

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lower Beaton Lake

NAME OF RESERVOIR

51-2

DATA SHEET NO.

DAM	1. OWNER Beaton Brothers		2. RIVER Unnamed trib. of Elm Creek		3. STATE Texas				
	4. SEC. - TWP. - RANGE -		5. NEAREST TOWN Corsicana		6. COUNTY Navarro				
	7. STREAM BED ELEV. 373		8. TOP OF DAM ELEV. 390		9. SPILLWAY CREST ELEV. 387.9				
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					16. DATE NORMAL OPER. BEGAN			
	b. POWER								
	c. WATER SUPPLY								
	d. IRRIGATION								
	e. CONSERVATION	387.9	55.6	319	319	1895 <u>1/</u>			
	f. INACTIVE								
17. LENGTH OF RESERVOIR		0.53	MILES	AV. WIDTH OF RESERVOIR		0.15 MILES			
WATERSHED	18. TOTAL DRAINAGE AREA		0.91	SQ. MI.	22. MEAN ANNUAL PRECIPITATION 36 INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA		0.82	SQ. MI.	23. MEAN ANNUAL RUNOFF INCHES				
	20. LENGTH	1.5	MILES	AV. WIDTH	0.6	MILES			
	21. MAX. ELEV.			MIN. ELEV.		25. CLIMATIC CLASSIFICATION Humid			
	24. MEAN ANNUAL RUNOFF					AC-FT.			
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.	
	1895 <u>1/</u> Sept. 1949	- 54	- 54	- Range Detailed	- 5	55.6 55.6	319 205	351 225	
	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	d. MEAN ANNUAL	e. 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	d. TOTAL TO DATE	e. AV. ANNUAL	f. PER SQ. MI.-YEAR		
	Sept. 1949	114	2.11	2.57	114	2.11	2.57		
	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	c. AV. ANNUAL	d. TOT. TO DATE	e. PERIOD	f. TOT. TO DATE		
Sept. 1949			0.66	35.74					

1/ The year 1895 is an estimate, and should be within 2 years of the date storage began.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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
 Jones, Victor H. and Ogle, James A., Report on Sedimentation in Lake Halbert Reservoir System, U. S. Soil Conservation Service, SCS-TP-92, 33 pp., illus., processed. Fort Worth, Texas, May 1950

The lake is in the watershed of Lake Halbert, 0.75 miles above the head of Lake Halbert. Lower Beaton Lake was built for railroad water supply but is now used for recreation. Sediment is medium to dark gray in color.

48. AGENCY SUPPLYING DATA Region 4, Soil Conservation Service 49. DATE September 1950

U. S. Dept. of Agriculture
 Fort Worth, Texas