

RESERVOIR SEDIMENTATION
DATA SUMMARY

LOS FLORES DEBRIS BASIN

70-48a

NAME OF RESERVOIR (Sheet 1 of 2)

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. RIVER Los Flores Channel			3. STATE California									
	4. SEC. TWP. 1 N RANGE 12 W			5. NEAREST TOWN Altadena			6. COUNTY Los Angeles									
	7. STREAM BED ELEV. 1714.5			8. TOP OF DAM ELEV. 1726.0			9. SPILLWAY CREST ELEV. 1715.6									
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															
	b. POWER															
	c. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION										April 1936					
	e. CONSERVATION															
	f. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR .08 MILES				AV. WIDTH OF RESERVOIR .04 MILES											
	18. TOTAL DRAINAGE AREA .45 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 25.2 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA .45 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH 1.46 MILES		AV. WIDTH .31 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.											
	21. MAX. ELEV. 4350		MIN. ELEV. 1714.5		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.	
	Sept. 1936		1		1											
	" 1938		2		3											
	" 1939		1		4											
	" 1943		4		8											
	" 1944		1		9											
	" 1945		1		10											
	" 1946		1		11											
	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		d. MEAN ANNUAL		e. TOTAL TO DATE			
	Sept. 1936		21.7		No record of inflow.											
	" 1938		38.0													
	" 1939		28.9													
	" 1943		34.5													
	" 1944		34.9													
" 1945		20.7														
" 1946		21.9														
26. DATE OF SURVEY		37. PERIOD SEDIMENT DEPOSITS ACRE-FEET 2/				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.				
Sept. 1936		6.59		6.59		14.7		6.59		6.59		14.7				
" 1938		34.40		17.20		38.2		41.0		13.66		30.4				
" 1939		.69		.69		1.53		41.7		10.42		23.2				
" 1943		7.91		1.98		4.40		49.6		6.20		13.8				
" 1944		1.67		1.67		3.71		51.3		5.70		12.7				
" 1945		.42		.42		.93		51.7		5.17		11.5				
" 1946		.43		.43		.96		52.1		4.74		10.5				
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		

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

LAS FLORES DEBRIS BASIN

NAME OF RESERVOIR

70-48c

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM Las Flores Chan.			3. STATE Calif								
	4. SEC. 3 TWP. 1N RANGE 12W			5. NEAREST P O. Altadena			6. COUNTY Los Angeles								
	7. LAT. 34°12'05" LONG 118°07'33"			8. TOP OF DAM ELEVATION 1726			9. SPILLWAY CREST ELEV. 1715.6								
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														
	b. MULTIPLE USE														
	c. POWER														
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN				
	e. IRRIGATION										Apr 36				
	f. CONSERVATION														
g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 0.08 MILES				AV. WIDTH OF RESERVOIR 0.04 MILES										
	18. TOTAL DRAINAGE AREA 0.45 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 26.8 INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA 0.45 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES										
	20. LENGTH 1.46 MILES		AV. WIDTH 0.31 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.										
	21. MAX. ELEV. 4,350		MIN. ELEV. 1707		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.		
	Sep 66		3	30.42											
	Sep 69		3	33.42											
	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		
	Sep 66		24.91												
	Sep 69		3/												
	26. DATE OF SURVEY		37. <u>4/</u> 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		
	Sep 66		11.9		3.97		8.82		85.3		2.75		6.11		
Sep 69		17.6		5.87		13.0		102.9		3.08		6.84			
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	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											

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.

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

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

2/ Item 32 - Capacity of debris basin varies. Debris excavated at various times.

3/ Item 34 - Incomplete rainfall record.

4/ Item 37 - Sedimentation values computed by LACFCD are based on complete water years.

RESERVOIR SEDIMENT DATA SUMMARY

Los Flores Debris Basin

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

NAME OF RESERVOIR

70-48b

DATA SHEET NO.
(Sheet 2 of 2)

DAM	1. OWNER LACFCD			2. STREAM Los Flores Channel			3. STATE California				
	4. SEC. TWP.		RANGE		5. NEAREST TOWN Altadena			6. COUNTY Los Angeles			
	7. STREAM BED ELEVATION 1707			8. TOP OF DAM ELEVATION 1726			9. SPILLWAY CREST ELEV. 1715.6				
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										
	b. FLOOD CONTROL										
	c. POWER										
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN
	e. IRRIGATION										
	f. CONSERVATION										
	g. SEDIMENT										April 36
	h. INACTIVE										
WATERSHED	17. LENGTH OF RESERVOIR 0.08 MILES				AV. WIDTH OF RESERVOIR 0.04 MILES						
	18. TOTAL DRAINAGE AREA 0.45 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 26.8 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 0.45 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES						
	20. LENGTH 1.46 MILES		AV. WIDTH 0.31 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.						
	21. MAX. ELEV. 4,350		MIN. ELEV. 1707		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 1/ ACRE-FEET	33. C/W RATIO AC.-FT. PERSQ. MI.			
	Sept 1947	1	12								
	Sept 1948	1	13								
	Sept 1949	1	14								
	Sept 1950	1	15								
	Sept 1952	2	17								
	Sept 1963	11	28								
	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		
	Sept 1947	29.3		No record of inflow							
	Sept 1948	12.4									
	Sept 1949	16.0									
	Sept 1950	18.5									
	Sept 1952	30.14									
	Sept 1963	19.92									
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
Sept 1947	.30		.30		.67		52.4		4.37		9.71
Sept 1948	0		0		0		52.4		4.03		8.96
Sept 1949	0		0		0		52.4		3.74		8.31
Sept 1950	0		0		0		52.4		3.49		7.76
Sept 1952	1.16		0.58		1.29		53.56		3.15		7.00
Sept 1963	19.8		1.80		4.00		73.36		2.62		5.82
26. DATE OF SURVEY	39. AV. DRY WGT. LBS. PER CU. FT.		40. SED. DEP. TONS PERSQ. 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

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION												
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												

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.

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

1/ Items 32 and 37. Capacity of debris basin varies. Debris excavated at various times.

48. AGENCY MAKING SURVEY Los Angeles County Flood Control District (LACFCD)
 49. AGENCY SUPPLYING DATA Corps of Engineers, Los Angeles 50. DATE 11 Feb 64

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

LAS FLORES DEBRIS BASIN (Revised)

NAME OF RESERVOIR

70-48d

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM Las Flores Chan.		3. STATE Calif.									
	4. SEC. 3 TWP. 1N RANGE 12W			5. NEAREST P.O. Altadena		6. COUNTY Los Angeles									
	7. LAT. 34° 12 ' 05 " LONG 118° 07 ' 33 "			8. TOP OF DAM ELEVATION 1726		9. SPILLWAY CREST ELEV. 1715.6									
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														
	b. MULTIPLE USE														
	c. POWER														
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN				
	e. IRRIGATION										Apr 36				
	f. CONSERVATION														
g. INACTIVE															
17. LENGTH OF RESERVOIR 0.08 MILES				AV. WIDTH OF RESERVOIR 0.04 MILES											
WATERSHED	18. TOTAL DRAINAGE AREA .45 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 26.8 INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA .45 SQ. MI.				23. MEAN ANNUAL RUNOFF				INCHES						
	20. LENGTH 1.46 MILES		AV. WIDTH .31 MILES		24. MEAN ANNUAL RUNOFF				AC.-FT.						
	21. MAX. ELEV. 4350		MIN. ELEV. 1707		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.
Sep 36		.5		.5											
Sep 38		2.0		2.5											
Sep 44		6.0		8.5											
Sep 63		19.0		27.5											
Sep 66		3.0		30.5											
Sep 69		3.0		33.5											
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			
Sep 36		2.10		No record of inflow											
Sep 38		38.00													
Sep 44		33.63													
Sep 63		20.96													
Sep 66		24.91													
Sep 69		35.80													
26. DATE OF SURVEY		37. <u>3</u> / 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			
Sep 36		6.50		13.00		28.88		6.50		13.00		28.88			
Sep 38		34.48		17.24		38.31		40.98		16.39		36.43			
Sep 44		8.81		1.47		3.26		49.79		5.86		13.02			
Sep 63		19.77		1.04		2.31		69.56		2.53		5.62			
Sep 66		11.87		3.96		8.79		81.43		2.67		5.93			
Sep 69		16.42		5.47		12.16		97.85		2.92		6.49			
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	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION													
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
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.							
46. ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
47. REMARKS AND REFERENCES														
<u>1/</u> Item 25 - Temperature taken at Pasadena, California. <u>2/</u> Item 32 - Capacity of debris basin varies. Debris excavated at various times. <u>3/</u> Item 37 - Sedimentation values computed by LACFCD are based on complete water years.														
48. AGENCY MAKING SURVEY					LACFCD C of E					49. AGENCY SUPPLYING DATA				
										50. DATE <u>11 Feb 72</u>				