

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Rock Creek
NAME OF RESERVOIR

79-10

DATA SHEET NO.

SCS-34 Rev. 6-66

DAM	1. OWNER Karland Merle Brown			2. STREAM Rock Creek			3. STATE Idaho					
	4. SEC. 30 TWP. IN RANGE 40E			5. NEAREST P.O. Ammon 5 SE			6. COUNTY Bonneville					
	7. LAT. 43° 23' 24" N LONG. 111° 47' 45" W			8. TOP OF DAM ELEVATION 102*			9. SPILLWAY CREST ELEV. 100.0*					
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										1946 1/	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION		102*		2.6		12.6		12.6		1946 *	
	f. CONSERVATION											
	g. INACTIVE											
WATERSHED	17. LENGTH OF RESERVOIR 0.120 MILES				AV. WIDTH OF RESERVOIR 0.0338 MILES							
	18. TOTAL DRAINAGE AREA 6.76 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 10 2/ INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 6.76 SQ. MI.				23. MEAN ANNUAL RUNOFF 4.5 3/ INCHES							
	20. LENGTH 4.5 MILES		AV. WIDTH 1.5 MILES		24. MEAN ANNUAL RUNOFF 1623* AC.-FT.							
	21. MAX. ELEV. 6800		MIN. ELEV. 5450		25. ANNUAL TEMP.: MEAN 42° RANGE 15°-69°F (Idaho Falls)							
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.			
	1946		--	--	--	--	2.6	12.6	0.008			
	8/25/66		20	20	Range-contour (D)	7R 2CI	2.6	8.96	0.006			
	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				
	8/25/66		3.59	.18	.027	3.59	.180	.027				
	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				
8/25/66		79.8	45	45	1.44	28.9	--	--				

*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	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
8/25/66	20.3	19.7	17.1	14.3	10.3	4.7	5.8	5.2	2.2	0.4					

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/ From memory of local residents
2/ U.S. Weather Bureau mean annual precipitation map, March 1965
3/ Distribution of average annual runoff in the United States, USGS Circular 52

Land Use: 31% wheat-fallow; 69% native grass and sage
Weighted slope percent for cropland = 19%
Weighted slope percent for range = 23%
Geology: Chiefly loessial silts over silicic lavas and associated pyroclastics

48. AGENCY MAKING SURVEY Soil Conservation Service
49. AGENCY SUPPLYING DATA Same
50. DATE 3/30/67