

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Erie Dam (Brewer Lake)

NAME OF RESERVOIR

30-24

DATA SHEET NO.

Unnamed Trib to

DAM	1. OWNER Rush River Water Res. Bd.		2. STREAM Rush River		3. STATE North Dakota			
	4. SEC. 20 TWP. 142N RANGE 53W		5. NEAREST P.O. Erie, ND		6. COUNTY Cass Co.			
	7. LAT. 47° 5' 49" LONG. 97° 25' "		8. TOP OF DAM ELEVATION 1152.0		9. SPILLWAY CREST ELEV. 1146.0			
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	1146.0	144.1	358.0	1932.7	7-1970		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY							
	e. IRRIGATION					16. DATE NORMAL OPER. BEGAN		
	f. CONSERVATION	1144.0 ^{1/}	128.8	1574.7	1574.7	8-1970		
g. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR 1.2 MILES		AV. WIDTH OF RESERVOIR 0.10 MILES					
	18. TOTAL DRAINAGE AREA 11.15 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 18.03(47) INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 8.0 SQ. MI.		23. MEAN ANNUAL RUNOFF 0.60 INCHES					
	20. LENGTH 6.0 MILES		AV. WIDTH 1.86 MILES		24. MEAN ANNUAL RUNOFF 356.6 AC.-FT.			
	21. MAX. ELEV. 1270		MIN. ELEV. 1115		25. ANNUAL TEMP.: MEAN RANGE			
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.
	7-1970					128.8 ^{2/}	1574.7	4.41
	9-1-81	11.16	11.16	Range (R)	10	128.8 ^{2/}	1542.1	4.32
	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		
	9-1-81	17.91						
	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	
	9-1-81	32.6	2.92	0.36	32.6	2.92	0.36	
	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		
9-1-81	50*	392.0	392.0	0.185 ^{2/}	2.07 ^{2/}			

26. DATE OF SURVEY

43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION

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PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION

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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
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PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION

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45. RANGE IN RESERVOIR OPERATION

WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
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46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
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47. REMARKS AND REFERENCES

1/ Recreation

2/ Conservation Pool

Estimated land use - approaching 75% cropland

Geology - Late Wisconsinan Drift

*Assumed

48. AGENCY MAKING SURVEY Extension Service w/SCS Tech. Assistance

49. AGENCY SUPPLYING DATA SCS, Bismarck, ND

50. DATE 3-2-82