

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Dam B Reservoir
NAME OF RESERVOIR

51-33

DATA SHEET NO.

DAM	1. OWNER Corps of Engineers, DA			2. STREAM Neches		3. STATE Texas		
	4. SEC. TWP. RANGE		5. NEAREST TOWN Jasper			6. COUNTY Tyler-Jasper		
	7. STREAM BED ELEVATION 50.0			8. TOP OF DAM ELEVATION 95.0		9. SPILLWAY CREST ELEV. 85.0		
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. MULTIPLE USE	85.0	16,830; 16,924	30,500; 30,547	124,700; 131,142	16 Apr 51		
	b. FLOOD CONTROL							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION	83.0	13,700; 13,842	94,200; 100,405	94,200; 100,595			
	g. SEDIMENT					19 May 51		
	h. INACTIVE	50.0	0; 82	0; 190				
17. LENGTH OF RESERVOIR	10.2	MILES	AV. WIDTH OF RESERVOIR	2.6	MILES			
WATERSHED	18. TOTAL DRAINAGE AREA 7,573 ^{2/}			SQ. MI.	22. MEAN ANNUAL PRECIPITATION 45.78 (56)			INCHES
	19. NET SEDIMENT CONTRIBUTING AREA 7,546.6			SQ. MI.	23. MEAN ANNUAL RUNOFF 9.65			INCHES
	20. LENGTH 300	MILES	AV. WIDTH 25.3	MILES	24. MEAN ANNUAL RUNOFF 3,904,800(31.9)			AC.-FT.
	21. MAX. ELEV. 530	MIN. ELEV. 50-43 ^{1/}	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. PERSQ. MI.
	1947			Map (R)		16,830	124,700	16.47
	1951	0	0	Range(D)	14 Rgs (D)	16,924	131,142	17.32
	Feb 1960	8.83	8.83	"	"	16,783	131,681	17.39
	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	
	Feb 1960	43.24 ^{3/}	3,044,500	5,853,000	26,883,000	3,044,500	26,883,000	
	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	
	Feb 1960	1,662 ^{4/}	188	0.025	1,662 ^{4/}	188	0.025	
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. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
Feb 1960	60.9 (8)	33.16	33.16	0.143	1.27	60.33	60.33	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION										
	47-40	40-35	35-30	30-25	25-20	20-15	15-10	10-5	5-Crest-5		
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
Feb 1960	-0.6	0.5	-0.8	-5.6	-4.0	-15.8	-65.7	-7.5	72.3	27.2	

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														
As the degradation exceeded the aggradation, this item was not computed.															

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV. ♡	INFLOW AC.-FT.
1951 ^{5/}	81.57	51.50	345,200	1956	83.26	60.65	1,011,900
1952	83.82	57.61	2,322,600	1957	83.39	59.38	3,375,000
1953	85.21	57.36	5,640,200	1958	83.61	75.87	5,853,000
1954	83.74	50.00	1,439,500	1959	83.28	79.03	3,351,100
1955	83.14	50.00	2,126,300	1960 ^{5/}	83.44	79.00	1,732,500

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA 6/	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
50	84	198						
55	170	822						
60	352	2,056						
65	666	4,467						
70	1,967	9,966						
75	5,419	27,602						
80	9,972	65,931						
85	16,783	131,681						
90	24,462	237,299						

47. REMARKS AND REFERENCES
1/ 1951 adjusted data.
2/ Determined by USGS Nov 1961.
3/ Weighted mean precipitation.
4/ Deposits above Highway 190 bridge only. Not corrected for degradation between highway and dam.
5/ Partial year.
6/ Estimated.

48. AGENCY MAKING SURVEY Dept of Army, CE, Fort Worth, Texas
49. AGENCY SUPPLYING DATA
50. DATE (Revised Dec 1962)