

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

West Walton Creek Weir¹
NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

64-7
64-4

DATA SHEET NO.

DAM	1. OWNER USDA - F.S.			2. STREAM Trib. Walton Creek			3. STATE Colorado									
	4. SEC. TWP. 5N RANGE 83W			5. NEAREST P.O. Steamboat Springs			6. COUNTY Routt									
	7. LAT 40° 22' 35" LONG 106° 42' 30"			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.									
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA XXXX		13. ORIGINAL CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN					
	a. FLOOD CONTROL															
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION															
	g. INACTIVE		N.A.²		660 Ft.²						10-1-67					
WATERSHED	17. LENGTH OF RESERVOIR				MILES		18. AV. WIDTH OF RESERVOIR				MILES					
	18. TOTAL DRAINAGE AREA				1.33		SQ. MI.		19. MEAN ANNUAL PRECIPITATION (4)				47.3³ INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				1.33		SQ. MI.		20. MEAN ANNUAL RUNOFF (4)				25.55⁴ INCHES			
	20. LENGTH		2.0 MILES		AV. WIDTH		0.7 MILES		21. MEAN ANNUAL RUNOFF (4)				1807.66⁴ AC.-FT.			
	21. MAX. ELEV.		9,728 Ft.		MIN. ELEV.		9,100 Ft.		22. ANNUAL TEMP: MEAN				RANGE			
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.	
	10-1-68		1		1		See Remark⁶									
	10-1-69		1		2											
	10-1-70		1		3											
	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			
	10-1-67		39.8 ³		1506.64 ⁴											
	10-1-68		49.7		2039.78											
	10-1-69		47.3		1615.42											
	10-1-70		52.4		2074.54											
26. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, XXXXXX				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				
10-1-68						696Ft ³ /MI ²		.016								
10-1-69						274		.006								
10-1-70						871		.020								
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, P.P.A.								
				a. PERIOD		b. TOTAL TO DATE		a. AV. ANNUAL		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE		
10-1-68				38.28		38.28										
10-1-69		110 (Est.)		15.07		26.67										
10-1-70				47.90		33.75										

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													

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 U.S. Highway 40 crosses channel 1 mile upstream of gage.
- 2 Weir pond used to collect bedload sediment and debris.
- 3 Area-mean precipitation for water year.
- 4 April-September runoff.
- 5 Weir pond cleaned each fall.
- 6 Gross sediment accumulation determined by cross-sectioning (Tabulation is in Ft³/Mi²).

48. AGENCY MAKING SURVEY Rocky Mt. Forest and Range Exp. Station

49. AGENCY SUPPLYING DATA Same

50. DATE 8/1/71