

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

Q-51
Kiowa Creek Watershed

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

34-10a

DATA SHEET NO.

DAM	1. OWNER Kiowa SCD			2. STREAM Kiowa Creek			3. STATE Colorado								
	4. SEC. 23 TWP. 10S RANGE 64W			5. NEAREST P.O. Elbert			6. COUNTY Elbert								
	7. LAT. 39° 10' 15" LONG 104° 32' 00"			8. TOP OF DAM ELEVATION 7009.73			9. SPILLWAY CREST ELEV. 7004.73								
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		7004.73		2.90		23.21		32.30		16. DATE NORMAL OPER. BEGAN September 1956				
	b. MULTIPLE USE														
	c. POWER														
	d. WATER SUPPLY														
	e. IRRIGATION														
	f. CONSERVATION														
	g. INACTIVE		6993.73				9.09		9.09						
17. LENGTH OF RESERVOIR 0.17 MILES				AV. WIDTH OF RESERVOIR 0.03 MILES											
WATERSHED	18. TOTAL DRAINAGE AREA 0.56 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 15.6 INCHES										
	19. NET SEDIMENT CONTRIBUTING AREA 0.56 SQ. MI.				23. MEAN ANNUAL RUNOFF 3.5 1/2 INCHES										
	20. LENGTH 1.0 MILES		AV. WIDTH 0.6 MILES		24. MEAN ANNUAL RUNOFF 104 AC.-FT.										
	21. MAX. ELEV.				MIN. ELEV.				25. ANNUAL TEMP: MEAN 45° F RANGE 30°-67° F (Chesman)						
	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.
June 1957		--		--		Range		13		2.90		32.30		0.31	
Jan. 1966		9		9		Range		13		2.90		30.17		0.29	
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			
Jan. 1966		2.13		0.24		0.43		2.13		0.24		0.43			
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	
Jan. 1966		80*		749 730		749 730		0.74		6.59					

*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
	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

Almost all of the sediment in the reservoir was deposited during an extremely large storm on June 17, 1965, in which a large flow occurred in the emergency spillway. Sediment deposited in the sediment pool totaled 1.93 acre feet (91%). Sediment deposited in the flood pool totaled 0.20 acre feet (9%).

1/ Atlas HA-212, USGS 1966

48. AGENCY MAKING SURVEY Soil Conservation Service
49. AGENCY SUPPLYING DATA Same

50. DATE May 2, 1966