

RESERVOIR SEDIMENTATION  
DATA SUMMARY

LAKE GIBBONS

49-2a

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER City of Paris, Texas			2. RIVER Trib. of Pine Creek		3. STATE Texas			
	4. SEC. TWP. RANGE		5. NEAREST TOWN Paris			6. COUNTY Lamar			
	7. STREAM BED ELEV. 564		8. TOP OF DAM ELEV. 610		9. SPILLWAY CREST ELEV. 599 <sup>1/</sup>				
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					1900			
	b. POWER								
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
	d. IRRIGATION								
	e. CONSERVATION								
	f. <del>XXXXXXXX</del> Rec.	599	131	1,394	1,394	1,394	1900		
17. LENGTH OF RESERVOIR 1.0 MILES				AV. WIDTH OF RESERVOIR 0.2 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA 1.46 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 38.94 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 1.26 SQ. MI.			23. MEAN ANNUAL RUNOFF 10 INCHES					
	20. LENGTH MILES		AV. WIDTH MILES		24. MEAN ANNUAL RUNOFF 533 Ac. Ft. / Sq. Mi. <del>AC. FT.</del>				
	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.	
	1900	---	---	---	----	131	1,394	955	
	March 1936	36	36	Range	8	131	1,324	907	
	July 1956	20.3	56.3	Detail	7	131	1,285	880	
	July 1956	20.3	56.3	Range	7	131	1,285	880	
	July 1956	20.3	56.3	Detail	7	131	1,285	880	
	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		
March 1936		70	1.94	1.54	70	1.94	1.54		
July 1956		39	1.92	1.52	109	1.94	1.54		
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 1936		---	---	---	.14	5.02	---	---	
July 1956		31.5 (4)	1,043	1,043	.14	7.82	---	---	

1/ Spillway lowered 3 feet in 1939. Area and capacities are based on 599 and not the original elevation of 602.

25. 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															
Average Land Use for the Period: Cultivated 12%, Pasture and Hay 75%, 13% Woodland and Idle.															
C/I Ratio = 1.71															
Estimated Trap Efficiency = 99%															
Total Annual Sediment Load, Adjusted for Trap Efficiency = 1.56 Ac.Ft./Sq.Mi.															
48. AGENCY SUPPLYING DATA				Soil Conservation Service Temple, Texas			49. DATE		July 31, 1956						