U.S. DEPARTMENT OF AGRICULTURE

RESERVOIR SEDIMENTATION DATA SUMMARY

Barbour Pond
NAME OF RESERVOIR

SOIL CONSERVATION SERVICE
50-13
DATA SHEET NO.

DAM

1. OWNER Katy and J. R. Barbour	2. RIVER Trib. to Little Washita	3. STATE Oklahoma
4. SEC. 31 TWP. 6N RANGE 6W	5. NEAREST TOWN 7 mi. S. & 4 mi. E., Chickasha, Okla.	6. COUNTY Grady County
7. STREAM BED ELEV.	8. TOP OF DAM ELEV.	9. SPILLWAY CREST ELEV.

RESERVOIR

10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE-FEET	14. ACCUMULATED ACRE-FEET	15. DATE STORAGE BEGAN
a. FLOOD CONTROL					Sept. 1935
b. POWER					
c. WATER SUPPLY		10.4	59.9	59.9	16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION					
f. INACTIVE					

17. LENGTH OF RESERVOIR 0.4 MILES — AV. WIDTH OF RESERVOIR 0.04 MILES

WATERSHED

18. TOTAL DRAINAGE AREA 0.68 SQ. MI.		22. MEAN ANNUAL PRECIPITATION	30.58 (36) INCHES
19. NET SEDIMENT CONTRIBUTING AREA 0.67 SQ. MI.		23. MEAN ANNUAL RUNOFF	3.22 INCHES
20. LENGTH MILES	AV. WIDTH MILES	24. MEAN ANNUAL RUNOFF	172 Ac.ft./sq.mi. AC.-FT.
21. MAX. ELEV.	MIN. ELEV.	25. CLIMATIC CLASSIFICATION	Humid

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/W RATIO AC.-FT. PER SQ. MI.
Sept. 1935	-	-	-	-	10.4	59.9	88.1
May 24, 1955	19.7	19.7	Range Detail	6 ranges	10.4	41.8	61.5

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 SEDIMENT DEPOSITS 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
May 24, 1955	18.1	0.92	1.37	18.1	0.92	1.37

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. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE
May 24, 1955	75 1/	2,238	2,238	1.54	30.22	-	-

1/ Estimated.

U.S.D.A., Soil Conservation Service, Milwaukee, 1951

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION											
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											

28. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGH 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

Land Use = 1% cultivated, 96% pasture, 3% miscellaneous.
C/I ratio = 0.43.
Estimated Trap Efficiency = 96%.
Total Annual Load, Adjusted for Trap Efficiency = 1.43 Ac.ft./sq.mi.

48. AGENCY SUPPLYING DATA SCS Oklahoma

49. DATE June 1955