

RESERVOIR SEDIMENTATION DATA SUMMARY

HAY DEBRIS BASIN

70-47b

NAME OF RESERVOIR (sheet 1 of 2) DATA SHEET NO.

DAM	1. OWNER LACFCD			2. RIVER Hay Canyon Channel		3. STATE Calif.		
	4. SEC. TWP. 2 N RANGE 13 W			5. NEAREST TOWN La Canada		6. COUNTY Los Angeles		
	7. STREAM BED ELEV. 1,905.0			8. TOP OF DAM ELEV. 1915.0		9. SPILLWAY CREST ELEV. 1905.0		
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					1936		
	b. POWER							
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION							
	e. CONSERVATION							
	f. INACTIVE					Oct. 1938		
WATERSHED	17. LENGTH OF RESERVOIR .06 MILES			AV. WIDTH OF RESERVOIR .04 MILES				
	18. TOTAL DRAINAGE AREA .20 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 25.8 INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA .20 SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES				
	20. LENGTH .81 MILES			AV. WIDTH .24 MILES			24. MEAN ANNUAL RUNOFF AC.-FT.	
	21. MAX. ELEV. 3230			MIN. ELEV. 1900.1			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. 1938	2	2					
	" 1939	1	3					
	" 1940	1	4					
	" 1941	1	5					
	" 1943	2	7					
	" 1944	1	8					
	" 1945	1	9					
	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. 1938	35.5	No record of inflow.					
	" 1939	26.9						
	" 1940	20.1						
	" 1941	52.0						
	" 1943	29.5						
" 1944	30.4							
" 1945	21.4							
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. 1938	11.31	5.66	28.3	11.3	5.65	28.3		
" 1939	1.26	1.26	6.30	12.6	4.20	21.0		
" 1940	.11	.11	.55	12.7	3.18	15.9		
" 1941	.38	.38	1.90	13.1	2.62	13.1		
" 1943	1.89	.95	4.75	15.0	2.14	10.7		
" 1944	.13	.13	.65	15.1	1.89	9.45		
" 1945	.31	.31	1.55	15.4	1.71	8.55		
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 SEDIMENTATION
DATA SUMMARY

Hay Debris Basin

70-47b

NAME OF RESERVOIR (sheet 2 of 2)

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. RIVER Hay Canyon Channel		3. STATE California										
	4. SEC. TWP.		RANGE		5. NEAREST TOWN La Canada		6. COUNTY Los Angeles									
	7. STREAM BED ELEV. 1 905.0			8. TOP OF DAM ELEV. 1,915		9. SPILLWAY CREST ELEV. 1,905										
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										Oct 36					
WATERSHED	17. LENGTH OF RESERVOIR .06 MILES				AV. WIDTH OF RESERVOIR .04 MILES											
	18. TOTAL DRAINAGE AREA .20 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 25.8 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA .20 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH .81 MILES		AV. WIDTH .24 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.											
	21. MAX. ELEV. 3,230		MIN. ELEV. 1,905		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.	
	Sep 46 ¹⁹		1		10											
	Sep 47 ²⁰		1		11											
	Sep 48 ²²		1		12											
	Sep 49 ²¹		1		13											
	Sep 50 ²⁰		1		14											
	Sep 52 ²³		2		16											
	Sep 61 ²²		9		25											
	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 46		21.6		No record of inflow											
	Sep 47		27.7													
	Sep 48		11.1													
	Sep 49		15.6													
	Sep 50		17.8													
Sep 52		28.21														
Sep 61		17.15														
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.				
Sep 46		0		0		0		15.4		1.54		7.70				
Sep 47		0		0		0		15.4		1.40		7.00				
Sep 48		0		0		0		15.4		1.28		6.40				
Sep 49		0		0		0		15.4		1.18		5.90				
Sep 50		0		0		0		15.4		1.10		5.50				
Sep 52		.92		.46		2.30		16.3		1.02		5.10				
Sep 61		6.44		.72		3.58		22.8		.91		4.56				
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	-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 32 - Capacity of debris basin varies. Debris excavated at various times.

2/ Item 37 - Sedimentation values computed by LACFCD are based on complete water year.

48. AGENCY SUPPLYING DATA LACFCD & C of E

49. DATE 17 Jan 62

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Hay Debris Basin

NAME OF RESERVOIR

70-47c

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM Hay Canyon Channel		3. STATE California		
	4. SEC. 26 TWP. 2N RANGE 13W		5. NEAREST P. O. La Canada		6. COUNTY Los Angeles			
	7. LAT. 34° 13' 30" LONG. 118° 12' 30"		8. TOP OF DAM ELEVATION 1915		9. SPILLWAY CREST ELEV. 1905			
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						16. DATE NORMAL OPER. BEGAN Oct '36	
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY							
	e. IRRIGATION							
	f. CONSERVATION							
g. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR 0.06 MILES			AV. WIDTH OF RESERVOIR .04 MILES				
	18. TOTAL DRAINAGE AREA .20 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 25.8 INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA .20 SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES				
	20. LENGTH .81 MILES		AV. WIDTH .24 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.			
	21. MAX. ELEV. 3230		MIN. ELEV. 1905		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 64	3	28				2	
	Sep 68	4	32					
	Sep 70	2	34					
	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 64	19.23		No record of inflow				
	Sep 68	27.44						
	Sep 70	31.32						
	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		
Sep 64	3.58	1.19	5.95	26.4	0.94	4.70		
Sep 68	2.60	0.65	3.25	29.0	0.91	4.55		
Sep 70	4.59	2.30	11.5	33.6	0.99	4.94		
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, California.

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

3/ Item 37 - Sedimentation values computed by LACFCD are based on complete water year.

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

50. DATE 11 Feb 71

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

HAY DEBRIS BASIN
NAME OF RESERVOIR

70-47c
DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM Hay Canyon Channel			3. STATE California					
	4. SEC. 26 TWP. 2N RANGE 13W			5. NEAREST P.O. La Canada			6. COUNTY Los Angeles					
	7. LAT 34° 13' 30" LONG 118° 12' 30"			8. TOP OF DAM ELEVATION 1915			9. SPILLWAY CREST ELEV. 1905					
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										Oct 36	
WATERSHED	17. LENGTH OF RESERVOIR -- 0.06 MILES				AV. WIDTH OF RESERVOIR 0.04 MILES							
	18. TOTAL DRAINAGE AREA .20 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 25.8 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA .20 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES							
	20. LENGTH .81 MILES		AV. WIDTH .24 MILES		24. MEAN ANNUAL RUNOFF AC-F.T.							
	21. MAX. ELEV. 3230		MIN. ELEV. 1905		25. ANNUAL TEMP MEAN 62.6° 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, 2/ ACRE-FEET		33. C/I. RATIO, AC.-FT. PER AC.-FT.		
	Sep 64		3	28								
	Sep 68		4	32								
	Sep 70		2	34								
	Sep 77		7	41								
	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 64		19.23		No record of inflow							
	Sep 68		27.44									
	Sep 70		31.32									
Sep 77		15.95										
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		
Sep 64		3.58	1.19	5.95		26.4		0.94		4.70		
Sep 68		2.60	0.65	3.25		29.0		.91		4.55		
Sep 70		4.59	2.30	11.5		33.6		.99		4.94		
Sep 77		.06	.01	.05		33.66		.82		4.1		
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, California.

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

3/ Item 37 - Sedimentation values computed by LACFCD are based on complete water year.