

RESERVOIR SEDIMENT
DATA SUMMARY
SCS-34 Rev. 6-62

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Lake Okabena
NAME OF RESERVOIR

36-20

DATA SHEET NO.

2 tribs.-Okabena Creek

DAM	1. OWNER City of Worthington			2. STREAM and unnamed trib.			3. STATE Minnesota									
	4. SEC. # TWP. 102N RANGE 40W			5. NEAREST TOWN Worthington			6. COUNTY Nobles									
	7. STREAM BED ELEVATION			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV. 1576.59'									
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. MULTIPLE USE		1576.59				5,183		5,183							
	b. FLOOD CONTROL															
	c. POWER															
	d. WATER SUPPLY															
	e. IRRIGATION										16. DATE NORMAL OPER. BEGAN					
	f. CONSERVATION															
	g. SEDIMENT															
	h. INACTIVE															
17. LENGTH OF RESERVOIR 1.6 MILES					AV. WIDTH OF RESERVOIR 0.7 MILES											
WATERSHED	18. TOTAL DRAINAGE AREA 17.40 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 26.75 (Long term) INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 16.27 SQ. MI.				23. MEAN ANNUAL RUNOFF 2.5 (Long term) INCHES											
	20. LENGTH 6.6 MILES				AV. WIDTH 2.6 MILES				24. MEAN ANNUAL RUNOFF 2320 (Long term) AC.-FT.							
	21. MAX. ELEV. 1722'				MIN. ELEV.				25. CLIMATIC CLASSIFICATION Subhumid							
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.	
	1897 ^{1/} March 1963		-- 65		-- 65		-- Range Contour (D)		-- 17R 1' CI		724		5,183 5,100 ^{2/} 4,263 ^{3/}		298 245	
	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			
	March 1963		920		14.15		0.87		920		14.15		0.87			
	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. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE			
March 1963		(Used 26)		492		492		0.27 17.75		--		--				

* Sec. 22, 23, 26, 27, 28

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
 1/ Assumed date of initial modern sediment deposition
 2/ 837 acre feet of this storage has been created by dredging
 3/ Storage, assuming no dredging
 Land Use in Watershed: cropland 76.6%, Grassland 7.6%, Woods 0.5%, wildlife 2.5%, Lakes & Ponds 5.5%, & Misc. (urban, roads, farmsteads, etc.) 7.3%.
 Geology and Soils: Dark colored soils formed from calcareous loam till of Wisconsin Age, 46% Nicollet-Webster, 36% Clarion-Webster and 18% Clarion.

48. AGENCY MAKING SURVEY Minnesota Watershed Work Plan Party, Soil Conservation Service
 49. AGENCY SUPPLYING DATA E&WP Unit, SCS, Lincoln, Nebraska 50. DATE February 18, 1965