

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Birch Lake

NAME OF RESERVOIR

(Twin Parks Watershed, Site 7)

27-14

DATA SHEET NO.

DAM		1. OWNER Iowa Co. SWCD		2. STREAM Trout Creek		3. STATE Wisconsin		
DAM		4. SEC. 4 TWP. 6N RANGE 5E		5. NEAREST P.O. Barneveld, Wis.		6. COUNTY Iowa		
DAM		7. LAT. 43° 00' 10" N LONG. 89° 55' 10" W		8. TOP OF DAM ELEVATION 970.5		9. SPILLWAY CREST ELEV. 960 1/2		
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	970	17.1	142.0	219.6	Oct 1964		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION	960	11.0	64.1	77.6	Oct 1964		
g. INACTIVE	952.5	4.8	13.5	13.5				
WATERSHED	17. LENGTH OF RESERVOIR (1070')		0.20 MILES	AV. WIDTH OF RESERVOIR (475')		0.09 MILES		
	18. TOTAL DRAINAGE AREA		1.5 SQ. MI.	22. MEAN ANNUAL PRECIPITATION		32 INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		1.5 SQ. MI.	23. MEAN ANNUAL RUNOFF		8.5 INCHES		
	20. LENGTH 2.0 MILES	AV. WIDTH 1.0 MILES	24. MEAN ANNUAL RUNOFF		680 AC.-FT.			
	21. MAX. ELEV. 1300	MIN. ELEV. 936	25. ANNUAL TEMP: MEAN 45°F RANGE -30°F-105°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. CH. RATIO, AC.-FT. PER AC.-FT.
	Oct 1964	0	0	-	-	17.1 <u>2/</u> 11.0 <u>3/</u> 4.8 <u>4/</u>	219.6 <u>2/</u> 77.6 <u>3/</u> 13.5 <u>4/</u>	0.32
	Mar 1975	10.5	10.5	Range Line Detailed	10	17.1 <u>2/</u> 11.0 <u>3/</u> 4.8 <u>4/</u>	209.37 <u>2/</u> 67.37 3.27 <u>4/</u>	0.31
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, ACRE-FEET		36. WATER INFL. TO DATE, AC.-FT.			
	Mar 1975	32 in.*	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			
	Mar 1975	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI. YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI. YEAR	
	10.23	0.97	0.65	10.23	0.97	0.65		
	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	
	Mar 1975	a. PERIOD	b. TOTAL TO DATE	a. AV. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	No measurements have been made.
69.0	976.82	976.82	0.44	4.66				

25. 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.								
Mar 1975	Permanent pool elevation is maintained except for brief periods (less than 5 days for flood storage). Permanent pool has been lowered (for several days) once in the 10.5 year period for fish management.														
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
Survey data will be stored in SCS Madison, Wisconsin state office. This reservoir is scheduled for the systematic survey at approximately 5 year survey intervals.															
1/ No emergency spillway. Principal spillway is the control elevation for permanent (conservation) pool and the outlet for flood control.															
2/ Flood control storage.															
3/ Conservation storage (fish and recreation)															
4/ Sediment storage															
*Estimate															
48. AGENCY MAKING SURVEY				U. S. Soil Conservation Service											
49. AGENCY SUPPLYING DATA				U. S. Soil Conservation Service											
						50. DATE <u>May 10, 1976</u>									