

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Sierra Madre Villa Debris Basin

NAME OF RESERVOIR

70-81a

DATA SHEET NO.

DAM	1. OWNER LACFCD			2. STREAM Sierra Madre Villa			3. STATE Calif									
	4. SEC. Land TWP. Grant RANGE			5. NEAREST P.O. Sierra Madre			6. COUNTY Los Angeles									
	7. LAT 34 10 30 " LONG 118° 04' 45 "			8. TOP OF DAM ELEVATION 1102.5			9. SPILLWAY CREST ELEV. 1089.0									
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										May 58					
	f. CONSERVATION															
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 1/ MILES				AV. WIDTH OF RESERVOIR 1/ MILES											
	18. TOTAL DRAINAGE AREA 1.46 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 26.82 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 1.46 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH 2.30 MILES		AV. WIDTH .90 MILES		24. MEAN ANNUAL RUNOFF AC.-FT.											
	21. MAX. ELEV. 4350.0		MIN. ELEV. 1089.0		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 59		1.4		1.4											
	Sep 62		3.0		4.4											
	Sep 68		6.0		10.4											
	Sep 70		2.0		12.4											
	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		9.40		No record of inflow.											
	Sep 62		12.19													
	Sep 68		23.37													
Sep 70		34.73														
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		c. PER SQ. MI.-YEAR				
Sep 59		.70		.50		.34		.70		.50		.34				
Sep 62		74.2		24.7		16.92		74.9		17.02		11.66				
Sep 68		1.55		.26		.18		76.5		7.35		5.03				
Sep 70		134.0		67.0		45.89		210.0		17.0		11.6				
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 17 - No dimensions available. <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 are based on complete water year.															
48. AGENCY MAKING SURVEY				LACFCD				50. DATE	11 Feb 51						
49. AGENCY SUPPLYING DATA				C of E											

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Sierra Madre Villa Debris Basin
NAME OF RESERVOIR

70-81Ab
DATA SHEET NO.

DAM	1. OWNER <u>LACFCD</u>			2. STREAM <u>Sierra Madre Villa</u>			3. STATE <u>Calif</u>									
	4. SEC. Land <u>TWP. Grant</u> RANGE			5. NEAREST P.O. <u>Sierra Madre</u>			6. COUNTY <u>Los Angeles</u>									
	7. LAT. <u>34° 10' 30"</u> LONG. <u>118 04' 45 "</u>			8. TOP OF DAM ELEVATION <u>1102.5</u>			9. SPILLWAY CREST ELEV. <u>1089.0</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 NOR-MAL OPER. BEGAN					
	e. IRRIGATION										May 58					
	f. CONSERVATION															
g. INACTIVE																
WATERSHED	17. LENGTH OF RESERVOIR <u>1/</u> MILES			AV. WIDTH OF RESERVOIR <u>1/</u> MILES												
	18. TOTAL DRAINAGE AREA <u>1.46</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <u>26.82</u> INCHES												
	19. NET SEDIMENT CONTRIBUTING AREA <u>1.46</u> SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES												
	20. LENGTH <u>2.30</u> MILES		AV. WIDTH <u>.90</u> MILES		24. MEAN ANNUAL RUNOFF AC.-F.T.											
	21. MAX. ELEV. <u>4350.0</u>		MIN. ELEV. <u>1089.0</u>		25. ANNUAL TEMP.: MEAN <u>62.2</u> RANGE <u>48.80-75.6</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		1.4		1.4											
	Sep 62		3.0		4.4											
	Sep 68		6.0		10.4											
	Sep 70		2.0		12.4											
	Sep 76		6.0		18.4											
	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		9.40		No record of inflow.											
	Sep 62		12.19													
Sep 68		23.37														
Sep 70		34.73														
Sep 76		28.86														
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		.70		.50		.34		.70		.50		.34				
Sep 62		74.2		24.7		16.92		74.9		17.02		11.66				
Sep 68		1.55		.26		.18		76.5		7.35		5.03				
Sep 70		134.0		67.0		45.89		210.0		17.0		11.6				
Sep 76		16.0		2.67		1.83		226.0		12.28		8.41				
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, PFM						
				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 17 - No dimensions available,
 2/ Item 25 - Temperature taken at Pasadena, California
 3/ Item 32 - Capacity of debris basin varies. Debris excavated at various times.
 4/ 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 Feb 77

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

SIERRA MADRE VILLA DEBRIS BASIN

NAME OF RESERVOIR

70-81b

DATA SHEET NO.

DAM	1. OWNER LACFCD		2. STREAM Sierra Madre Villa		3. STATE California			
	4. SEC. Land TWP. Grant RANGE		5. NEAREST P.O. Sierra Madre		6. COUNTY Los Angeles			
	7. LAT. 34°10'30" LONG 118°04'45"		8. TOP OF DAM ELEVATION 1102.5		9. SPILLWAY CREST ELEV. 1089.0			
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						May 58		
WATERSHED	17. LENGTH OF RESERVOIR 0.15 MILES		AV. WIDTH OF RESERVOIR .10 MILES					
	18. TOTAL DRAINAGE AREA 1.46 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 26.82 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 1.46 SQ. MI.		23. MEAN ANNUAL RUNOFF		INCHES			
	20. LENGTH 2.30 MILES	AV. WIDTH .90 MILES	24. MEAN ANNUAL RUNOFF		AC.-FT.			
	21. MAX. ELEV. 4350	MIN. ELEV. 1089	21. 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 78	2.0	20.4					
	Sep 79	1.0	21.4					
	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 78	31.99	No record of inflow.					
	Sep 79	23.56						
	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 78	1.12	0.56	0.38	227.12	11.13	7.62	
Sep 79	18.60	18.60	12.75	245.72	11.48	7.86		
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	

