DEPARTMENT OF THE ARMY — CORPS OF ENGINEERS

RESERVOIR SEDIMENTATION DATA SUMMARY

PUDDINGSTONE DIVERSION DAM — NAME OF RESERVOIR

70-24b — DATA SHEET NO.

DAM

1. OWNER LACFCD	2. RIVER San Dimas Wash	3. STATE California
4. SEC. TWP. RANGE	5. NEAREST TOWN San Dimas	6. COUNTY Los Angeles
7. STREAM BED ELEV. 1,130	8. TOP OF DAM ELEV. 1,163.8	9. SPILLWAY CREST ELEV. 1,152.5

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 1/	1,152.5	15.0	148	148	Oct 1929
b. POWER					
c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION					Jul 1928
f. INACTIVE					

17. LENGTH OF RESERVOIR 0.21 2/ MILES — AV. WIDTH OF RESERVOIR 0.082 2/ MILES

WATERSHED

18. TOTAL DRAINAGE AREA 18.8 SQ.MI.		22. MEAN ANNUAL PRECIPITATION 27.07	INCHES
19. NET SEDIMENT CONTRIBUTING AREA Uncontrolled 2.6	SQ.MI.	23. MEAN ANNUAL RUNOFF 1.90	INCHES
20. LENGTH 3.7 MILES AV. WIDTH 0.7	MILES	24. MEAN ANNUAL RUNOFF 1,900 (23)	AC.-FT.
21. MAX. ELEV. 5,588 MIN. ELEV. 1,152.5		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.
Oct 1929					15.0	148	7.9
Jan 1936	6.2	6.2	Contour	1'	12.7	121	6.4
Mar 1938	2.1	8.3	"		10.1	50	2.7
Nov 1939	1.8	10.1	"	2'	11.6	76	4.0
Oct 1942	2.9	13.0	"	2'	10.5	101	5.4
Sep 1944	2.0	15.0	"	2'	11.4	112	6.0
Jan 1952	7.3	22.3	"	2'	12.0	119	6.3
Sep 1953	1.7	24.0	"	2'	13.0	138	7.3

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
Oct 1929						
Jan 1936	23.1	#ND	ND	ND	ND	ND
Mar 1938	47.7	6,760	11,200	14,200	6,760	14,200
Nov 1939	15.4	1,130	1,290	2,030	4,180	16,230
Oct 1942	26.8	2,720	7,210	7,900	3,540	24,130
Sep 1944	33.9	6,000	8,590	12,000	4,110	36,130
Jan 1952	22.6	762	1,720	5,560	1,870	41,690
Sep 1953	16.5	1,120	3,370	1,910	2,450	43,600

26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE-FEET a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ.MI.-YR.	38. TOTAL SED. DEPOSITS TO DATE ACRE-FEET a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ.MI.-YR.
Oct 1929	-	-	-	-	-	-
Jan 1936	27	4.35	1.67	27	4.35	1.67
Mar 1938	71	33.80	13.00	98	11.80	4.54
Nov 1939	Sluicing increased storage capacity					
Oct 1942	"	"	"	"		
Sep 1944	"	"	"	"		
Jan 1952	"	"	"	"		
Sep 1953	"	"	"	"		

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. a. AV. ANNUAL	b. TO DATE	42. SED. INFLOW PPM a. PERIOD	b. TO DATE
Oct 1929							
Jan 1936				3/ 2.9	4/ 18.2		
Mar 1938				8.0	66.2		
Nov 1939					48.6		
Oct 1942					31.8		
Sep 1944					24.3		
Jan 1952					19.6		
Sep 1953					6.8		

ENG FORM 1 AUG 49 1787

Not determined

26. DATE OF SURVEY	43. DEPTH DESIGNATION — RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION												
	20-15	15-10	10-5	crest -5									
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Oct 1929													
Jan 1936	0	2	40	58									
Mar 1938	18	26	32	24									

Sediment removed by sluicing

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.
(1928-29 -	1933-34 ND)			1943-44	1,147.8	1,126.0	3,406
1934-35	1,139.6	Dry	ND	1944-45	1,146.0	Dry	1,720
1935-36	1,152.4	Dry	304	1945-46	1,146.65	"	969
1936-37	1,154.6	"	3,434	1946-47	1,145.95	"	1,400
1937-38	1,154.6	"	11,190	1947-48	Dry	"	0
1938-39	1,154.7	"	1,288	1948-49	"	"	0
1939-40	1,145.7	1,128.0	350	1949-50	"	"	0
1940-41	1,146.4	1,128.0	7,213	1950-51	"	"	0
1941-42	1,145.6	Dry	341	1951-52	1,146.5	"	1,460
1942-43	1,149.9	1,133.0	8,593	1952-53	Dry	"	0

46. ELEVATION-AREA-CAPACITY DATA (Sep 1953)

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1,131.5	0	0	1,164	23.1	342.4			
1,135	1.2	1.52						
1,140	5.6	21.2						
1,145	7.7	56.4						
1,150	11.6	107.0						
1,155	14.5	173.1						
1,160	18.5	256.7						

47. REMARKS AND REFERENCES

1/ Water in this diversion dam does not remain ponded above elev. 1,145.5, entrance to diversion channel, although flow may be regulated by radial gates at channel entrance.

2/ In September 1944.

3/ Based on summation of deposits 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 LACFCD & C of E

49. DATE Revised June 1962

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

PUDDINGSTONE DIVERSION DAM (Revised)
NAME OF RESERVOIR

70-24c
DATA SHEET NO.

DAM

1. OWNER LACFCD	2. STREAM San Dimas Wash	3. STATE California
4. SEC. 35 TWP. 1N RANGE 9W	5. NEAREST P.O. San Dimas	6. COUNTY Los Angeles
7. LAT. 34° 07' 51" LONG. 117° 46' 55"	8. TOP OF DAM ELEVATION 1163.8	9. SPILLWAY CREST ELEV. 1152.5

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	1/ 1152.5	15.0	148	148	Oct 29
b. MULTIPLE USE					
c. POWER					16. DATE NORMAL OPER. BEGAN
d. WATER SUPPLY					
e. IRRIGATION					Jul 28
f. CONSERVATION					
g. INACTIVE					

WATERSHED

17. LENGTH OF RESERVOIR 2/ 0.21 MILES		AV. WIDTH OF RESERVOIR 2/ 0.082 MILES	
18. TOTAL DRAINAGE AREA 19.9 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 27.07 INCHES	
19. NET SEDIMENT CONTRIBUTING AREA 3/ 19.7 SQ. MI.		23. MEAN ANNUAL RUNOFF 2.22 INCHES	
20. LENGTH 9.5 MILES	AV. WIDTH 2.07 MILES	24. MEAN ANNUAL RUNOFF 2,358 (39) AC.-FT.	
21. MAX. ELEV. 5,588	MIN. ELEV. 1130	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.
Oct 29					15.0	148	0.06
Jan 36	6.25	6.25	Contour	1'	12.7	121	.05
Mar 38	2.17	8.42	"		10.1	50	.02
Nov 39	1.66	10.08	"	2'	11.6	76	.03
Oct 42	2.92	13.00	"	2'	10.5	101	.04
Sep 44	1.92	14.92	"	2'	11.4	112	.05

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 29						
Jan 36	23.1	ND	ND	ND	ND	ND
Mar 38	47.7	6,760	11,200	14,200	6,760	14,200
Nov 39	15.4	1,130	1,290	2,030	4,180	16,230
Oct 42	26.8	2,720	7,210	7,900	3,540	24,130
Sep 44	33.9	6,000	8,590	12,000	4,110	36,130

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
Oct 29	- -	-	-	-	-	-
Jan 36	27	4.32	1.66	27	4.32	1.66
Mar 38	71	32.72	12.58	98	11.64	4.48
Nov 39	Sluicing increased storage capacity.					
Oct 42	"	"	"	"		
Sep 44	"	"	"	"		

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 29				-	-		
Jan 36				2.9	18.2		
Mar 38				8.0	66.2		
Nov 39					48.6		
Oct 42					31.8		
Sep 44					24.3		

ND - Not Determined

ENG FORM 1787
NOV 66
PREVIOUS EDITIONS ARE OBSOLETE.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION												
	20-15	15-10	10-5	Crest-5									
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Oct 29													
Jan 36	0	2	40	58									
Mar 38	18	26	32	24									
	Sediment removed by sluicing.												

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.
(1928-29 - 1933-34 ND)							
1934-35	1,139.6	Dry	ND				
1935-36	1,152.4	Dry	304				
1936-37	1,151.6	Dry	3,434				
1937-38	1,154.6	Dry	11,201				
1938-39	1,145.7	Dry	1,288				
1939-40	1,145.7	1,128.0	350				
1940-41	1,146.4	1,128.0	7,213				
1941-42	1,145.6	Dry	341				
1942-43	1,149.9	1,133.0	8,593				
1943-44	1,147.8	1,126.0	3,406				

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1,31.5	0	0						
1,135	1.2	1.52						
1,140	5.6	21.2						
1,145	7.7	56.4						
1,150	11.6	107.0						
1,155	14.5	173.1						
1,160	18.5	256.7						
1,164	23.1	342.4						

47. REMARKS AND REFERENCES

1/ Item 11 - Water in this diversion dam does not remain ponded above elev 1145.6, entrance to diversion channel, although flow may be regulated by radial gates at channel entrance.

2/ Item 17 - In September 1944.

3/ Item 19 - Includes San Dimas Drainage Area (16.2 Sq.Mi.). Sediment sluiced into this area.

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

5/ Item 41 - Various amounts removed by sluicing and excavation.

48. AGENCY MAKING SURVEY LACFCD

49. AGENCY SUPPLYING DATA C of E

50. DATE Revised Jun 62

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

PUDDINGSTONE DIVERSION DAM (Revised)
NAME OF RESERVOIR

70-24c
DATA SHEET NO.

DAM

1. OWNER LACFCD	2. STREAM San Dimas Wash	3. STATE California
4. SEC. 35 TWP. 1N RANGE 9W	5. NEAREST P.O. San Dimas	6. COUNTY Los Angeles
7. LAT. 34° 07' 51" LONG. 117° 46' 55"	8. TOP OF DAM ELEVATION 1163.8	9. SPILLWAY CREST ELEV. 1152.5

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	1/ 1152.5	15.0	148	148	Oct 29
b. MULTIPLE USE					
c. POWER					16. DATE NORMAL OPER. BEGAN
d. WATER SUPPLY					
e. IRRIGATION					Jul 28
f. CONSERVATION					
g. INACTIVE					

WATERSHED

17. LENGTH OF RESERVOIR 2/ 0.21 MILES		AV. WIDTH OF RESERVOIR 2/ 0.082 MILES	
18. TOTAL DRAINAGE AREA 19.9 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 27.07 INCHES	
19. NET SEDIMENT CONTRIBUTING AREA 3/ 19.7 SQ. MI.		23. MEAN ANNUAL RUNOFF 2.22 INCHES	
20. LENGTH 9.5 MILES	AV. WIDTH 2.07 MILES	24. MEAN ANNUAL RUNOFF 2,358 (39) AC.-FT.	
21. MAX. ELEV. 5,588	MIN. ELEV. 1130	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.
Jan 52	7.33	22.25	Contour	2'	12.0	119	.05
Sep 53	1.67	23.92	"	2'	13.0	138	.06
Sep 62	9.0	32.92	"	2'	16.0	203	.09
May 66	3.67	36.59	"	2'	15.0	125	.05
Oct 67	1.41	38.00	"	2'	17.0	200	.08
Jan 69	1.25	39.25	"	2'	10.0	74	.03

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
Jan 52	22.6	757	1,720	5,547	1,873	41,677
Sep 53	16.5	1,143	3,370	1,909	1,822	43,586
Sep 62	20.62	1,142	5,938	10,275	1,636	53,861
May 66	21.30	2,125	873	7,800	1,685	61,661
Oct 67	30.38	10,169	13,656	14,339	2,000	76,000
Jan 69	43.91	11,110	2,744	13,887	2,290	89,887

26. DATE OF SURVEY	37. 5/ 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
Jan 52	Sluicing increased storage capacity.					
Sep 53	"	"	"	"		
Sep 62	49	5.44	0.28	178	5.41	0.27
May 66	78	21.08	1.07	256	7.00	.36
Oct 67	56	40.00	2.03	312	8.21	.42
Jan 69	126	101.00	5.13	438	11.16	.57

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
Jan 52					19.6		
Sep 53					6.8		
Sep 62				-1.09	-37.1		
May 66				.41	15.5		
Oct 67				-.89	-35.1		
Jan 69				1.23	50.0		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	20-15	15-10	10-5	Crest+5								
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
Sep 62	Sediment removed by sluicing and excavation of 114 acre-feet.											
May 66	16	34	34	16								
Oct 67	Excavation of 131 acre-feet increased storage capacity.											
Jan 69	10	30	12	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.
1944-45	1146.0	Dry	1,720	1956-57	Dry	Dry	0
1945-46	1146.65	"	969	1957-58	1146.7	1131.5	5,938
1946-47	1145.95	"	1,400	1958-59	1141.5	Dry	89
1947-48	Dry	"	0	1959-60	Dry	"	0
1948-49	"	"	0	1960-61	1142.8	1131.5	147
1949-50	"	"	0	1961-62	1152.2	1138.0	3,277
1950-51	"	"	0	1962-63	1146.8	1130.7	827
1951-52	1146.5	"	3,366	1963-64	1145.4	1130.7	112
1952-53	Dry	"	0	1964-65	1152.0	1130.7	873
1953-54	1146.0	1131.5	628	1965-66	1148.12	1133.0	6,471
1954-55	Dry	Dry	0	1966-67	1152.7	1135.0	13,656
1955-56	1145.85	"	196	1967-68	1151.4	1131.0	2,744

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1131	0	0						
1135	2.3	4.41						
1140	5.0	24.3						
1145	8.5	60.3						
1150	13.4	116.7						
1155	18.5	201.2						
1160	21.4	302.5						

47. REMARKS AND REFERENCES

1/ Item 10a - Water in this diversion dam does not remain ponded above elevation 1145.5, entrance to diversion channel, although flow may be regulated by radial gates at channel entrance.

2/ Item 17 - September 1944.

3/ Item 19 - Includes San Dimas Drainage Area (16.2 Sq.Mi.). Sediment sluiced into this area.

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

5/ Items 37 & 41 - Various amounts removed by sluicing and excavation.

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

PUDDINGSTONE DIVERSION DAM (Revised)
NAME OF RESERVOIR

70-24c
DATA SHEET NO.

DAM

1. OWNER: LACFCD	2. STREAM: San Dimas Wash	3. STATE: California
4. SEC. 35 TWP. 1N RANGE 9W	5. NEAREST P.O.: San Dimas	6. COUNTY: Los Angeles
7. LAT. 34° 07 '51 " LONG 117°46 55 "	8. TOP OF DAM ELEVATION: 1163.8	9. SPILLWAY CREST ELEV.: 1152.5

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	1/ 1152.5	15.0	148	148	Oct 29
b. MULTIPLE USE					
c. POWER					16. DATE NORMAL OPER. BEGAN
d. WATER SUPPLY					
e. IRRIGATION					Jul 28
f. CONSERVATION					
g. INACTIVE					

WATERSHED

17. LENGTH OF RESERVOIR: 2/ 0.21 MILES		AV. WIDTH OF RESERVOIR: 2/ 0.082 MILES	
18. TOTAL DRAINAGE AREA: 19.9 SQ. MI.		22. MEAN ANNUAL PRECIPITATION: 27.07 INCHES	
19. NET SEDIMENT CONTRIBUTING AREA: 3/ 19.7 SQ. MI.		23. MEAN ANNUAL RUNOFF: 2.22 INCHES	
20. LENGTH: 9.5 MILES	AV. WIDTH: 2.07 MILES	24. MEAN ANNUAL RUNOFF: 2,358 (39) AC.-FT.	
21. MAX. ELEV.: 5,588	MIN. ELEV.: 1130	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.
Mar 69	0.17	39.42	Contour	2'	8	42	0.02
Nov 70	1.66	41.08	"	2'	17	156.3	.07

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
Mar 69	--	--	--	18,116	2,740	108,003
Nov 70	13.61	5,936	35,110	9,854	2,869	117,857

26. DATE OF SURVEY	37. 5/ 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
Mar 69	32	--	--	470	11.92	0.61
Nov 70	55.7	33.35	1.69	526	12.80	.65

26. DATE OF SURVEY	39. AV. DRY WGT., LBS. PER CU. FT.	40. SED. DEP., TONS PER SQ. MI.-YR.		41. 5/ 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
Mar 69				1.76	71.6		
Nov 70				-.13	-5.6		

ENG FORM 1787
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PREVIOUS EDITIONS ARE OBSOLETE.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	20-15	15-10	10-5	5-Crest								
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
Mar 69 Nov 70		19	45	36								

Excavation of 170 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.
1968-69	1154.3	1137.0	35,110				
1969-70	1151.6	1130.0	3,997				

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1131	0	0						
1135	2.3	4.41						
1140	5.0	24.3						
1145	8.5	60.3						
1150	13.4	116.7						
1155	18.5	201.2						
1160	21.4	302.5						

47. REMARKS AND REFERENCES

1/ Item 10a - Water in this diversion dam does not remain ponded above elevation 1145.5, entrance to diversion channel, although flow may be regulated by radial gates at channel entrance.

2/ Item 17 - September 1944.

3/ Item 19 - Includes San Dimas Drainage Area (16.2 Sq.Mi.). Sediment sluiced into this area.

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

5/ Items 37 & 41 - Various amounts removed by sluicing and excavation.

48. AGENCY MAKING SURVEY LACFCD

49. AGENCY SUPPLYING DATA C of E

50. DATE 11 Feb 71

RESERVOIR SEDIMENT
DATA SUMMARY

PUDDINGSTONE DIVERSION DAM
NAME OF RESERVOIR

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

70-24c
DATA SHEET NO.

DAM

1. OWNER LACFCD	2. STREAM San Dimas Wash	3. STATE Calif
4. SEC. 35 TWP. 1N RANGE 9W	5. NEAREST P.O. San Dimas	6. COUNTY Los Angeles
7. LAT. 34° 07' 51" LONG. 117° 46' 55"	8. TOP OF DAM ELEVATION 1163.8	9. SPILLWAY CREST ELEV. 1152.5

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	1/ 1152.5	15.0	148	148	Oct 29
b. MULTIPLE USE					
c. POWER					16. DATE NORMAL OPER. BEGAN
d. WATER SUPPLY					
e. IRRIGATION					
f. CONSERVATION					Jul 28
g. INACTIVE					

WATERSHED

17. LENGTH OF RESERVOIR 2/ 0.21 MILES		AV. WIDTH OF RESERVOIR 2/ 0.082 MILES	
18. TOTAL DRAINAGE AREA 19.9 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 27.07 INCHES	
19. NET SEDIMENT CONTRIBUTING AREA 3/ 19.7 SQ. MI.		23. MEAN ANNUAL RUNOFF 2.22 INCHES	
20. LENGTH 9.5 MILES	AV. WIDTH 2.07 MILES	24. MEAN ANNUAL RUNOFF 2,358 (39) AC.-FT.	
21. MAX. ELEV. 5,588	MIN. ELEV. 1,130	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.
Mar 69	0.17	39.42	Contour	2'	8	42	0.02
Nov 70	1.66	41.08	"	2'	17	156.3	.07
May 73	2.50	43.58	"	2'	17	146.2	.06
Nov 76	3.50	47.08	"	2'	17	167.8	.07

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
Mar 69	---	--	--	18,116	2,740	108,003
Nov 70	13.61	5,936	35,110	9,854	2,869	117,857
May 73	19.46	1,859	2,181	4,648	2,811	122,505
Nov 76	15.63	1,468	3,746	5,138	2,711	127,643

26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, ACRE-FEET a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR
Mar 69	32	--	--	470	11.92	0.61
Nov 70	55.7	33.35	1.69	526	12.80	.65
May 73	10.1	4.04	.20	536	12.30	.62
Nov 76	Excavation increased capacity.					

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. AV. ANN.	b. TOT. TO DATE	42. SED. INFLOW, PPM a. PERIOD	b. TOT. TO DATE
Mar 69				1.76	71.6		
Nov 70				-.13	-5.6		
May 73				.03	1.2		
Nov 76				-.28	-13.4		

ENG FORM 1787
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PREVIOUS EDITIONS ARE OBSOLETE.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION												
	22.5-20	20-15	15-10	10-5	5-Crest								
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Mar 69			19	45	36								
Nov 70	Excavation of 170 acre-feet increased storage capacity.												
May 73	1	23	44	29	3								
Nov 76	Excavation of 21.6 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.
1968-69	1154.3	1137.0	35,110				
1969-70	1151.6	1130.0	3,997				
1970-71	1148.8	1132.0	2,181				
1971-72	1146.6	1132.0	764				
1972-73	1146.6	1132.0	2,115				
1973-74	1146.7	1131.8	3,746				
1974-75	1144.8	1131.8	969				
1975-76	1144.2	1132.6	423				

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1131	0	0						
1135	1.8	2.05						
1140	7.2	24.9						
1145	10.1	67.1						
1150	14.6	127.3						
1155	18.9	212.6						
1160	21.8	315.8						
1164	24.0	407.6						

47. REMARKS AND REFERENCES

1/ Item 10a - Water in this diversion dam does not remain ponded above elevation 1145.5, entrance to diversion channel, although flow may be regulated by radial gates at channel entrance.

2/ Item 17 - September 1944.

3/ Item 19 - Includes San Dimas Drainage Area (16.2 sq.miles). Sediment sluiced into this area.

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

5/ Items 37 & 41 - Various amounts removed by sluicing and excavation.

48. AGENCY MAKING SURVEY LACFCD

49. AGENCY SUPPLYING DATA C of E

50. DATE Feb 77