								
Jun 70						-0.05		-1.37								

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	30-22		22-20		20-18		18-Crest								
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
Oct 41	Original	Survey													
Nov 44	17	41			21		21								
Mar 62	2						98								
Jun 70	Capacity increased by excavation.														
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
1952-53	266.10	261.00	15.2	1964-65	267.23	261.00	84								
1953-54	269.78	"	93.0	1965-66	270.67	"	196								
1954-55	268.00	"	49.7	1966-67	275.69	"	595								
1955-56	279.93	"	306.3	1967-68	273.20	"	353								
1956-57	266.40	"	30.5	1968-69	278.55	"	2710								
1957-58	272.42	"	1210.0	1969-70	267.30	"	200								
1958-59	262.90	"	414.0												
1959-60	262.10	"	374.0												
1960-61	261.60	"	220.0												
1961-62	271.38	"	316												
1962-63	268.81	"	80												
1963-64	265.15	"	28												
46. (Jun 70) ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
260	0	0	274	20.7	122	288	55.3	648							
262	0.2	0.1	276	24.9	167	290	60.7	764							
264	3.7	4.0	278	30.1	222										
266	6.7	10.7	280	35.4	288										
268	10.0	30.4	282	40.1	363										
270	13.5	54.1	284	44.8	448										
272	16.9	84.1	286	49.9	542										
47. REMARKS AND REFERENCES															
<p>1/ Items 18 &amp; 19 - Drainage area and sediment contributing area were increased when Loftus Diversion channel was completed on 21 Dec 54.</p> <p>2/ Item 25 - Temperatures taken at Pasadena, California.</p>															
48. AGENCY MAKING SURVEY			C of E, Los Angeles			50. DATE									
49. AGENCY SUPPLYING DATA			C of E, Los Angeles			14 Feb 75									