

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

EUFULA LAKE

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

45-41

DATA SHEET NO.

DAM	1. OWNER <u>Dept. of Army, C of E</u>		2. STREAM <u>Canadian</u>		3. STATE <u>Oklahoma</u>				
	4. SEC. <u>25</u> TWP. <u>10N</u> RANGE <u>18E</u>		5. NEAREST P.O. <u>Whitefield</u>		6. COUNTY <u>McIntosh</u>				
	7. LAT. <u>35° 18' 25"</u> LONG. <u>95° 21' 45"</u>		8. TOP OF DAM ELEVATION <u>612.0</u>		9. SPILLWAY CREST ELEV. <u>597.0 1/</u>				
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	597.0	143,800 3/	1,470,000	3,848,000	10 Feb 64			
	b. MULTIPLE USE								
	c. POWER	585.0	102,500	1,481,000	2,378,000	16. DATE NOR-MAL OPER. BEGAN			
	d. WATER SUPPLY								
	e. IRRIGATION					Feb 64			
	f. CONSERVATION	565.0	48,000	897,000	897,000				
	g. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR <u>113 2/</u> MILES		AV. WIDTH OF RESERVOIR <u>2</u> MILES						
	18. TOTAL DRAINAGE AREA <u>47,522</u> SQ. MI.		22. MEAN ANNUAL PRECIPITATION <u>14.4-42.1</u> INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA <u>13,693</u> SQ. MI.		23. MEAN ANNUAL RUNOFF <u>1.60</u> INCHES						
	20. LENGTH <u>600</u> MILES		AV. WIDTH <u>79</u> MILES		24. MEAN ANNUAL RUNOFF <u>4,308,000</u> AC.-FT.				
	21. MAX. ELEV. <u>12,491</u>		MIN. ELEV. <u>495</u>		25. 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.	
	2-10-64	-	-	Range	75	143,800	3,848,000	0.89	
	6-1-69	5.33	5.3	Range	75	143,750	3,798,400	0.88	
	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		
	6-1-69	15.0-44.9	2,838,000	4,432,000	15,128,000	2,838,000	15,128,000		
	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		
	6-1-69	49,600	9,310	0.680	49,600	9,310	0.680		
	26. DATE OF SURVEY	39. AV. DRY WGT., LBS. PER CU. FT.	40. SED. DEP., TONS PERSQ. 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		
6-1-69	62.2	921	921	0.24	1.29	3270	3270		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	103-90	90-80	80-70	70-60	60-50	50-40	40-30	30-20	20-10	10-cr	cr+10	+10+20
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
6-1-69	0.7	2.3	5.4	7.1	9.0	19.3	24.4	23.2	5.9	2.0	0.7	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														
6-1-69	2.6	3.5	3.3	8.5	12.0	14.2	15.9	22.6	12.9	3.8	0.7			

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1964 (8 mo)	570.4	494.0	1,344,000				
1965	584.4	570.3	2,014,000				
1966	584.6	575.9	1,472,000				
1967	582.8	570.7	1,639,000				
1968	590.0	580.1	4,432,000				
1969 (8 mo)	587.0	580.8	4,227,000				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
	1969 CAPACITY		580	86,670	1,858,000	535	10,840	149,600
612	201,000	6,380,000	575	72,440	1,460,000	530	8,840	100,700
610	193,100	5,990,000	570	59,680	1,131,000	525	6,360	62,620
605	173,500	5,068,000	565	46,910	864,800	520	5,000	33,500
600	155,000	4,244,000	560	34,710	661,400	515	2,950	13,420
597	143,750	3,798,000	555	27,200	509,000	510	1,120	3,330
595	136,400	3,516,000	550	21,710	385,600	505	212	514
590	118,700	2,880,000	545	17,600	287,700	500	41	49
585	102,200	2,330,000	540	13,670	210,600	495	0	0

47. REMARKS AND REFERENCES

- 1/ Spillway crest elevation - 565.0, top of gates elevation - 597.0.
- 2/ Length of Canadian River 31.7 miles; North Canadian 26.1 miles; Deep Fork River 23.0 miles; and Gaines Creek 32.2 miles.
- 3/ Previously published as 143,000 acres.

48. AGENCY MAKING SURVEY Dept. of the Army, Corps of Engr., Tulsa District

49. AGENCY SUPPLYING DATA Corps of Engr., Dept. of the Army 50. DATE 5 Nov. 71