

**RESERVOIR SEDIMENT
DATA SUMMARY**

SCS-34 Rev. 6-62

Leo Frediani

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

72-25

DATA SHEET NO.

DAM	1. OWNER Leo Frediani			2. STREAM Seven Oaks Creek			3. STATE California									
	4. SEC. NW 23 TWP. 10N RANGE 11W			5. NEAREST TOWN Healdsburg			6. COUNTY Sonoma									
	7. STREAM BED ELEVATION 91*			8. TOP OF DAM ELEVATION 110*			9. SPILLWAY CREST ELEV. 105.1*									
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. MULTIPLE USE										October 1960					
	b. FLOOD CONTROL															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION		105.1		0.95		6.78		6.78		October 1960					
	f. CONSERVATION															
	g. SEDIMENT															
	h. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 0.09 MILES				AV. WIDTH OF RESERVOIR 0.02 MILES											
	18. TOTAL DRAINAGE AREA (380 acres) 0.594 SQ. MI.				22. MEAN ANNUAL PRECIPITATION (70 yrs) 46 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 0.592 SQ. MI.				23. MEAN ANNUAL RUNOFF 21 INCHES											
	20. LENGTH 1.1 MILES		AV. WIDTH 0.55 MILES		24. MEAN ANNUAL RUNOFF 678 ¹ / _{AC-F.T.}											
	21. MAX. ELEV. 1717*		MIN. ELEV. 91*		25. CLIMATIC CLASSIFICATION humid											
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.	
	10-60 ² /		-		-		-		-		0.95		6.78		11.41	
	10-4-65		5		5		Range (D)		5 ranges		0.95		4.61		7.76	
	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			
	10-4-65		46 in.		678 ¹ /		1050		3390		678		3390			
	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.-YEAR		a. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR			
	10-4-65		2.17		0.43		0.73 ³ /		2.17		0.43		0.73 ³ /			
	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. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE				
10-4-65		87 ⁴ /		1383		1383		6.34		32.00		892		892		

* Assumed datum - Add 284 feet to obtain approximate M.S.L. elevations. Spillway has removable flashboards - elev. in closed position 107.8. Added¹/ capacity-2.43 ac.ft.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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														
10-4-65	8.8	15.2	7.8	19.4	11.1	10.6	8.8	7.4	6.0	5.1					

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 23, 24, 35 and 36 are based on U.S. Geological Survey stream flow records for the 5 year period 1960-1965.
 2/ Original data obtained during 1965 survey.
 3/ Total yield from watershed computed to be 1.43 using trap efficiency of 51 percent. Storage with flashboards used to compute this. Total capacity 6.78 + 2.43 = 9.21 ac.ft.
 4/ 1 disturbed sample, 2 undisturbed. Values for weighted average dry unit weight: GW-105 lbs./cu.ft.(disturbed), SM(undisturbed)92.5 lbs./cu.ft; ML(undisturbed)78.4 lbs./cu.ft.

48. AGENCY MAKING SURVEY USDA, Soil Conservation Service; Berkeley, California
 49. AGENCY SUPPLYING DATA same 50. DATE 1-5-66

Geology: Franciscan formation; Upper Jurassic and Cretaceous sandstone, shale and glaucophane schist.
 Land use: Woodland 59%; grass 22%; brush 19%.