

Table #1

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

RESERVOIR SEDIMENTATION
DATA SUMMARY

Kerens City Lake
NAME OF RESERVOIR

51-23
DATA SHEET NO.

DAM	1. OWNER <u>City of Kerens</u>			2. RIVER <u>Cow Creek</u>			3. STATE <u>Texas</u>				
	4. LONG. <u>96.14</u> Lat. <u>32.08</u>			5. NEAREST TOWN <u>Kerens</u>			6. COUNTY <u>Navarro</u>				
	7. STREAM BED ELEV. <u>307</u>			8. TOP OF DAM ELEV. <u>337</u>			9. SPILLWAY CREST ELEV. <u>328.4</u>				
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					Sept. 1935					
	b. POWER										
	c. WATER SUPPLY	<u>328.4</u>	<u>89</u>	<u>630</u>	<u>630</u>						
	d. IRRIGATION					16. DATE NORMAL OPER. BEGAN					
	e. CONSERVATION										
	f. INACTIVE										
WATERSHED	17. LENGTH OF RESERVOIR <u>0.88</u> MILES			AV. WIDTH OF RESERVOIR <u>0.07</u> MILES							
	18. TOTAL DRAINAGE AREA <u>6.42</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <u>36.91</u> INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA <u>6.28</u> SQ. MI.			23. MEAN ANNUAL RUNOFF <u>7.76</u> INCHES							
	20. LENGTH MILES			AV. WIDTH MILES			24. MEAN ANNUAL RUNOFF <u>414 ac.ft./sq.mi.</u>				
	21. MAX. ELEV.			MIN. ELEV.			25. CLIMATIC CLASSIFICATION <u>Subhumid</u>				
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.			
	<u>Sept. 1935</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>89</u>	<u>630</u>	<u>98</u>			
	<u>July 6-8, 1954</u>	<u>18.8</u>	<u>18.8</u>	<u>Range Detail</u>	<u>8</u>	<u>89</u>	<u>554</u>	<u>87</u>			
	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				
	<u>July 6-8, 1954</u>	<u>76</u>	<u>4.04</u>	<u>0.64</u>	<u>76</u>	<u>4.04</u>	<u>0.64</u>				
	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				
<u>July 6-8, 1954</u>	<u>54.49</u>	<u>759</u>	<u>759</u>	<u>0.64</u>	<u>12.06</u>	<u>-</u>	<u>-</u>				

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

Land Use - cultivated 1,449 acres-pasture, 940 acres - formerly cultivated
1,513 cross-woodland, 120 acres.
C/.I ratio - 0.24 in 1935, 0.21 in 1954.
Estimated trap efficiency - 93% in 1935, 92% in 1954.
Total annual sediment load adjusted for trap efficiency - 0.70 ac.ft./sq.mi.

48. AGENCY SUPPLYING DATA SCS, Temple, Texas

49. DATE 7-13-54