

RESERVOIR SEDIMENT

DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Upper Turtle River Watershed Detention Dam #6

NAME OF RESERVOIR

30-22

DATA SHEET NO.

DAM	1. OWNER Grand Forks Co. WRB			2. STREAM Trib. Turtle River			3. STATE North Dakota						
	4. SEC. 23 TWP. 152 RANGE 56			5. NEAREST P.O. Niagara 5NW			6. COUNTY Grand Forks						
	7. LAT. 47° 57' 47" LONG. 97° 46' 27"			8. TOP OF DAM ELEVATION 1296.5			9. SPILLWAY CREST ELEV. 1291.5						
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		1291.5		81.0		1460.09		1584.4		Oct. 1972		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY												
	e. IRRIGATION										16. DATE NORMAL OPER. BEGAN		
	f. CONSERVATION		1250 1/		10.28		124.31		124.31		Oct. 1972		
g. INACTIVE													
WATERSHED	17. LENGTH OF RESERVOIR 0.42 MILES				AV. WIDTH OF RESERVOIR 0.04 MILES								
	18. TOTAL DRAINAGE AREA 11.20 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 18.05 (78 yr) INCHES								
	19. NET SEDIMENT CONTRIBUTING AREA 11.18 SQ. MI.				23. MEAN ANNUAL RUNOFF 0.30 2/ INCHES								
	20. LENGTH 9.0 MILES		AV. WIDTH 1.24 MILES		24. MEAN ANNUAL RUNOFF 179.09 AC.-F.T.								
	21. MAX. ELEV. 1450		MIN. ELEV. 1226		25. ANNUAL TEMP.: MEAN 39° RANGE -42° to 111° F								
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.		
	9-14-73		-	-	Range (D)	8	10.28		124.31		0.69		
	9-13-83		10.0	10.0	Range (D)	9	10.28		119.84		0.67		
	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
	9-14-73		--		--		--		--		--		--
	9-13-83		4.47		0.447		0.04		4.47		0.447		0.04
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
9-14-73		--		--		--		--		--			
9-13-84		40*		34.85		34.85		0.36		3.60			

*Assumed

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

1/ Sediment Pool, Fish & Wildlife
 2/ 80% Chance

Land use in watershed: 82% Cropland
 Geology: Late Wisconsinan Glacial Drift
 1973 - Initial survey. No sediment measured.

48. AGENCY MAKING SURVEY USDA Soil Conservation Service
 49. AGENCY SUPPLYING DATA USDA Soil Conservation Service
 50. DATE 3/8/84