

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

Stillhouse Hollow Lake
NAME OF RESERVOIR

53-58
DATA SHEET NO.

DAM	1. OWNER U.S. Army Corps of Engineers		2. STREAM Lampasas River		3. STATE Texas			
	4. SEC.	TWP. RANGE	5. NEAREST P.O. Belton		6. COUNTY Bell			
	7. LAT. 31° 01' 20" LONG. 97° 31' 57"		8. TOP OF DAM ELEVATION 698.0		9. SPILLWAY CREST ELEV. 666.0			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-FEET	14. GROSS STORAGE, ACRE-FEET	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL	666.0	11,830	394,664	630,367	19 Feb 1968		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY	622.0	6,430	234,927	235,703	16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					1/		
	f. CONSERVATION							
g. INACTIVE	515.0	93	776	776	02 Sep 1966			
WATERSHED	17. LENGTH OF RESERVOIR 30.5 MILES		AV. WIDTH OF RESERVOIR 0.61 MILES					
	18. TOTAL DRAINAGE AREA 1319 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 30.3 (63.92) INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 1301 SQ. MI.		23. MEAN ANNUAL RUNOFF 3.05 INCHES					
	20. LENGTH 107.0 MILES	AV. WIDTH 12.33 MILES	24. MEAN ANNUAL RUNOFF 214,249 (63.92) AC.-FT.					
	21. MAX. ELEV. 1580	MIN. ELEV. 498.0	25. ANNUAL TEMP. MEAN 65.7 RANGE 14° to 102°					
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/I. RATIO, AC.-FT. PER AC.-FT.
	Feb 1968			Contour (D)	10 foot	11,830	630,367	2.94
	Dec 1987	2/ 19.83	19.83	Range (D)	25	11,773	623,147	2.91
	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	
	Dec 1987	31.7	212,372	566,155 (1975)	4,211,334	212,372	4,211,334	
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, 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	
	Dec 1987	7220	364.09	0.280	7220	364.09	0.280	
	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. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
Dec 1987	56.8 (10)	346.21	346.21	.058	1.145	1560	1560	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	168-151	151-146	146-126	126-106	106-86	86-66	66-46	46-44	44-26	26-6	6-Crest				
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
Dec 1987	8.30	2.49	8.53	14.28	30.85	25.14	9.28	0.44	-1.50	-1.27	3.46				
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														
Dec 1987	14.50	10.02	17.18	12.92	10.93	19.46	14.00	2.63	-0.65	-0.99					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1968 <u>3/</u>	619.31	527.50	254,968	1979	629.38	614.17	213,546
1969	626.36	619.31	148,029	1980	628.75	616.92	108,679
1970	635.00	621.28	389,993	1981	633.83	617.00	169,322
1971	623.85	615.63	66,206	1982	623.56	620.38	100,111
1972	624.95	621.37	153,383	1983	623.98	619.97	109,058
1973	624.57	621.54	169,562	1984	620.32	612.18	20,598
1974	635.67	619.12	216,740	1985	625.62	615.00	143,581
1975	631.99	621.61	566,155	1986	628.70	621.67	248,796
1976	625.27	621.79	176,763	1987	639.54	621.82	516,812
1977	637.26	620.46	402,389	1988 <u>4/</u>	622.39	621.82	12,081
1978	621.38	613.12	24,562				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
509.0	0	0	590.0	3002	82,527			
510.0	5	3	600.0	3828	116,508			
520.0	108	551	610.0	4949	160,298			
530.0	226	2,110	620.0	6194	215,925			
540.0	467	5,337	630.0	7332	283,466			
550.0	815	11,673	640.0	8525	362,862			
560.0	1188	21,606	650.0	9607	453,252			
570.0	1726	35,872	660.0	10851	555,276			
580.0	2282	56,065	666.0	11773	623,147			

47. REMARKS AND REFERENCES

1/ Stillhouse Hollow operated as a temporary detention basin from 2 Sep 1966 to 19 Feb 1968.

2/ Period of Record = 19.83 Years (from 19 Feb 1968 to last Resurvey 19 Dec 1987).

3/ 1968 partial year from impoundment.

4/ Partial water year 1988.

48. AGENCY MAKING SURVEY Department of the Army, CE, Fort Worth

49. AGENCY SUPPLYING DATA Department of the Army, CE, Fort Worth

50. DATE Oct 1988