

RESERVOIR SEDIMENT

DATA SUMMARY

SCS-34 Rev. 6-66

Scofield Reservoir

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

64-9

DATA SHEET NO.

DAM	1. OWNER US Bureau of Reclamation		2. STREAM Price River		3. STATE Utah			
	4. SEC. 10 TWP. 12S RANGE 7E		5. NEAREST P.O. Scofield 5 NE		6. COUNTY Carbon			
	7. LAT 39° 47' 15" LONG 111° 07' 30"		8. TOP OF DAM ELEVATION 2327.5m		9. SPILLWAY CREST ELEV. 2321.8m			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, dam ²	13. ORIGINAL CAPACITY, dam ³	14. GROSS STORAGE, dam ³	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL							
	b. MULTIPLE USE					May, 1926		
	c. POWER							
	d. WATER SUPPLY					18. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION	2321.5m	114,000	81,400	91,000			
	f. CONSERVATION							
g. INACTIVE	2312.2m	43,700	9,620	9,620	June 15, 1965			
WATERSHED	17. LENGTH OF RESERVOIR 1/ 8.48 km		AV. WIDTH OF RESERVOIR 1.34 km					
	18. TOTAL DRAINAGE AREA 399 km ²		22. MEAN ANNUAL PRECIPITATION 610 mm					
	19. NET SEDIMENT CONTRIBUTING AREA 389 km ²		23. MEAN ANNUAL RUNOFF 1.68 mm					
	20. LENGTH 22.5 km		AV. WIDTH 18.8 km		24. MEAN ANNUAL RUNOFF 67000 dam ³			
	21. MAX. ELEV. 2946.2 m		MIN. ELEV. 2308.7 m		25. ANNUAL TEMP. MEAN °C RANGE 0-10°C			
SURVEY DATA	25. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA, dam ²	32. CAPACITY, dam ³	33. C/R RATIO, dam ³ /dam ³
	July 1943	0	0				73,780	1.65
	Sept. 1949	36	36	Contour (D)	1.5m	118,000	85,600	1.55
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, dam ³		36. WATER INFL. TO DATE, dam ³			
		a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	d. MEAN ANNUAL	e. TOTAL TO DATE		
	Sept. 1979	610mm	2/ 637,000	2/ 98,500	2/ 2,293,000	2/ 63,700	2/ 2,293,000	
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, dam ³			38. TOTAL SED. DEPOSITS TO DATE, dam ³			
		a. PERIOD TOTAL	b. AV. ANNUAL	c. / Km ² /yr	a. TOTAL TO DATE	b. AV. ANNUAL	c. / Km ² /yr	
	Sept. 1979	5,400	150	.39	5,400	150	.39	
	26. DATE OF SURVEY	39. AV. DRY WGT., g per cm ³	40. SED. DEP. MM per Km ² -yr		41. STORAGE LOSS, FCT		42. SED. INFLOW, FPM	
		a. PERIOD	b. TOTAL TO DATE	a. AV. ANN	b. TOT TO DATE	a. PERIOD	b. TOT TO DATE	
Sept. 1979	.96	374	374	.16	5.8	2,260	2,260	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	97.5-92.5	92.5-87.5	87.5-82.5	82.5-77.5	77.5-72.5	72.5-67.5	67.5-62.5	62.5-57.5	57.5-52.5	52.5-47.5	47.5-42.5	
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												

September 1979	2/	2/	2/	2/	2/	2/	2/	2/	2/	2/		
	4	17	24	27	27	1	0	0	0	0		

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 1979														
	16	15	14	14	13	13	6	6	3					

45. RANGE IN RESERVOIR OPERATION

WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1941-1980	2323.0 (1952)	2312.3 (1945)					

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION _m	AREA _{dam}	CAPACITY _{dam}	ELEVATION _m	AREA _{dam}	CAPACITY _{dam}	ELEVATION	AREA	CAPACITY
2308.9	0	0						
2310.4	2020	1360	2318.0	62700	45900			
2311.4	7290	5300	2319.5	80500	61000			
2313.4	15800	11800	2321.0	100000	77000			
2315.0	30800	21700	2321.8	114000	86300			
2316.5	45300	34500						

47. REMARKS AND REFERENCES

1/ Reservoir consists of two arms, one north and the other south of dam. Northern arm is 1.87 mi. long. Southern arm is 3.40 mi. long.
 2/ Estimated

48. AGENCY MAKING SURVEY U.S. Geological Survey, Water Resources Division, Iowa District
 49. AGENCY SUPPLYING DATA U.S. Geological Survey
 50. DATE July 7, 1981