

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

HOMME DAM

NAME OF RESERVOIR

30-17a

DATA SHEET NO.

DAM	1. OWNER Corps of Engineers				2. STREAM So. Br. Park River		3. STATE North Dakota						
	4. SEC. 19 TWP. 157N. RANGE 55W			5. NEAREST P.O. Park River, ND		6. COUNTY Walsh							
	7. LAT 48° 24' 13" LONG 97° 47' 30"				8. TOP OF DAM ELEVATION 1099.0		9. SPILLWAY CREST ELEV. 1080.0						
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL (E) CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET (E)		15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL		1080.0		194		1,200		3,650		2 Sept 49		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY		1074.0		194		2,350		2,450		16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION												
	f. CONSERVATION										1 Nov 50		
	g. INACTIVE		1048.0		20		100		100				
WATERSHED	17. LENGTH OF RESERVOIR 2.25 MILES				AV. WIDTH OF RESERVOIR 0.13 MILES								
	18. TOTAL DRAINAGE AREA 229.0 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 18.97 (20) INCHES								
	19. NET SEDIMENT CONTRIBUTING AREA 229.0 SQ. MI.				23. MEAN ANNUAL RUNOFF 1.01 (20) INCHES								
	20. LENGTH 30 MILES		AV. WIDTH 7.5 MILES		24. MEAN ANNUAL RUNOFF 12,300 (20) AC. FT.								
	21. MAX. ELEV. 1500.00'		MIN. ELEV. 1040.0		25. ANNUAL TEMP MEAN 39.5° RANGE 34.1°-43.3°								
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.				
	13 Jan 53		5.2	0		7 R	194	3,650	0.297				
	19 Mar 58		6.0	5.2	Range	7	194	3,382	0.275				
	1 Mar 64		6.8	11.2	Detailed	7	194	3,253	0.264				
	9 Dec 70			18.0		7	194	2,971	0.242				
	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			
	13 Jan 53		20.53		13,106	37,574	68,153	13,106		68,153			
	19 Mar 58		14.23		2,690	26,320	64,810	3,120		133,060			
	1 Mar 64		19.90		7,457	42,750	183,620	4,575		317,075			
	9 Dec 70												
	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				
	13 Jan 53		268 (C) (138)(D)	51.5 (26.5)	0.225 (0.115)	268 (138)		51.5 (26.5)	0.225 (0.115)				
	19 Mar 58		1129 (87)	21.5 (14.5)	0.0938 (0.0633)	397 (225)		35.4 (20.1)	0.155 (0.088)				
1 Mar 64		2282 (279)	41.5 (41)	0.18 (0.18)	679 (504)		37.72 (28.00)	0.165 (0.122)					
9 Dec 70													
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						
13 Jan 53		90*	441 (225)	441 (225)	1.41 (0.0726)	7.34 (3.78)	5,672 (2,921)	5,672 (2,921)					
19 Mar 58		90*	184 (124)	304 (172)	0.97 (0.55)	10.98 (6.15)	2,971 (1,936)	4,303 (2,439)					
1 Mar 64		90*	353 (353)	323 (239)	1.033 (0.767)	19.50 (13.80)	2,215 (2,192)	3,039 (2,293)					
9 Dec 70													

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														
29 Mar 58	19.5	16.0	8.5	11.0	15.5	15.5	12.5	1.5	0	0					
1 Mar 64	4.2	5.0	9.3	16.0	28.8	23.1	14.4	-0.8	(A)	0					
9 Dec 70	10.5	18.5	11.0	13.0	18.0	17.0	12.1	-0.1	0	0					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
From 1/13/53	1064.20	1059.65	1,393	1963	1080.49	1072.64	5,970
1954	80.80	59.60	8,840	1964	82.81	74.10	19,587
1955	82.40	70.87	13,695	1955	83.70	69.00	28,183
1956	82.68	53.39	37,627	1966	82.50	70.25	42,720
1957	81.05	74.02	6,457	1967	82.66	64.15	30,953
1958	78.42	70.20	1,205	1968	80.69	73.11	6,289
1959	80.98	70.20	7,964	1969	83.00	54.00	26,948
1960	83.02	75.02	26,319	to 12/9/70	81.68	70.39	29,457
1961	80.11	74.50	1,708				
1962	82.50	54.70	22,091				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

- A. Negative denotes scour in this reach.
- B. Records are for entire calendar year. Elevations are Home Pool at the dam.
- C. Represents net amount in reservoir below elevation in Item #9.
- D. Represents net amount in reservoir above and below elevation in Item #9.
- E. Spring Drawdown from elevation 1080.0 to 1074.0. Top of Water Supply Pool is at elevation 1080. in during the Summer and Fall.