

RESERVOIR SEDIMENTATION  
DATA SUMMARY

SIERRA MADRE DEERIS DAM

70-34 a

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER <b>LACFCD</b>			2. RIVER <b>Little Santa Anita Cr.</b>			3. STATE <b>California</b>									
	4. SEC. <b>TWP. RANGE</b>			5. NEAREST TOWN <b>Sierra Madre</b>			6. COUNTY <b>Los Angeles</b>									
	7. STREAM BED ELEV. <b>1110</b>			8. TOP OF DAM ELEV. <b>1175</b>			9. SPILLWAY CREST ELEV. <b>1172.5</b>									
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>1172.5</b>		<b>1.7</b>		<b>50.3</b>		<b>50.3</b>		<b>1928</b>					
	b. POWER															
	c. WATER SUPPLY															
	d. IRRIGATION										16. DATE NORMAL OPER. BEGAN					
	e. CONSERVATION										<b>Feb 1928</b>					
WATERSHED	17. LENGTH OF RESERVOIR <b>0.11</b>			MILES			AV. WIDTH OF RESERVOIR <b>0.024</b>			MILES						
	18. TOTAL DRAINAGE AREA <b>2.39</b>			SQ. MI.			22. MEAN ANNUAL PRECIPITATION <b>31.25</b>			INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA <b>2.39</b>			SQ. MI.			23. MEAN ANNUAL RUNOFF			INCHES						
	20. LENGTH <b>2.92</b>		MILES		AV. WIDTH <b>0.82</b>		MILES		24. MEAN ANNUAL RUNOFF		AC.-FT.					
	21. MAX. ELEV. <b>5433</b>		MIN. ELEV. <b>1172.5</b>						25. CLIMATIC CLASSIFICATION <b>Humid</b>							
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.	
	Feb 1928						Contour		5'		2.0		50.3		21	
	Feb 1930		2.0		2.0		"		5'		1.9		47.4		20	
	Feb 1932		2.0		4.0		"		5'		1.7		34.4		14	
	Nov 1939		7.8		11.8		"		5'		1.7		44.3		19	
	Jan 1944		4.1		15.9		"		5'		1.7		42.4		18	
	Oct 1944		.8		16.7		"		5'		1.8		40.6		17	
	Oct 1956		12.0		28.7		"		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			
	Feb 1928				No record of inflow											
	Feb 1930		20.3													
	Feb 1932		34.8													
Nov 1939		31.3														
Jan 1944		39.8														
Oct 1944		25.5														
Oct 1956		23.4														
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.				
Feb 1928		0		0		0		0		0		0				
Feb 1930		0		0		0		0		0		0				
Feb 1932		2.9		1.45		0.61		2.9		0.73		0.31				
Nov 1939		13.0		1.67		0.70		15.9		1.35		0.56				
Jan 1944		Sluicing increased storage capacity						15.9		1.00		0.42				
Oct 1944		1.9		2.38		1.00		17.8		1.07		0.45				
Oct 1956		55.8		4.65		1.95		73.6		2.56		1.07				
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		
Feb 1928								0		0						
Feb 1930								0		0						
Feb 1932								1.45		5.76						
Nov 1939								2.68		31.61						
Jan 1944								1.99		31.61						
Oct 1944								2.13		35.39						
Oct 1956								5.09		146.32						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION												
	63-60	60-50	50-40	40-30	30-20	20-10	Crest -10						
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
Feb 1932	3	27	53	7	10								
Nov 1939			12	18	24	28	18						
Oct 1944		15	45	10	10	5	15						
Oct 1956	Sediment removal												

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.
No record of reservoir operation							

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1120	0	0						
1130	0.14	.64						
1140	0.51	3.45						
1150	1.00	10.5						
1160	1.3	21.7						
1170	1.7	36.4						
1175	1.8	45.0						

47. REMARKS AND REFERENCES

\* Item 14 - Valve at dam is open at all times. No ponded water in reservoir after storms.

48. AGENCY SUPPLYING DATA    LACFCD & C of E

49. DATE    6 Jan 1960

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

Sierra Madre Debris Basin (Formerly Dam)  
NAME OF RESERVOIR

70-34b

DATA SHEET NO.

DAM	1. OWNER <b>LACFCD</b>		2. STREAM <b>Little Santa Anita Creek</b>		3. STATE <b>Calif</b>	
	4. SEC. <b>16</b> TWP. <b>1N</b> RANGE <b>11W</b>		5. NEAREST P. O. <b>Sierra Madre</b>		6. COUNTY <b>Los Angeles</b>	
	7. LAT. <b>34°10'34"</b> LONG. <b>118°2'31"</b>		8. TOP OF DAM ELEVATION <b>1175</b>		9. SPILLWAY CREST ELEV. <b>1172.5</b>	
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				Feb 28		
WATERSHED	17. LENGTH OF RESERVOIR <b>0.11</b> MILES		AV. WIDTH OF RESERVOIR <b>0.024</b> MILES			
	18. TOTAL DRAINAGE AREA <b>2.39</b> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <b>31.25</b> INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA <b>2.39</b> SQ. MI.		23. MEAN ANNUAL RUNOFF		INCHES	
	20. LENGTH <b>2.92</b> MILES		AV. WIDTH <b>0.82</b> MILES		24. MEAN ANNUAL RUNOFF	
	21. MAX. ELEV. <b>5433</b>		MIN. ELEV. <b>1172.5</b>		25. ANNUAL TEMP. MEAN <b>62.2°</b> RANGE <b>48.8°-75.6°</b>	
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 69		13		41.58	
	Sep 70		1		42.58	
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET	
			a. MEAN ANNUAL		b. MAX. ANNUAL	
			c. PERIOD TOTAL		36. WATER INFL. TO DATE, AC.-FT.	
			a. MEAN ANNUAL		b. TOTAL TO DATE	
	Sep 69		28.67		No record of inflow.	
Sep 70		18.71				
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 69		65.1		139		
Sep 70		3.66		143		
		5.01		3.33		
		3.66		3.35		
		2.10		1.39		
		1.53		1.40		
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.		
		a. PERIOD		b. TOTAL TO DATE		
		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM		
		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 basin varies. Debris excavated at various times.  
 3/ Item 37 - Sedimentation values computed by LACFCD based on complete water year.

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

SIERRA MADRE DEBRIS BASIN (Formerly Dam) (Revised)  
NAME OF RESERVOIR

70-34c

DATA SHEET NO.

DAM	1. OWNER <b>LACFD</b>				2. STREAM <b>Little Santa Anita Crk</b> STATE <b>Calif</b>											
	4. SEC. <b>16</b> TWP. <b>1N</b> RANGE <b>11W</b>			5. NEAREST P.O. <b>Sierra Madre</b>		6. COUNTY <b>Los Angeles</b>										
	7. LAT. <b>34° 10' 34" N</b> LONG. <b>118° 2' 31" W</b>				8. TOP OF DAM ELEVATION <b>1175.0</b>		9. SPILLWAY CREST ELEV. <b>1172.5</b>									
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										Feb 28					
	b. MULTIPLE USE															
	c. POWER										16. DATE NORMAL OPER. BEGAN					
	d. WATER SUPPLY															
	e. IRRIGATION										Feb 28					
	f. CONSERVATION															
	g. INACTIVE															
17. LENGTH OF RESERVOIR <b>0.11</b> MILES				AV. WIDTH OF RESERVOIR <b>0.024</b> MILES												
18. TOTAL DRAINAGE AREA <b>2.39</b> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <b>31.25</b> INCHES												
19. NET SEDIMENT CONTRIBUTING AREA <b>2.39</b> SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES												
20. LENGTH <b>2.92</b> MILES				24. MEAN ANNUAL RUNOFF AC.-FT.												
21. MAX. ELEV. <b>5,433.0</b>				MIN. ELEV. <b>1172.5</b>				25. ANNUAL TEMP MEAN <b>62.2°</b> RANGE <b>48.8°-75.6°</b>								
WATERSHED	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.	
	Nov 39		11.83		11.83											
	Jan 44		4.17		16.00											
	Mar 54		10.17		26.17											
	Sep 69		15.50		41.67											
	Sep 74		5.00		46.67											
	Sep 75		1.00		47.67											
	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 39		28.44		No record of inflow											
Jan 44		38.58														
Mar 54		25.27														
Sep 69		26.26														
Sep 74		21.71														
Sep 75		21.14														
SURVEY DATA	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			
	Nov 39		26.15		2.21		0.92		26.15		2.21		0.92			
	Jan 44		14.19		3.40		1.42		40.34		2.52		1.05			
	Mar 54		54.46		5.36		2.24		94.80		3.62		1.52			
	Sep 69		79.46		5.13		2.15		174.26		4.18		1.75			
	Sep 74		18.22		3.64		1.52		192.48		4.12		1.72			
	Sep 75		12.71		12.71		5.32		205.19		4.30		1.80			
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														
<p>1/ Item 25 - Temperature taken at Pasadena, Calif.</p> <p>2/ Item 32 - Capacity of basin varies. Debris excavated at various times.</p> <p>3/ Item 37 - Sediment values as computed by LACFCD are sediment removals from basin.</p>														
48. AGENCY MAKING SURVEY				LACFCD				50. DATE			Feb 76			
49. AGENCY SUPPLYING DATA				C of E										