

RESERVOIR SEDIMENT DATA SUMMARY

Marsh Creek
NAME OF RESERVOIR

72 - 35
DATA SHEET NO.

DAM	1. OWNER <u>Contra Costa County</u>			2. STREAM <u>Marsh Creek</u>			3. STATE <u>California</u>									
	4. SEC. <u>35</u> TWP. <u>IN</u> RANGE <u>2E</u>			5. NEAREST P.O. <u>Brentwood</u>			6. COUNTY <u>Contra Costa</u>									
	7. LAT <u>37° 53' 21"</u> LONG <u>121° 42' 19"</u>			8. TOP OF DAM ELEVATION <u>206</u>			9. SPILLWAY CREST ELEV. <u>192</u>									
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		191.8		325		4,300		4,681		October 1962					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION *		168.0		49.3		381		381		December 1962					
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR				0.89 MILES				AV. WIDTH OF RESERVOIR				0.57 MILES			
	18. TOTAL DRAINAGE AREA				51.8 SQ. MI.				22. MEAN ANNUAL PRECIPITATION				15 - 20 INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				51.3 SQ. MI.				23. MEAN ANNUAL RUNOFF				5 INCHES			
	20. LENGTH		16.9 MILES		AV. WIDTH		3.1 MILES		24. MEAN ANNUAL RUNOFF		13,812 AC.-FT.					
	21. MAX. ELEV.		2,090		MIN. ELEV.		151		25. ANNUAL TEMP.: MEAN				60 RANGE 36-88			
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.	
	December 1962		-		-		-		-		325 (50)		4,300 (381)		0.311* (0.028)	
	September 1976		13.9		13.9		Range Contour		9 2 ft.		325 (41.7)		4,286 (266)		0.311* (0.019)	
	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			
	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			
	September 1976		5** (115)		0.36** (8.27)		0.007** (0.16)		5** (115)		0.36** (8.27)		0.007** (0.16)			
	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				
September 1976		90** (54.8)		13.7** (191)		13.7** (191)		0.008** (2.17)		0.115** (30.2)						

* Sediment
* Assumed

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														
September 1/ 1976	1.1 SEG 1	5.5 SEG 2	31.8 SEG 3	15.6 SEG 4	10.0 SEG 5	50.8 SEG 6								
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><u>1/</u> Accumulated sediment deposition was determined from differences in as-built and 1976 capacities. The capacities were determined in reservoir segments from contour maps.</p> <p>1. Figures in parenthesis pertain to sediment pool.</p> <p>2. About 80 percent of the deposits is clay and silt and the remaining 20 percent is fine grain sand with coarse sand and gravel in the extreme upper part of the pool.</p> <p>3. Sediment deposition above the sediment pool was not determined in the 1976 survey. An estimate of 5 percent was made.</p>														
48. AGENCY MAKING SURVEY USDA, Soil Conservation Service														
49. AGENCY SUPPLYING DATA USDA, Soil Conservation Service														
50. DATE <u>May 7, 1981</u>														