

RESERVOIR SEDIMENT DATA SUMMARY

LAKE PAHOJA (Pioneer M-1)

36 - 26

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Lyon Co. Conservation Bd		2. STREAM Trib. of Klondike Cr		3. STATE Iowa		
	4. SEC. 23 TWP. 99N RANGE 48W		5. NEAREST P.O. Klondike 2E		6. COUNTY Lyon		
	7. LAT. 43° 23' 2" LONG. 96° 28' 44"		8. TOP OF DAM ELEVATION 1381.0		9. SPILLWAY CREST ELEV. 1376.7		
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	1376.7	104.6	663.7	1426.5	Jan. 1974	
	b. MULTIPLE USE						
	c. POWER						
	d. WATER SUPPLY						
	e. IRRIGATION					16. DATE NORMAL OPER. BEGAN	
	f. CONSERVATION	1368.0	67.1	762.8	762.8		
	g. INACTIVE					Jan. 1974	
17. LENGTH OF RESERVOIR 1.08 MILES		AV. WIDTH OF RESERVOIR 0.15 MILES					
WATERSHED	18. TOTAL DRAINAGE AREA 6.009 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 26.77 INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA 5,845(5,905) SQ. MI.		23. MEAN ANNUAL RUNOFF 1.5 INCHES				
	20. LENGTH 4.5 MILES	AV. WIDTH 1.34 MILES		24. MEAN ANNUAL RUNOFF 480 AC.-FT.			
	21. MAX. ELEV. 1490		MIN. ELEV. 1340		25. ANNUAL TEMP.: MEAN 46.6 RANGE - 35 to 107		
	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
Jan. 1974	-	-	Range (D)	12	104.6 (67.1)	1426.5 (762.8)	2.97 (1.59)
Jan. 1983	9	9	Range (D)	12	104.6 (67.1)	1413.0 (750.0)	2.94 (1.56)
SURVEY DATA	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
	Jan. 1983	26.28					
	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
Jan. 1983	13.5(12.8)	1.50(1.42)	0.25 (0.24)	13.5(12.8)	1.50(1.42)	0.25(0.24)	
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
Jan. 1983	37.5	204 (196)	204 (196)	0.1 (0.2)	0.9 (1.7)		

NOTE: Figures in parentheses are for the reservoir area below the principal spillway, elevation 1368.0

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	Conservation			F.C. Pool											
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION															
Jan. 1983		95			5										
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			Percent			Erosion Rate					Tons/Acre				
Cropland			76			5.7									
Pasture			7			0.3									
Other			17			0.7									
(Roads, Lots & Buildings, Water, and Misc.)															
Sediment: (%)		Clay	Silt	Sand	Gravel										
		21	55	23	1										
48. AGENCY MAKING SURVEY				Soil Conservation Service				50. DATE						January 1984	
49. AGENCY SUPPLYING DATA				Soil Conservation Service											