

RESERVOIR SEDIMENT DATA SUMMARY

Lake Lou Yaeger
NAME OF RESERVOIR

24- 57
DATA SHEET NO.

DAM	1. OWNER City of Litchfield		2. STREAM West Fork Shoal Cr.		3. STATE Illinois			
	4. SEC. 36 TWP. 9N RANGE 5W		5. NEAREST P.O. Litchfield, IL		6. COUNTY Montgomery			
	7. LAT. 39° 11' 10" LONG. 89° 36' 8"		8. TOP OF DAM ELEVATION 607.0		9. SPILLWAY CREST ELEV. 594.8 ^{1/}			
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	594.8	1580	4910	20747	March 1966		
	b. MULTIPLE USE							
	c. POWER					16. DATE NORMAL OPER. BEGAN		
	d. WATER SUPPLY	591.5 ^{2/}	1412	13438	15837			
	e. IRRIGATION							
	f. CONSERVATION 3/			770	2399	May 16, 1966		
g. INACTIVE 4/			1629	1629				
WATERSHED	17. LENGTH OF RESERVOIR 7.16 MILES		AV. WIDTH OF RESERVOIR 0.34 MILES					
	18. TOTAL DRAINAGE AREA 115.0 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 38.5 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 73.29 ^{5/} SQ. MI.		23. MEAN ANNUAL RUNOFF 9.5 INCHES					
	20. LENGTH 17.3 MILES		AV. WIDTH 6.65 MILES		24. MEAN ANNUAL RUNOFF 58263 AC.-FT.			
	21. MAX. ELEV. 719		MIN. ELEV. 553		25. ANNUAL TEMP: MEAN 54° RANGE Jan. 32° -July 7			
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.
	March, 1966	-	-	-	-	1580 ^{6/}	20747	0.36
	Sept., 1977	11.5	11.5	Range (D)	27	1580 ^{7/}	18816	0.32
	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 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	
	Sept., 1977	1931	168	2.29	1931	168	2.29	
	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	
Sept., 1977	48.6	2424	2424	0.81	9.31			

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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															
<p>1/ Emergency spillway control section elevation.</p> <p>2/ Crest elevation of principal spillway.</p> <p>3/ Recreation storage.</p> <p>4/ Sediment pool.</p> <p>5/ Excluded areas are: 39.24 sq. mi. drainage area above Shoal Cr. #2 Reservoir (in series) and 2.47 sq. mi. surface area of reservoir.</p> <p>6/ Originally determined by planimetry of USGS Quad. sheets.</p> <p>7/ Assumes insignificant deposition above principal spillway elevation during first 11.5 years.</p>															
48. AGENCY MAKING SURVEY Illinois Water Survey										50. DATE 2/13/79					
49. AGENCY SUPPLYING DATA Soil Conservation Service															