

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Corpus Christi

NAME OF RESERVOIR

52-1

DATA SHEET NO.

DAM	1. OWNER City of Corpus Christi			2. RIVER Nueces River			3. STATE Texas									
	4. SEC. - TWP. - RANGE -			5. NEAREST TOWN Mathis			6. COUNTY Live Oak									
	7. STREAM BED ELEV. 28			8. TOP OF DAM ELEV. 96			9. SPILLWAY CREST ELEV. 74									
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					
	d. FLOOD CONTROL										July 24, 1934					
	b. POWER															
	c. WATER SUPPLY		74		5,493		54,426		54,426		16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION										July 1934					
	e. CONSERVATION															
	f. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 29.8 (Main body 7.1) MILES						AV. WIDTH OF RESERVOIR MILES									
	18. TOTAL DRAINAGE AREA 16,800 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 25 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 16,791 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH 210.0 MILES		AV. WIDTH 80.0 MILES		24. MEAN ANNUAL RUNOFF 680,700 (5) AC.-FT.											
	21. MAX. ELEV. 2,400		MIN. ELEV.		25. CLIMATIC CLASSIFICATION Subhumid											
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.	
	July 1934		-		-		-		-		5,493		54,426		3.24	
	March 1942		7.6		7.6		Range Detailed		48		5,493		43,801		2.61	
	March 1948		6.0		13.6		"		47		5,484		39,387		2.34	
	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		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			
	March 1942		10,625		1,398		0.083		10,625		1,398		0.083			
March 1948		4,414 1/		736		0.044		15,039		1,106		0.066				
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		
March 1942		34.9 (26)		63		63		2.57		19.52		-		-		
March 1948		35.6 (13)		36 2/		51		2.03		27.63		-		-		

1/ Above-crest deposits of 2 acre-feet not included.

2/ Computed as the difference in total weight of sediment for the periods 1934-42 and 1934-48, then reduced to tons per sq. mi. per year.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION										
	46-32	32-28	28-24	24-20	20-16	16-12	12-8	8-4	4-Crest		
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
March 1942	5	3	6	11	10	19	20	16	10		
March 1948	4	3	5	8	9	16	18	22	15		

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															
March 1942	33	46	14	7											
March 1948	36	47	13	4											

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
46	17	26	70	3,225	22,374			
50	118	262	74	5,484	39,387			
54	247	968						
58	608	2,603						
62	1,271	6,234						
66	1,877	12,414						

47. REMARKS AND REFERENCES
 Brown, Carl B., Jones, Victor H., and Rogers, Ross E., Report on Sedimentation in Lake Corpus Christi and the Water Supply of Corpus Christi, Texas, U. S. Soil Conservation Service, SCS-TP-74, 54 pp., illus., processed. Fort Worth, Texas, Dec. 1948.

In 1948 2,968 Ac. Ft. of water was impounded behind silt bars.

48. AGENCY SUPPLYING DATA Region 4, Soil Conservation Service 49. DATE August 3, 1950

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