

RESERVOIR SEDIMENTATION
DATA SUMMARY

LIVE OAK FLOOD CONTROL BASIN

70-14a

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER IACFCD			2. RIVER Live Oak Creek			3. STATE California				
	4. SEC. TWP.		RANGE		5. NEAREST TOWN La Verne			6. COUNTY Los Angeles			
	7. STREAM BED ELEV. 1,430			8. TOP OF DAM ELEV. 1,500			9. SPILLWAY CREST ELEV. 1,497				
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. SURFACE AREA ACRES		13. STORAGE ACRE-FEET		14. ACCUMULATED ACRE-FEET		15. DATE STORAGE BEGAN
	a. FLOOD CONTROL		1,497		11.0		247		247		1922-23
	b. POWER										16. DATE NORMAL OPER. BEGAN
	c. WATER SUPPLY										
	d. IRRIGATION										
	e. CONSERVATION										
	f. INACTIVE										Nov 1922
17. LENGTH OF RESERVOIR 0.36 MILES					AV. WIDTH OF RESERVOIR 0.05 MILES						
WATERSHED	18. TOTAL DRAINAGE AREA 2.3 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 23.0 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 2.3 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.53 INCHES						
	20. LENGTH 2.7 MILES		AV. WIDTH 0.85 MILES		24. MEAN ANNUAL RUNOFF 188 (32) AC.-FT.						
	21. MAX. ELEV. 3,694		MIN. ELEV. 1,497		25. CLIMATIC CLASSIFICATION Subhumid						
	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/W RATIO AC.-FT. PER SQ. ML.		
Nov 1952		14.5	29.9	Contour	5'	11.6	221	96			
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					
Nov 1952		22.0		174	827	2,520	127	3,800			
26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE-FEET							
	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YR.	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YR.					
Nov 1952		7	0.48	0.21	26.0	0.87	0.38				
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	a. AV. ANNUAL	b. TO DATE	a. PERIOD	b. TO DATE				
Nov 1952				0.35	10.5						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION													
	52-50	50-40	40-30	30-20	20-10	10-crest								
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
Mar 1929	Insufficient data													
Mar 1936	16	12			36	36								
May 1938	2	16	23	25	29	5								
Nov 1952		13	68	17		2								

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.
1938-39	1,465.4	Dry	20.6	1945-46	1,477.4	Dry	104
1939-40	1,463.6	"	16.1	1946-47	1,472.0	"	64
1940-41	1,488.0	"	719	1947-48	Dry	"	0
1941-42	Dry	"	0	1948-49	"	"	0
1942-43	1,491.4	"	827	1949-50	1,456.4	"	4.7
1943-44	1,478.1	"	218	1950-51	Dry	"	0
1944-45	1,474.4	"	177	1951-52	1,476.7	"	358
				1952-53	1,455.4	"	2

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1,445	0	0	1,485	7.6	109			
1,450	.3	.6	1,490	9.1	150			
1,455	.7	2.8	1,495	10.9	199			
1,460	1.4	7.5	1,500	12.6	257			
1,465	2.2	16.1						
1,470	3.4	29.5						
1,475	4.7	49.0						
1,480	6.1	75.4						

47. REMARKS AND REFERENCES

1/ Item 36 - Values starting March 1936.

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Live Oak Dam

NAME OF RESERVOIR

70-14b

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM Live Oak Creek			3. STATE California								
	4. SEC. 32 TWP. 1N RANGE 8W			5. NEAREST P.O. La Verne			6. COUNTY Los Angeles								
	7. LAT 34° 07' 55" LONG 117° 44' 37"			8. TOP OF DAM ELEVATION 1500			9. SPILLWAY CREST ELEV. 1497								
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		1497		11.0		247		247		1922-23				
	b. MULTIPLE USE														
	c. POWER														
	d. WATER SUPPLY										Nov 1922				
	e. IRRIGATION														
	f. CONSERVATION														
	g. INACTIVE														
17. LENGTH OF RESERVOIR 0.36 MILES					AV. WIDTH OF RESERVOIR 0.05 MILES										
WATERSHED	18. TOTAL DRAINAGE AREA 2.3 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 23.0 INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA 2.3 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.92 INCHES										
	20. LENGTH 2.7 MILES		AV. WIDTH 0.85 MILES		24. MEAN ANNUAL RUNOFF 233 (15) AC.-FT.										
	21. MAX. ELEV. 3694		MIN. ELEV. 1490		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.
1919										110		247		107	
Mar 1929		6.3		6.3						11.0		247		107	
Mar 1936		7.0		13.3		Contour		5'		10.9		242		105	
May 1938		2.1		15.4		Contour		5'		11.6		228		100	
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			
1919															
Mar 1929		22.0		ND		ND		ND		ND		ND			
Mar 1936		21.9		ND		ND		ND		ND		ND			
May 1938		36.2		650		800		1280		ND		ND			
26. DATE OF SURVEY		37. 3/ PERIOD CAPACITY LOSS, ACRE-Feet			38. TOTAL SED. DEPOSITS TO DATE, ACRE-Feet										
		a. PERIOD TOTAL			b. AV. ANNUAL		c. PER SQ. MI.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		
1919															
Mar 1929		0			0		0		0		0		0		
Mar 1936		5			.71		.31		5		.38		.17		
May 1938		14			6.65		2.9		19		1.23		.54		
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		a. AV. ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE	
1919															
Mar 1929								0		0					
Mar 1936								.17		2.19					
May 1938								.49		5.60					

ND = Not Determined.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION													
	52-50	50-40	40-30	30-20	20-10	10-Crest								
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
1919	Insufficient data													
Mar 1929	16	12	-	-	36	36								
Mar 1936	2	16	23	25	29	5								
May 1938														
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
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.							
1922-23				1931-32			ND							
1923-24				1932-33			0							
1924-25				1933-34	1488.2	Dry	ND							
1925-26		No Record		1934-35	1465.3	Dry	27							
1926-27				1935-36	1467.6	1444.0	33							
1927-28				1936-37	1480.5	Dry	494							
1928-29				1937-38	1494.7	Dry	800							
1929-30														
1930-31														
46. ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
1445	0	0	1480	6.1	82.3									
1450	.3	.6	1485	7.5	116									
1455	.9	3.0	1490	9.1	157									
1460	1.7	8.9	1495	10.9	205									
1465	2.7	19.5	1500	12.8	264									
1470	3.7	35.2												
1475	4.7	55.8												
47. REMARKS AND REFERENCES														
1/ Item 25 - Temperature taken at Pasadena, California.														
2/ Item 36 - Record started March 1936.														
3/ Item 37 & 41 - Sediment removed at various times.														
ND = Not Determined.														
48. AGENCY MAKING SURVEY			LACTCD			50. DATE _____								
49. AGENCY SUPPLYING DATA			C of E											

RESERVOIR SEDIMENT DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Live Oak Dam
NAME OF RESERVOIR

70-14 b
DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM Live Oak Creek			3. STATE California																				
	4. SEC. TWP. RANGE			5. NEAREST TOWN La Verne			6. COUNTY Los Angeles																				
	7. STREAM BED ELEVATION 1,430			8. TOP OF DAM ELEVATION 1,500			9. SPILLWAY CREST ELEV. 1,497																				
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. MULTIPLE USE										1922-23																
	b. FLOOD CONTROL		1,497		11.0		247		247																		
	c. POWER																										
	d. WATER SUPPLY																										
	e. IRRIGATION										16. DATE NORMAL OPER. BEGAN																
	f. CONSERVATION																										
	g. SEDIMENT																										
h. INACTIVE										Nov 1922																	
17. LENGTH OF RESERVOIR			0.36			MILES			AV. WIDTH OF RESERVOIR			0.05			MILES												
18. TOTAL DRAINAGE AREA				2.3				SQ. MI.				22. MEAN ANNUAL PRECIPITATION				23.0				INCHES							
19. NET SEDIMENT CONTRIBUTING AREA				2.3				SQ. MI.				23. MEAN ANNUAL RUNOFF				1.44				INCHES							
20. LENGTH			2.7			MILES			AV. WIDTH			0.85			MILES			24. MEAN ANNUAL RUNOFF			177(42)			AC.-FT.			
21. MAX. ELEV.				3,694				MIN. ELEV.				1,430				25. CLIMATIC CLASSIFICATION								Subhumid			
SURVEY DATA	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/W RATIO AC.-FT. PER SQ. MI.												
	Nov 1952		14.5		29.9		Contour		5 feet		11.6		221		96 1/2 ✓												
	Dec 1961		9.0		38.9		"		"		11.3		170		74 1/2 ✓												
	Dec 1962		1.0		39.9		"		"		11.0		166		72 1/2 ✓												
	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														
	Nov 1952		22.0		174		827		2,520		127		3,800														
	Dec 1961		18.91		137		699		1,229				5,029														
	Dec 1962		21.48		186		186		186				5,215														
	26. DATE OF SURVEY		37. PERIOD SEDIMENT DEPOSITS ACRE-FEET				38. TOTAL SED. DEPOSITS TO DATE ACRE-FEET.																				
		a. PERIOD TOTAL		b. AV. ANNUAL		c. PER SQ. MI.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR															
Nov 1952		7		0.48		0.21		26.0		0.87		0.38															
Dec 1961		51		5.67		2.46		77.0		1.98		0.86															
Dec 1962		4		4.0		1.74		81.0		2.03		0.88															
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		a. AV. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE													
Nov 1952								0.35		10.5																	
Dec 1961								.80		31.2																	
Dec 1962								.82		32.8																	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION												
	52-50	50-40	40-30	30-20	20-10	10-Crest							
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Mar 1929	Insufficient data												
Mar 1936	16	12			36	36							
May 1938	2	16	23	25	29	5							
Nov 1952		13	68	17		2							
Dec 1961	1	8	32	48	8	3							
Dec 1962			4	19	48	29							

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.
1944-45	1474.4	Dry	177	1953-54	1472.6	1445.7	78
1945-46	1477.4	"	104	1954-55	1447.5	1444.+	0.3
1946-47	1472.0	"	64	1955-56	1477.5	Dry	77
1947-48	Dry	"	0	1956-57	1447.9	"	1.9
1948-49	"	"	0	1957-58	1487.4	1444.+	699
1949-50	1456.4	"	4.7	1958-59	1458.1	Dry	5.6
1950-51	Dry	"	0	1959-60	Dry	"	0
1951-52	1476.7	"	358	1960-61	1456.3	1444.+	4.8
1952-53	1476.7	"	364	1961-62	1487.5	1468.6	186.3

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1456.5	0	0	1495	10.1	144.7			
1460	+	+	1500	12.0	200.8			
1465	0.03	0.13						
1470	.22	.67						
1475	2.24	6.43						
1480	5.00	26.9						
1485	6.90	58.0						
1490	8.50	97.4						

47. REMARKS AND REFERENCES
 1/ Item 36. Records started March 1936.

48. AGENCY MAKING SURVEY Los Angeles County Flood Control District (LACFCD)
 49. AGENCY SUPPLYING DATA Corps of Engineers, Los Angeles
 50. DATE 11 Feb 1964

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Live Oak Dam
NAME OF RESERVOIR

70-14 c
DATA SHEET NO.

DAM	1. OWNER LACFCO			2. STREAM Live Oak Creek			3. STATE California					
	4. SEC. 32 TWP. 1N RANGE 8W			5. NEAREST P O. LaVerne			6. COUNTY Los Angeles					
	7. LAT. 34° 07' 55" LONG 117° 44' 37"			8. TOP OF DAM ELEVATION 1,500			9. SPILLWAY CREST ELEV. 1,497					
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		1497		11.0		247		247		1922-23	
	b. MULTIPLE USE										16. DATE NORMAL OPER. BEGAN	
	c. POWER										Nov 1922	
	d. WATER SUPPLY											
	e. IRRIGATION											
	f. CONSERVATION											
	g. INACTIVE											
WATERSHED	17. LENGTH OF RESERVOIR .36 MILES				AV. WIDTH OF RESERVOIR 0.05 MILES							
	18. TOTAL DRAINAGE AREA 2.3 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 23.0 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 2.3 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.78 INCHES							
	20. LENGTH 2.7 MILES		AV. WIDTH 0.85 MILES		24. MEAN ANNUAL RUNOFF 218 (50) AC.-FT.							
	21. MAX. ELEV. 3,694		MIN. ELEV. 1,430		25. ANNUAL TEMP. MEAN 62.2° RANGE 48.8°-75.6°							
SURVEY DATA	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.			
	Mar 67		4.3	44.2	Contour	5'	11.0	221.8	1.33			
	Jan 69		1.75	45.95	"	5'	10.4	197.1	1.11			
	Oct 70		1.75	47.70	"	5'	11.1	251.1	1.13			
	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			
	Mar 67		26.84		233	215	747	132	5,977			
	Jan 69		31.87		569	698	996	149	6,973			
	Oct 70		19.19		986	2,146	1,725	179	8,698			
	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	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR					
Mar 67		28.0	8.8	3.83	109	2.41	1.05					
Jan 69		24.7	14.1	6.13	134	2.85	1.24					
Oct 70		23.0	13.1	5.70	157	3.27	1.40					
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	a. AV. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE				
Mar 67					.22	10.1						
Jan 69					.43	20.2						
Oct 70					-.03	-1.7						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	52.50	50-40	40-30	30-20	20-10	10-Crest						
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Mar 67	15	19	20	32	12	2						
Jan 69	0	10	24	24	23	19						
Oct 70	Excavation of 77 acre-feet increased storage capacity.											

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
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.
1963-64	1448.0	1432.8	4.8				
1964-65	1459.0	1432.8	19.9				
1965-66	1478.2	1432.0	215.0				
1966-67	1493.2	1432.0	698.0				
1967-68	1477.8	1452.0	131.0				
1968-69	1497.5	1452.0	2146.0				
1969-70	1481.0	1437.0	254.0				
.
.

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1436	0	0	1470	4.3	53.3	1505	13.7	352
1440	.1	.2	1475	5.3	77.7			
1445	.3	1.3	1480	6.3	107.0			
1450	.7	4.0	1485	7.4	142.0			
1455	1.5	9.7	1490	8.6	183.0			
1460	2.4	19.6	1495	10.1	230.0			
1465	3.2	34.1	1500	12.1	286.0			

47. REMARKS AND REFERENCES

1/ Item 25 - Temperature taken at Pasadena, California.

2/ Items 32, 37 & 41 - Sediment removed at various times.

3/ Item 36 - Record started March 1936.

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

LIVE OAK DAM

NAME OF RESERVOIR

70-14^cd

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM LIVE OAK CREEK			3. STATE CALIFORNIA									
	4. SEC. 32 TWP. 1N RANGE 8W			5. NEAREST P O. La Verne			6. COUNTY Los Angeles									
	7. LAT. 34° 07' 55" LONG 117° 44' 37"			8. TOP OF DAM ELEVATION 1500			9. SPILLWAY CREST ELEV. 1497									
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		1497		11.0		247		247		1922-23					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION										Nov 22					
g. INACTIVE																
WATERSHED	17. LENGTH OF RESERVOIR 0.36 MILES				AV. WIDTH OF RESERVOIR 0.05 MILES											
	18. TOTAL DRAINAGE AREA 2.3 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 23.0 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 2.3 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.78 INCHES											
	20. LENGTH 2.7 MILES		AV. WIDTH 0.85 MILES		24. MEAN ANNUAL RUNOFF 218 (50) AC-FT.											
	21. MAX. ELEV. 3694		MIN. ELEV. 1430		25. ANNUAL TEMP MEAN 62.2° RANGE 48.8°-75.6°											
SURVEY DATA	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.	
	Mar 67		3.2		45.2		Contour		5'		11.0		221.8		1.02	
	Jan 69		1.75		46.95		"		5'		10.4		197.1		.90	
	Oct 70		1.75		48.70		"		5'		11.1		251.1		1.15	
	Oct 77		7.0		55.70		"		5'		12.0		256.2		1.18	
	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			
	Mar 67		26.84		233		215		747		132		5977			
	Jan 69		31.87		569		698		996		149		6973			
	Oct 70		19.19		986		2,146		1,725		179		8698			
	Oct 77		28.13		125		291		872		158		9570			
	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		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR			
	Mar 67		28.0		8.8		3.83		109		2.41		1.05			
	Jan 69		24.7		14.1		6.13		134		2.85		1.24			
Oct 70		23.0		13.1		5.70		157		3.22		1.40				
Oct 77		0		--		--		157		3.22		1.40				
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		a. AV. ANN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE		
Mar 67								.22		10.1						
Jan 69								.43		20.2						
Oct 70								-.03		-1.7						
Oct 77								-.06		-3.7						

26. DATE OF SURVEY	43 DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION										
	52-50	50-40	40-30	30-20	20-10	10-Crest					
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
Mar 67	15	19	20	32	12	2					
Jan 69	0	10	24	24	23	19					
Oct 70	Excavation of 77 acre-feet increased storage capacity.										
Oct 77	Excavation of 5 acre-feet increased storage capacity.										

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.
1963-64	1448.0	1432.8	4.8	1975-76	1463.71	1443.43	30.4
1964-65	1459.0	1432.8	19.9	1976-77	1459.27	1436.0	34.3
1965-66	1478.2	1432.0	215.0				
1966-67	1493.2	1432.0	698.0				
1967-68	1477.8	1452.0	131.0				
1968-69	1497.5	1452.0	2146.0				
1969-70	1481.0	1437.0	254.0				
1970-71	1466.7	1436.0	243.3				
1971-72	1465.5	1437.0	70.6				
1972-73	1484.8	1437.0	290.6				
1973-74	1472.8	1436.0	132.4				
1974-75	1469.73	1442.30	70.9				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1444	0	0	1485	7.7	135.9			
1445	.02	.03	1490	9.9	179.6			
1450	.57	1.81	1495	11.4	232.9			
1455	1.33	6.27	1500	12.9	293.5			
1460	2.3	15.3	1505	14.0	361.8			
1465	3.1	28.8						
1470	4.1	46.9						
1475	5.4	70.8						
1480	6.5	100.6						

47. REMARKS AND REFERENCES
 1/ Item 25 - Temperature taken at Pasadena, California.
 2/ Items 32, 37 & 41 - Sediment removed at various times.
 3/ Item 36 - Record started March 1936.

48. AGENCY MAKING SURVEY LACFCD
 49. AGENCY SUPPLYING DATA C of E

50. DATE 17 Feb 78