

RESERVOIR SEDIMENT
DATA SUMMARY

Bureau of Reclamation

Spring Creek Debris Reservoir

NAME OF RESERVOIR

72-37

DATA SHEET NO.

DAM	1. OWNER Dept. Interior--USBR		2. STREAM Spring Creek		3. STATE California			
	4. SEC. 18 TWP. 32N RANGE 5W		5. NEAREST P O. Shasta 4NE		6. COUNTY Shasta			
	7. LAT 40° 38' " LONG 122° 28' "		8. TOP OF DAM ELEVATION 816		9. SPILLWAY CREST ELEV. 795.0			
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					1/63		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					1/63		
	f. CONSERVATION	795.0	91	5579	5579			
g. INACTIVE $\frac{1}{2}$	659.6	6	120	120				
17. LENGTH OF RESERVOIR 1.140		MILES		AV. WIDTH OF RESERVOIR 0.123		MILES		
WATERSHED	18. TOTAL DRAINAGE AREA 15.88		SQ. MI.		22. MEAN ANNUAL PRECIPITATION 42-90 (66)		INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA 15.74		SQ. MI.		23. MEAN ANNUAL RUNOFF 35.31		INCHES	
	20. LENGTH 11.1		MILES		AV. WIDTH 1.43		MILES	
	21. MAX. ELEV. 4649		MIN. ELEV. 626		25. ANNUAL TEMP. MEAN 62.1 RANGE 38.4-88.4			
					24. MEAN ANNUAL RUNOFF 29,904			AC.-FT.
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.
	Feb. 1963							
	Jul. 1979	16.4	16.4	Contour (R)	10' C.I.	91	5218	0.17
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET			36. WATER INFL. TO DATE, AC.-FT.	
		(inches)		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE
	July 1979	66		29,904	62,815	478,476	29,904	478,476
	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	
	July 1979	361	22.01	1.40	361	22.01	1.40	
	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	
	No data available.							

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION												
	135-125	125-115	115-105	105-95	95-85	85-75	75-65	65-55	55-45	45-35	35-15	15-0	
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
July 1979	21.5	35.3	27.0	11.7	4.3	4.2	-0.9	-0.9	-0.9	-0.9	-0.4	Trace	

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.
1964	759.20	660.58	10,202	1974	790.59	679.27	62,815
1965	800.35	660.08	35,795	1975	777.84	683.83	31,217
1966	794.84	660.11	28,023	1976	751.20	682.10	7,700+
1967	793.65	669.60	45,659	1977	707.42	683.60	3,007
1968	789.39	669.76	15,620	1978	802.53	683.60	57,138
1969	801.86	669.84	45,470	1979	795.27	683.60	15,143
1970	767.14	678.97	39,260				
1971	770.56	679.20	32,322				
1972	723.69	679.00	10,251				
1973	789.94	678.96	38,854				

46. 2/ ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
810	104	6670	740	46	1495			
800	94	5679	730	39	1068			
795	91	5218	720	33	707			
790	87	4773	710	24	421			
780	77	3952	700	19	205			
770	69	3218	690	10	61			
760	61	2568	680	2	0			
750	54	1995	670	0	0			
			660	0	0			

47. REMARKS AND REFERENCES

1/ Inactive storage space filled with sediment prior to start of normal operation.

2/ Preliminary elevation-area-capacity table developed for this survey--official table to be prepared at later date.

Unpublished report: "Sedimentation in the Lower Spring Creek Valley, Spring Creek Debris and Pollution Control Dam, 1980/81 Progress Report"; U.S. Dept. Int.; Bureau of Reclamation; Sacramento, California; April 1981.

48. AGENCY MAKING SURVEY Mid-Pacific Region, Bureau of Reclamation, Sacramento, CA

49. AGENCY SUPPLYING DATA Bureau of Reclamation

50. DATE Sept. 1981