

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Sirianni Lake

52-11

DATA SHEET NO.

DAM	1. OWNER <b>L. F. Sirianni</b>		2. RIVER Trib. of Hondo Creek		3. STATE <b>Texas</b>			
	4. SEC. TWP. RANGE		5. NEAREST TOWN <b>3-1/2 mi. W Moore</b>		6. COUNTY <b>Frio</b>			
	7. STREAM BED ELEV. <b>76.5 1/</b>		8. TOP OF DAM ELEV. <b>105.0 1/</b>		9. SPILLWAY CREST ELEV. <b>100.0 1/</b>			
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					<b>February 14 1951</b>		
	b. POWER							
	c. WATER SUPPLY <b>Stock</b>	<b>100.0 1/</b>	<b>13.7</b>	<b>80.3</b>	<b>80.3</b>	16. DATE NORMAL OPER. BEGAN		
	d. IRRIGATION							
	e. CONSERVATION							
	f. INACTIVE							
17. LENGTH OF RESERVOIR		<b>0.3</b>	MILES	AV. WIDTH OF RESERVOIR		<b>0.15</b> MILES		
WATERSHED	18. TOTAL DRAINAGE AREA		<b>0.769</b>	SQ. MI.	22. MEAN ANNUAL PRECIPITATION <b>21.38 (41)</b> INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA		<b>0.747</b>	SQ. MI.	23. MEAN ANNUAL RUNOFF <b>1.0</b> INCHES			
	20. LENGTH		MILES	AV. WIDTH	MILES	24. MEAN ANNUAL RUNOFF <b>53.3 ac.ft./sq.mi.</b> - FT.		
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION <b>Subhumid</b>			
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.
	<b>Feb. 14, 1951</b>					<b>13.7</b>	<b>80.3</b>	<b>104</b>
	<b>Sept. 1, 1955</b>	<b>4.54</b>	<b>4.54</b>	<b>Detail</b>	<b>3 ranges</b>	<b>13.7</b>	<b>76.5</b>	<b>99</b>
	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	
	<b>Sept. 1, 1955</b>	<b>3.80</b>	<b>0.837</b>	<b>1.12</b>	<b>3.80</b>	<b>0.837</b>	<b>1.12</b>	
	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 P PM	
		a. PERIOD	b. TOTAL TO DATE	a. AV. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
<b>Sept. 1, 1955</b>	<b>45.6(2)</b>	<b>1,112</b>	<b>1,112</b>	<b>1.04</b>	<b>4.73</b>			

1/ Local

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 No ponds in watershed  
 Land Use: 21% cultivated, 79% pasture  
 Average C/I ratio = 1.90  
 Estimated trap efficiency = 98%  
 Total annual sediment load, adjusted for trap efficiency = 1.14  
 acre-feet per square mile.