

RESERVOIR SEDIMENTATION
DATA SUMMARY

BAILEY DEBRIS BASIN

70-38b - 1

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER LACFD			2. RIVER B ailey Channel			3. STATE Calif.									
	4. SEC. TWP. I N RANGELL W			5. NEAREST TOWN Sierra Madre			6. COUNTY Los Angeles									
	7. STREAM BED ELEV. 1134			8. TOP OF DAM ELEV. 1154.0			9. SPILLWAY CREST ELEV. 1140.0									
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															
	d. IRRIGATION										16. DATE NORMAL OPER. BEGAN					
	e. CONSERVATION															
	f. INACTIVE										Aug. 1945					
WATERSHED	17. LENGTH OF RESERVOIR .09 MILES				AV. WIDTH OF RESERVOIR .04 MILES											
	18. TOTAL DRAINAGE AREA .57 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 28.2 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA .57 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH 1.58 MILES		AV. WIDTH .36 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.											
	21. MAX. ELEV. 4030		MIN. ELEV. 1134		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. 1946		1		1											
	" 1947		1		2											
	" 1948		1		3											
	" 1949		1		4											
	" 1950		1		5											
	Sept. 1952		2		7											
	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. 1946		22.3		No record of inflow.											
" 1947		30.8														
" 1948		14.3														
" 1949		17.8														
" 1950		22.5														
Sept. 1952		34.64														
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. 1946		.48		.48		.84		.48		.48		.84				
" 1947		0		0		0		.48		.24		.42				
" 1948		0		0		0		.48		.16		.28				
" 1949		0		0		0		.48		.12		.21				
" 1950		0		0		0		.48		.10		.18				
Sept. 1952		.2		.1		.18		.68		.10		.18				
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		

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
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														
<p>1/ Item 32. Capacity of debris basin varies. Debris excavated at various times.</p> <p>2/ Item 37. Sedimentation values computed by LACFCD are based on complete water year.</p>														
48. AGENCY SUPPLYING DATA LACFCD & C. of E.										49. DATE 12 March 1951.				

RESERVOIR SEDIMENT
DATA SUMMARY

BAILEY CANYON DEBRIS DAM (REVISED)

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

NAME OF RESERVOIR

70-38d

DATA SHEET NO.

DAM	1. OWNER <u>LACFO</u>			2. STREAM <u>BAILEY CHANNEL</u>			3. STATE <u>CALIFORNIA</u>							
	4. SEC. <u>Land</u> TWP. <u>Grant</u> RANGE			5. NEAREST P.O. <u>Sierra Madre</u>			6. COUNTY <u>Los Angeles</u>							
	7. LAT <u>34° 10' 40"</u> LONG. <u>118° 04' 00"</u>			8. TOP OF DAM ELEVATION <u>1,166</u>			9. SPILLWAY CREST ELEV. <u>1,155</u>							
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													
	f. CONSERVATION													
	g. INACTIVE										1/Dec 54			
WATERSHED	17. LENGTH OF RESERVOIR <u>.08</u> MILES				AV. WIDTH OF RESERVOIR <u>0.02</u> MILES									
	18. TOTAL DRAINAGE AREA <u>.60</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>27.00</u> INCHES									
	19. NET SEDIMENT CONTRIBUTING AREA <u>.60</u> SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES									
	20. LENGTH <u>1.5</u> MILES AV. WIDTH <u>0.4</u> MILES				24. MEAN ANNUAL RUNOFF AC.-FT.									
	21. MAX. ELEV. <u>4,000</u>		MIN. ELEV. <u>1,155</u>		25. ANNUAL TEMP. MEAN <u>62.2°</u> RANGE <u>48.8°-75.6°</u>									
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 59		4.83	4.83										
	Sep 62		3.0	7.83										
	Sep 68		6.0	13.83										
	Sep 71		3.0	16.83										
	Sep 72		1.0	17.83										
	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 59		26.43		No record of inflow									
	Sep 62		13.23											
	Sep 68		25.62											
	Sep 71		30.54											
	Sep 72		11.50											
	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 59		22.83	4.73	7.88	22.83		4.73	7.88						
Sep 62		15.87	5.29	8.82	38.70		4.94	8.23						
Sep 68		3.08	0.52	0.86	41.78		3.02	5.03						
Sep 71		3.10	1.03	1.72	44.88		2.67	4.45						
Sep 72		20.33	20.33	83.88	65.21		3.66	6.10						
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															
<u>1/</u> Item 16- Debris basin originally completed in August 1945. No debris removals prior to reconstruction of basin in December 1954. <u>2/</u> Item 25- Temperature taken at Pasadena, California. <u>3/</u> Item 32 -Capacity of debris basin varies. Debris excavated at various times. <u>4/</u> Item 37- Sedimentation values computed by LACFCD based on complete water year.															
48. AGENCY MAKING SURVEY LACFCD					50. DATE 12 Feb 73										
49. AGENCY SUPPLYING DATA C of E															

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

BATLEY CANYON DEBRIS BASIN
NAME OF RESERVOIR

70-38d
DATA SHEET NO.

DAM	1. OWNER LACFCD		2. STREAM Bailey Channel		3. STATE California	
	4. SEC. LandwP. Grantrange		5. NEAREST P.O. Sierra Madre		6. COUNTY Los Angeles	
	7. LAT. 34°10'40" LONG 118°04'00"		8. TOP OF DAM ELEVATION 1,166		9. SPILLWAY CREST ELEV. 1,155	
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					
	f. CONSERVATION					
	g. INACTIVE					Dec 54 1/
17. LENGTH OF RESERVOIR 0.08 MILES	AV. WIDTH OF RESERVOIR 0.02 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA 0.60 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 27.00 INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA 0.60 SQ. MI.		23. MEAN ANNUAL RUNOFF INCHES			
	20. LENGTH 1.5 MILES	AV. WIDTH 0.4 MILES	24. MEAN ANNUAL RUNOFF AC.-FT.			
	21. MAX. ELEV. 4,000	MIN. ELEV. 1,155	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
Sep 79	7.0	24.83				
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 79	21.32	No record of inflow.				
SURVEY DATA	26. DATE OF SURVEY	37. 4/ 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
	Sep 79	5.27	0.75	1.25	70.48	2.84
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. TODATE	a. PERIOD	b. TOT. TODATE

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															
<u>1/</u> Item 16 - Debris basin originally completed in August 1945. No debris removals prior to reconstruction of basin in December 1954. <u>2/</u> Item 25 - Temperature taken at Pasadena, California. <u>3/</u> Item 32 - Capacity of debris basin varies. Debris excavated at various times. <u>4/</u> Item 37 - Sedimentation values computed by LACFCD based on complete water year.															
48. AGENCY MAKING SURVEY				LACFCD											
49. AGENCY SUPPLYING DATA				C of E				50. DATE 14 February 1980							