

RESERVOIR SEDIMENT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

DATA SUMMARY

Choctaw Retention Reservoir

SCS 34 Rev. 6-66

NAME OF RESERVOIR

63-25

DATA SHEET NO.

DAM	1. OWNER BLM			2. STREAM Indian Wash			3. STATE Colorado									
	4. SEC. 16 TWP. T 1N RANGE R 1E			5. NEAREST P.O. Grand Junction			6. COUNTY Mesa									
	7. LAT. 39° 09' 26" LONG. 108° 28' 48"			8. TOP OF DAM ELEVATION 105.1			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										1965					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION										1965					
	g. INACTIVE		100.0		5.22		32.5		32.5							
17. LENGTH OF RESERVOIR				0.126 MILES				AV. WIDTH OF RESERVOIR				0.065 MILES				
WATERSHED	18. TOTAL DRAINAGE AREA				1.12 SQ. MI.				22. MEAN ANNUAL PRECIPITATION				8.41 (84 yr) INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				1.11 SQ. MI.				23. MEAN ANNUAL RUNOFF				0.7 INCHES			
	20. LENGTH		1.6 MILES		AV. WIDTH		0.7 MILES		24. MEAN ANNUAL RUNOFF		41.8		AC. FT.			
	21. MAX. ELEV.		6880		MIN. ELEV.		5225		25. ANNUAL TEMP: MEAN 52.7° RANGE							
	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.	
October 1965		-		-		-		-		5.22		32.5		0.78		
October 1975		10		10		Range		11		5.22		21.0		0.50		
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				
October 1975		11.56		1.15		1.03		11.5		1.16		1.03				
								Adding sediment in diversion channel 13.02		Adding sed. in diver. channel 1.30		Adding sed. in diver. channel 1.16				
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								
October 1975						3.5		35.4								

* Assumed Elevation

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														

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
 The largest flood flow into the reservoir occurred on July 18, 1974, with water ponding to an estimated elevation of 97.6 feet. The flood water volume caught by the reservoir was 9.53 acre-feet.
 An estimated 1.46 acre-feet of sediment was deposited in a channel diversion going into the reservoir.
 Nine small dams above this reservoir caught approximately 100% of the sediment (sediment levels at or below the crest of the spillway) from a total drainage area of 0.69 sq. mi. (444 acres).
 More than 66 very small gully plugs are estimated to have caught approximately 50% of the sediment from 0.18 sq. mi. (117 acres) of the drainage area of Choctaw Reservoir.

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Soil Conservation Service
 50. DATE 1975