

Erosion & Migration
Sedimentation

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

**RESERVOIR SEDIMENTATION
DATA SUMMARY**

Black Hills

NAME OF RESERVOIR

71-20

DATA SHEET NO.

DAM	1. OWNER <u>CCC Flood Contr. Dist.</u>			2. RIVER <u>Green Valley Creek</u>			3. STATE <u>California</u>									
	4. SEC. <u>Twp. 38⁰ Range Lat. 122</u>			5. NEAREST TOWN <u>Danville</u>			6. COUNTY <u>Contra Costa</u>									
	7. STREAM BED ELEV.			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV.									
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										1880					
	b. POWER															
	c. WATER SUPPLY				2.48		32.68		32.68		16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION															
	e. CONSERVATION															
	f. INACTIVE										1880					
17. LENGTH OF RESERVOIR <u>.11</u> MILES					AV. WIDTH OF RESERVOIR <u>.03</u> MILES											
WATERSHED	18. TOTAL DRAINAGE AREA <u>0.76</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>19</u> INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA <u>0.76</u> SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH MILES; AV. WIDTH MILES				24. MEAN ANNUAL RUNOFF AC.-FT.											
	21. MAX. ELEV. MIN. ELEV.				25. CLIMATIC CLASSIFICATION <u>Semi-arid</u>											
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.	
	1880		-		-		-		-		2.48		32.68		43.0	
	1951		71		71		Range Detailed		6		2.48		27.04		35.5	
	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 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			
	1951		5.64		0.08		0.11		5.64		0.08		0.11			
	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. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE.				
1951		46		110.2		110.2		0.24		17.26		- -				

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														

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

Ref: "Walnut Creek Watershed Program for Soil Conservation and Flood Control." Contra Costa County, Calif. Flood Control and Water Conservation District in cooperation with Soil Conservation Service, Sept. 1952, processed.