

RESERVOIR SEDIMENTATION  
DATA SUMMARY

BIG TUJUNGA DAM

70-28

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER <b>LACFCD</b>			2. RIVER <b>Big Tujunga Creek</b>			3. STATE <b>Calif.</b>									
	4. SEC. <b>TWP. 3 N RANGE 12 W</b>			5. NEAREST TOWN <b>Sunland</b>			6. COUNTY <b>Los Angeles</b>									
	7. STREAM BED ELEV. <b>2104</b>			8. TOP OF DAM ELEV. <b>2304</b>			9. SPILLWAY CREST ELEV. <b>2290</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>1/</b>		<b>2290</b>		<b>86</b>		<b>6240</b>		<b>6240</b>		<b>1930-31</b>					
	b. POWER															
	c. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION										<b>July 1931</b>					
	e. CONSERVATION															
	f. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR <b>1.94 2/</b>			MILES			AV. WIDTH OF RESERVOIR <b>0.063 2/</b>			MILES						
	18. TOTAL DRAINAGE AREA <b>82.3</b>			SQ. MI.			22. MEAN ANNUAL PRECIPITATION <b>27.7</b>			INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA <b>82.2</b>			SQ. MI.			23. MEAN ANNUAL RUNOFF <b>4.45</b>			INCHES						
	20. LENGTH <b>14.2</b>		MILES		AV. WIDTH <b>5.8</b>		MILES		24. MEAN ANNUAL RUNOFF <b>19,520 (18)</b>		AC.-FT.					
	21. MAX. ELEV. <b>7078</b>			MIN. ELEV. <b>2104</b>			25. CLIMATIC CLASSIFICATION <b>Subhumid</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.ML	
	<b>1928</b>		<b>Original</b>								<b>86</b>		<b>6240</b>		<b>76</b>	
	May 1938		6.9		6.9		Volum.				75		4734		58	
	Oct. 1939		1.5		8.4				76		4488		55			
	Feb. 1940		.3		8.7				74		4568		56			
	July 1941		1.5		10.2		Contour		5'		79		4425		54	
	Feb. 1943		1.5		11.7		"		5'		78		4043		49	
	Apr. 1943		.2		11.9		"		5'		78		4236		51	
	June 1944		1.1		13.8		"		5'		79		4235		51	
	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					
	<b>1928</b>															
	May 1938		28.6		10,900		26,970		126,600		18,350		126,600			
	Oct. 1939		17.6		37,380		64,860		13,390		16,660		139,990			
	Feb. 1940		47.3		7,060		7,060		4,160		16,570		144,150			
July 1941		36.3		59,400		59,400		60,800		20,090		204,950				
Feb. 1943		34.1		30,000		52,900		37,400		20,710		212,350				
Apr. 1943		39.0		30,000		52,900		19,560		22,000		261,910				
June 1944		31.7		42,270		42,270		44,980		23,600		306,890				
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.				
<b>1928</b>																
May 1938		1506		218		2.65		1506		218		2.65				
Oct. 1939		246		164		2.00		1752		209		2.54				
Feb. 1940		Sluicing increased storage capacity						1752		175		2.45				
July 1941		143		95.3		1.16		1895		186		2.26				
Feb. 1943		382		255		3.10		2277		195		2.37				
Apr. 1943		Sluicing increased storage capacity						2277		191		2.33				
June 1944		1		.91		.01		2278		175		2.13				
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				
<b>1928</b>																
May 1938								3/		4/						
Oct. 1939								3.50		24.1						
Feb. 1940								3.35		28.1						
July 1941								2.80		26.8						
Feb. 1943								2.98		29.1						
Apr. 1943								3.12		35.2						
June 1944								3.06		32.1						
								2.80		32.1						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION													
	180-	160-	140-	120-	100-	80-60	60-40	40-20	20-0	0-20				
	160	140	120	100	80	60	40	20	0					
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
May 1938	5	13	16	6	7	9	14	12	18					
Oct. 1939					27	28	18	21	6					
July 1941			25	64	11									
Feb. 1943		1	8	6	9	21	21	21	13					

  

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.
1930-31	N.R.	N.R.	N.D.	1939-40	2250.9	2143.0	70,580
1931-32	N.R.	N.R.	N.D.	1940-41	2257.2	2145.0	59,400
1932-33	2246.4	2154.8	4342	1941-42	2253.6	2176.7	7,120
1933-34	2267.5	2141.0	4441	1942-43	2300.7	2145.0	52,880
1934-35	2290.1	2172.9	11,990	1943-44	2263.3	2145.0	42,270
1935-36	2234.8	2143.0	3875				
1936-37	2290.3	2142.9	26,970				
1937-38	2306.9	Dry	64,860				
1938-39	2253.1	2145.0	9905				

  

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
2145	0	0	2220	24.8	832	2300	87.3	5064
2150	0.8	2.1	2230	29.6	1107	2309	96.5	5896
2160	3.1	23.1	2240	34.1	1428			
2170	5.9	67.5	2250	42.1	1811			
2180	9.4	116	2260	51.3	2283			
2190	12.9	259	2270	60.0	2841			
2200	16.8	409	2280	69.4	3498			
2210	21.3	600	2290	77.6	4235			

  

47. REMARKS AND REFERENCES
1/ After flood season, reservoir is used for conservation.
2/ In June 1944.
3/ Based on summation of deposits listed in Item 37a. Deposition, if any, in years of sluicing is not included in the summation.
4/ Based on data in Item 32. Storage is regained by sluicing operations.

  

48. AGENCY SUPPLYING DATA	49. DATE
LACFCD & C. of E. NR - No record ND Not determined.	12 March 1951

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Big Tujunga Flood Control Basin

70-28b

NAME OF RESERVOIR

DATA SHEET NO.

DAM		1. OWNER IACFCD		2. RIVER Big Tujunga Creek		3. STATE California		
		4. SEC. TWP. RANGE		5. NEAREST TOWN Sunland		6. COUNTY Los Angeles		
		7. STREAM BED ELEV. 2,104		8. TOP OF DAM ELEV. 2,304		9. SPILLWAY CREST ELEV. 2,290		
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	2,290	86	6,240	6,240 1/	1930-1931		
	b. POWER							
	c. WATER SUPPLY							
	d. IRRIGATION					16. DATE NORMAL OPER. BEGAN		
	e. CONSERVATION							
	f. INACTIVE					July 1931		
17. LENGTH OF RESERVOIR		1.94	MILES		AV. WIDTH OF RESERVOIR		0.06 MILES	
WATERSHED	18. TOTAL DRAINAGE AREA		82.3	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		25.3 INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA		82.2	SQ. MI.	23. MEAN ANNUAL RUNOFF		3.48 INCHES	
	20. LENGTH		14.2	MILES	AV. WIDTH		5.8 MILES	
					24. MEAN ANNUAL RUNOFF		15,090 (32) AC.-FT.	
	21. MAX. ELEV.		7,078	MIN. ELEV.		2,290	25. CLIMATIC CLASSIFICATION	
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. ML.
	Apr 1943	.2	11.9	Contour	5'	78	4,236	51
	Jun 1944	1.1	13.0	"	5'	79	4,235	51
	Oct 1953	9.3	22.3	"	5'	78	4,099	50
	Jun 1958	4.7	27.0	"	5'	79	4,123	50
	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	
	Apr 1943	39.0			19,560	22,000	261,910	
	Jun 1944	31.7	40,900	42,270	44,980	23,610	306,890	
	Oct 1953	19.0	8,520	27,290	79,150	17,400	386,040	
	Jun 1958	23.56	8,290		38,960	15,740	425,000	
	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.	
	Apr 1943	2/ 169	Sediment sluiced			3,271		
	Jun 1944	198	180	2.19	3,469	267	3.25	
Oct 1953	136	14.6	0.18	3,605	162	1.97		
Jun 1958	109	23.2	.28	3,714	138	1.67		
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	
Apr 1943					32.1			
Jun 1944				4.28	32.1			
Oct 1953				2.60	34.4			
Jun 1958				2.21	33.9			

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION									
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION									
Apr. 1943	Sluicing		- increased		storage		capacity.			
Jun. 1944	"		"		"		"			
Oct. 1953	1	3	10	18	20	19	11	11	7	
Jun. 1958	Sluicing		- increased		storage		capacity.			

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.
1942-43	2300.7	2145.0	52,880	1951-52	2289.8	2167.2	27,288
1943-44	2663.3	2145.0	42,270	1952-53	2242.6	2142.0	3,496
1944-45	2273.1	2205.2	13,200	1953-54	2269.4	2142.5	5,389
1945-46	2288.2	2205.2	11,543	1954-55	2257.4	2142.5	2,623
1946-47	2248.5	2200.8	12,990	1955-56	2243.0	2158.3	3,026
1947-48	2245.8	2145.0	2,680	1956-57	2244.7	2159.0	1,967
1948-49	2235.9	2145.0	2,130	1957-58	2283.9	2142.5	27,560
1949-50	2243.6	2181.9	2,030				
1950-51	2212.4	2179.5	840				

46. ELEVATION-AREA-CAPACITY DATA (Jun 1958)								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
2,145	0	0	2,220	234	687.1	2,300	89	4,952
2,150	.54	1.17	2,230	28.8	744.9	2,310	99	5,891
2,160	2.5	15.2	2,240	37	1262			
2,170	5.0	50.9	2,250	46	1665			
2,180	7.4	111.8	2,260	53	2153			
2,190	10.7	200.6	2,270	62	2720			
2,200	14.1	322.6	2,280	71	3382			
2,210	18.0	478.6	2,290	29	4123			

47. REMARKS AND REFERENCES

1/ Item 14 - Reservoir is used for conservation after flood season.

2/ Item 37a - Total sediment removed since previous survey - 133 ac. ft.

3/ Item 41 b - Based upon values in Item 32

48. AGENCY SUPPLYING DATA  
LACFCD and C of E

49. DATE Revised June 1962

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

Big Tujunga Flood Control Basin

NAME OF RESERVOIR

70-28c

DATA SHEET NO.

DAM	1. OWNER <b>LACPCD</b>			2. STREAM <b>Big Tujunga Creeks</b>			3. STATE <b>California</b>									
	4. SEC. <b>36</b> TWP. <b>3N</b> RANGE <b>13W</b>			5. NEAREST P.O. <b>Sunland</b>			6. COUNTY <b>Los Angeles</b>									
	7. LAT. <b>34° 17' 30"</b> LONG. <b>118° 11' 15"</b>			8. TOP OF DAM ELEVATION <b>2,304</b>			9. SPILLWAY CREST ELEV. <b>2,290</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>2,290</b>		<b>86</b>		<b>6,240</b>		<b>6,240</b>		<b>1930-31</b>					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										<b>July 1931</b>					
	e. IRRIGATION															
	f. CONSERVATION															
	g. INACTIVE															
17. LENGTH OF RESERVOIR <b>1.94</b> MILES				AV. WIDTH OF RESERVOIR <b>0.06</b> MILES												
18. TOTAL DRAINAGE AREA <b>82.3</b> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <b>27.71</b> INCHES												
19. NET SEDIMENT CONTRIBUTING AREA <b>82.2</b> SQ. MI.				23. MEAN ANNUAL RUNOFF <b>3.50</b> INCHES												
20. LENGTH <b>14.2</b> MILES		AV. WIDTH <b>5.8</b> MILES		24. MEAN ANNUAL RUNOFF <b>15,353 (43)</b> AC.-FT.												
21. MAX. ELEV. <b>7,078</b>			MIN. ELEV. <b>2,104</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.	
	Oct 66		4.25		35.25		Contour		5'		78		3,819		0.25	
	Feb 69		2.33		37.58		Contour		5'		68		2,758		0.18	
	Oct 70		1.67		39.25		Contour		5'		88		6,027		0.39	
SURVEY DATA	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								
	Oct 66		18.50		8,720 30,772 36,624			13,676 484,144								
	Feb 69		23.72		47,767 30,158 111,297			15,845 595,441								
Oct 70		11.24		29,209 107,610 48,778			16,413 644,219									
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											
Oct 66		246 58.6 0.71			4,095 116 1.41											
Feb 69		1,156 496 6.03			5,251 140 1.70											
Oct 70		0 -- --			5,251 134 1.63											
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. ANN. b. TOT. TO DATE		a. PERIOD b. TOT. TO DATE										
Oct 66						1.10 38.8										
Feb 69						1.48 55.8										
Oct 70						.09 3.41										

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE CREST ELEVATION												
	180	160	140	120	100	80	60	40	20	Crest			
	160	140	120	100	80	60	40	20	Crest				
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
Oct 66			6	9	31	25	13	10	6				
Feb 69	Sluicing and excavation (95 acre-feet)												
Oct 70	Sluicing and excavation of 3,269 acre-feet, increased storage capacity.												

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.
1961-62	2294.3	2145.5	16,711				
1962-63	2246.2	2182.0	1,715				
1963-64	2240.4	2142.5	1,526				
1964-65	2255.8	2145.5	2,429				
1965-66	2289.6	2205.3	30,772				
1966-67	2289.6	2206.3	30,158				
1967-68	2256.8	2153.0	10,559				
1968-69	2301.4	2153.0	107,610				
1969-70	2236.7	2149.0	11,666				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
2141	0	0	2220	42.2	1543	2300	97.5	6958
2150	5.7	36.2	2230	48.7	2001	2310	107.1	7986
2160	8.2	105	2240	54.5	2520			
2170	12.3	209	2250	60.1	3096			
2180	17.1	358	2260	66.0	3730			
2190	22.9	560	2270	72.4	4426			
2200	29.2	823	2280	79.5	5187			
2210	35.6	1150	2290	88.0	6027			

47. REMARKS AND REFERENCES

- 1/ Item 14 - Reservoir is used for conservation after flood season.
- 2/ Item 25 - Temperature taken at Pasadena, California.
- 3/ Items 37 & 41 - Sediment removed at various times.

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

Big Tujunga

NAME OF RESERVOIR

70-28c

DATA SHEET NO.

DAM	1. OWNER LACFCD		2. STREAM Big Tujunga Creek		3. STATE California			
	4. SEC. 36 TWP. 3N RANGE 13W		5. NEAREST P.O. Sunland		6. COUNTY Los Angeles			
	7. LAT 34° 17' 30" LONG 118° 11' 15"		8. TOP OF DAM ELEVATION 2304		9. SPILLWAY CREST ELEV. 2290			
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	2290	86	6240	6240		1930-31	
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY						16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION						July 1931	
	f. CONSERVATION							
g. INACTIVE								
17. LENGTH OF RESERVOIR 1.94 MILES			AV. WIDTH OF RESERVOIR 0.06 MILES					
18. TOTAL DRAINAGE AREA 82.3 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 25.3 INCHES						
19. NET SEDIMENT CONTRIBUTING AREA 82.2 SQ. MI.		23. MEAN ANNUAL RUNOFF 3.50 INCHES						
20. LENGTH 14.2 MILES		AV. WIDTH 5.8 MILES		24. MEAN ANNUAL RUNOFF 15,353 (43) AC.-FT.				
21. MAX. ELEV. 7078		MIN. ELEV. 2104		22/ANNUAL TEMP. MEAN 62.2 RANGE 48.8°-75.6°				
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.
	Apr 1943	.2	11.9	Contour	5'	78	4,236	.28
	Jun 1944	1.1	13.0	"	5'	79	4,235	.28
	Oct 1953	9.3	22.3	"	5'	78	4,099	.27
	Jun 1958	4.8	27.1	"	5'	79	4,123	.27
	Jul 1962	4.1	31.2	"	5'	78	4,065	.26
SURVEY DATA	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	
	Apr 1943	39.0	52,880	52,880	19,560	22,000	261,910	
	Jun 1944	31.7	40,900	42,270	44,980	23,610	306,890	
	Oct 1953	19.0	8,780	27,290	79,150	17,400	386,040	
	Jun 1958	23.56	8,117	5,389	38,960	15,740	425,000	
	Jul 1962	14.48	5,493	3,405	22,520	14,340	447,520	
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		
Apr 1943	169	Sediment sluiced		3,271	275	3.34		
Jun 1944	198	180	2.19	3,469	267	3.25		
Oct 1953	136	14.6	0.18	3,605	162	1.97		
Jun 1958	109	22.7	.28	3,714	137	1.67		
Jul 1962	135	32.9	.40	3,849	123	1.50		
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	
Apr 1943				2.71	32.2			
Jun 1944				2.48	32.2			
Oct 1953				1.53	34.2			
Jun 1958				1.25	34.0			
Jul 1962				1.12	34.9			

26. DATE OF SURVEY	43. 180-160 DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION									
	160	140	120	100	80	80-60	60-40	40-20	-20	
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION									
Apr 1943	Sluicing increased storage capacity.									
Jun 1944	Sluicing increased storage capacity.									
Oct 1953	1	3	10	18	20	19	11	11	7	
Jun 1958	Sluicing increased storage capacity.									
Jul 1962			1	2		1	14	34	48	

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.
1942-43	2300.7	2145.0	52,880	1951-52	2289.8	2167.2	27,288
1943-44	2663.3	2145.0	42,270	1952-53	2242.6	2142.0	3,496
1944-45	2273.1	2205.2	13,200	1953-54	2269.4	2142.5	5,389
1945-46	2288.2	2205.2	11,543	1954-55	2257.4	2142.5	2,623
1946-47	2248.5	2200.8	12,990	1955-56	2243.0	2158.3	3,026
1947-48	2245.8	2145.0	2,680	1956-57	2244.7	2159.0	1,967
1948-49	2235.9	2145.0	2,130	1957-58	2283.9	2142.5	27,560
1949-50	2243.6	2131.9	2,030	1958-59	2251.9	2181.2	3,405
1950-51	2212.4	2179.5	840	1959-60	2232.6	2178.8	1,183
				1960-61	2216.7	2176.8	838

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
2,145	0	0	2,220	22.8	687.2	2,300	88.9	4898.3
2,150	.4	.8	2,230	27.5	935.7	2,310	98.8	5843.3
2,160	2.5	14.5	2,240	35.0	1245.3			
2,170	4.7	48.9	2,250	43.4	1635.5			
2,180	7.5	109.1	2,260	51.4	2111.9			
2,190	10.8	198.9	2,270	60.4	2669.8			
2,200	14.1	324.6	2,280	70.3	3327.9			
2,210	17.7	481.6	2,290	77.8	4064.7			

47. REMARKS AND REFERENCES

1/ Item 14 - Reservoir is used for conservation after flood season.

2/ Item 25 - Temperature taken at Pasadena, California.

3/ Item 37a - Sediment removed at various times.

RESERVOIR SEDIMENT  
DATA SUMMARY

BIG TUJUNGA FLOOD CONTROL BASIN

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

NAME OF RESERVOIR

70-284

DATA SHEET NO.

DAM	1. OWNER <b>LACFCD</b>			2. STREAM <b>BIG TUJUNGA CREEK</b>			3. STATE <b>CALIF</b>					
	4. SEC. <b>36</b> TWP. <b>3N</b> RANGE <b>13W</b>			5. NEAREST P.O. <b>Sunland</b>			6. COUNTY <b>Los Angeles.</b>					
	7. LAT. <b>34° 17' 30"</b> LONG. <b>118° 11' 15"</b>			8. TOP OF DAM ELEVATION <b>2304</b>			9. SPILLWAY CREST ELEV. <b>2290</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		2,290		86		6,240		6,240		1930-31	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION											
g. INACTIVE										Jul 31		
17. LENGTH OF RESERVOIR <b>1.94</b> MILES			AV. WIDTH OF RESERVOIR <b>0.06</b> MILES									
WATERSHED	18. TOTAL DRAINAGE AREA <b>82.3</b> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <b>27.71</b> INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA <b>82.2</b> SQ. MI.				23. MEAN ANNUAL RUNOFF <b>3.50</b> INCHES							
	20. LENGTH <b>14.2</b> MILES		AV. WIDTH <b>5.8</b> MILES		24. MEAN ANNUAL RUNOFF <b>15,353 (43)</b> AC.-FT.							
	21. MAX. ELEV. <b>7,078</b>		MIN. ELEV. <b>2,104</b>		25. ANNUAL TEMP. MEAN <b>62.29</b> RANGE <b>48.80-75.60</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/I. RATIO, AC.-FT. PER AC.-FT.			
	Oct 66		4.25	35.25	Contour	5'	78	3,819	0.29			
	Feb 69		2.33	37.58	"	5'	68	2,758	0.21			
	Oct 70		1.67	39.25	"	5'	88	6,027	0.39			
	Apr 78		7.50	46.75	"	5'	75	4,338	0.28			
	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			
	Oct 66		18.50		8,720	30,772	36,624	13,676	484,144			
	Feb 69		23.72		47,767	30,158	111,297	15,845	595,441			
	Oct 70		11.24		29,209	107,610	48,778	16,413	644,219			
Apr 78		21.27		17,025	91,026	127,689	16,511	771,908				
26. DATE OF SURVEY		37. <b>3/</b> 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					
Oct 66		246	58.6	0.71	4,095	116	1.41					
Feb 69		1,156	496	6.03	5,251	140	1.70					
Oct 70		0	--	--	5,251	134	1.63					
Apr 78		1,689	225	2.74	6,940	148	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			
Oct 66						1.10	38.8					
Feb 69						1.48	55.8					
Oct 70						.09	3.41					
Apr 78						.65	30.48					

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION									
	180-	160-	140-	120-	100-	80-	60-	40-	20-	Crest
	160	140	120	100	80	60	40	20	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION	
Oct 66			6	9	31	25	13	10	6	
Feb 69	Sluicing and excavation (95 acre-feet)									
Oct 70	Sluicing and excavation of 3,269 acre-feet, increased storage capacity.									
Apr 78	2	10	10	10	17	16	16	19		

  

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.
1961-62	2294.3	2145.5	16,711	1973-74	2280.3	2260.4	8,663
1962-63	2246.2	2182.0	1,715	1974-75	2265.28	2187.65	5,442
1963-64	2240.4	2142.5	1,526	1975-76	2238.25	2187.09	4,482
1964-65	2255.8	2145.5	2,429	1976-77	2224.14	2194.27	3,928
1965-66	2289.6	2205.3	30,772	1977-78	2301.60	2188.88	91,026
1966-67	2289.6	2206.3	30,158				
1967-68	2256.8	2153.0	10,559				
1968-69	2301.4	2153.0	107,610				
1969-70	2236.7	2149.0	11,666				
1970-71	2232.2	2141.0	12,394				
1971-72	2233.6	2187.5	4,118				
1972-73	2290.1	2204.1	15,375				

  

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
2174	0	0	2250	49.0	1994			
2180	10.2	46.0	2260	53.0	2506			
2190	17.1	182.2	2270	56.0	3052			
2200	21.6	377.6	2280	64.0	3641			
2210	24.6	611.0	2290	75.0	4338			
2220	27.6	873.2	2300	87.0	5150			
2230	31.0	1167.0	2310	100.0	6050			
2240	32.0	1533.0						

  

47. REMARKS AND REFERENCES
1/ Item 14 - Reservoir is used for conservation after flood season.
2/ Item 25 - Temperature taken at Pasadena, California.
3/ Items 37 & 41 - Sediment removed at various times.

  

48. AGENCY MAKING SURVEY	LACFCD
49. AGENCY SUPPLYING DATA	C of E
50. DATE	14 February 1980