

RESERVOIR SEDIMENTATION
DATA SUMMARY

Madsen Farm Pond
NAME OF RESERVOIR

SOIL CONSERVATION SERVICE
30 - 7
DATA SHEET NO.

DAM	1. OWNER I. A. Madsen			2. RIVER Swan Creek			3. STATE North Dakota			
	4. SEC. 12 TWP. 140 N RANGE 53 W			5. NEAREST TOWN Wheatland			6. COUNTY Cass			
	7. STREAM BED ELEV. 88.8*			8. TOP OF DAM ELEV. 98.2*			9. SPILLWAY CREST ELEV. 94.3*			
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					1939				
	b. POWER									
	c. WATER SUPPLY	94.3*	6.29	22.82	22.82	16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION									
	f. INACTIVE					1939				
17. LENGTH OF RESERVOIR		0.74	MILES	AV. WIDTH OF RESERVOIR		.0093	MILES			
WATERSHED	18. TOTAL DRAINAGE AREA		27.76	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		18.82	INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		27.76	SQ. MI.	23. MEAN ANNUAL RUNOFF		0.602	INCHES		
	20. LENGTH	11.0	MILES	AV. WIDTH	2.5	MILES	24. MEAN ANNUAL RUNOFF		887.76	AC.-FT.
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION		Semi-arid			
	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.	
1939		--	--	--	--	6.29	22.82	0.822		
June 1956		17	17	Range (D)	13	6.29	19.10	0.688		
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	
	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		
	June 1956		3.72	0.219	0.0078	3.72	0.219	0.0078		
	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		
	June 1956		35.0*	5.95	5.95	0.96	16.30			

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/Amenia, N. Dak., rainfall record.
 2/Mean annual runoff - U.S.G.S. Circulars 37 and 52.
 *Assumed

48. AGENCY SUPPLYING DATA SCS, Fargo, North Dakota 49. DATE June 29, 1956