

RESERVOIR SEDIMENTATION
DATA SUMMARY

Lake Bronson

NAME OF RESERVOIR

30 - 1

DATA SHEET NO.

DAM	1. OWNER State of Minnesota			2. RIVER Two Rivers			3. STATE Minnesota					
	4. SEC. 32, 33, 34 TWP. 16N RANGE 46W			5. NEAREST TOWN Bronson			6. COUNTY Kittson					
	7. STREAM BED ELEV. 945.2			8. TOP OF DAM ELEV. 975 app.			9. SPILLWAY CREST ELEV. 971.48					
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										16. DATE NORMAL OPER. BEGAN	
	b. POWER											
	c. WATER SUPPLY											
	d. IRRIGATION											
	e. CONSERVATION		971.48		309.3		3,792		3,792		Summer 1940	
	f. INACTIVE											
17. LENGTH OF RESERVOIR 1.7 MILES					AV. WIDTH OF RESERVOIR 0.25 MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 439 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 20.15 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 438.5 SQ. MI.				23. MEAN ANNUAL RUNOFF INCHES							
	20. LENGTH MILES		AV. WIDTH		MILES		24. MEAN ANNUAL RUNOFF AC.- FT.					
	21. MAX. ELEV.			MIN. ELEV.			25. CLIMATIC CLASSIFICATION Sub-humid					
	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.			
Summer 1940		-	-	-	-	309.3	3,792	8.64				
Oct. 11, 1950		10	10	Recon. Fathometer Contour	5 ft.	309.3	3,626	8.26				
SURVEY DATA	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AG.- 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						
Oct. 11, 1950	165.9	16.6	0.038	165.9	16.6	0.038						
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						
Oct. 11, 1950	30.94 (5)	25.6	25.6	0.44	4.38							

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
 Estimated trap efficiency 44 percent.
 Survey by Soil Conservation Service and Minnesota Dept. of Conservation.

Region 3, Soil Conservation Service
 U. S. Dept. of Agriculture

48. AGENCY SUPPLYING DATA Milwaukee, Wisconsin

49. DATE December 4, 1950