

RESERVOIR SEDIMENTATION
DATA SUMMARY

Magnolia Lake (Red Horse)
NAME OF RESERVOIR

51-6
DATA SHEET NO.

DAM	1. OWNER City of Corsicana			2. RIVER Trib. of Elm Creek			3. STATE Texas									
	4. SEC. - TWP. - RANGE -			5. NEAREST TOWN Corsicana			6. COUNTY Navarro									
	7. STREAM BED ELEV. 361			8. TOP OF DAM ELEV. 386			9. SPILLWAY CREST ELEV. 383.3									
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										1885					
	b. POWER															
	c. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION															
	e. CONSERVATION <u>1/</u>		383.3		103.6		756		756		1885					
	f. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 0.76 MILES				AV. WIDTH OF RESERVOIR 0.21 MILES											
	18. TOTAL DRAINAGE AREA 0.59 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 36 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 0.43 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES											
	20. LENGTH 1.0 MILES		AV. WIDTH 0.6 MILES		24. MEAN ANNUAL RUNOFF 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.	
	1885 Sept. 1949		- 64		- 64		- Range Detailed		- 7		103.6 103.6		756 659		1,281 1,117	
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET				36. WATER INFL. TO DATE AC.-FT.							
					b. MEAN ANNUAL		d. 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			
	Sept. 1949		97		1.52		3.53		97		1.52		3.53			
	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		c. PERIOD		b. TOT. TO DATE	
Sept. 1949								0.20		12.83						

1/ Magnolia Lake was built about 1885 to supplant Burke Neck as a water supply for Corsicana until Lake Halbert was constructed in 1921, and is now being used for recreation.

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, Corsicana, Texas. U. S. Soil Conservation Service SCS-TP-92, 33 pp., illus., processed. Fort Worth, Texas, May 1950.

48. AGENCY SUPPLYING DATA Region 4, Soil Conservation Service 49. DATE August 4, 1950
U. S. Dept. of Agriculture
Fort Worth, Texas