

RESERVOIR SEDIMENT DATA SUMMARY

Big Coulee Dam
NAME OF RESERVOIR

30-21

DATA SHEET NO.

DAM	1. OWNER N.D. State Water Commission				2. STREAM Big Coulee		3. STATE North Dakota								
	4. SEC. 36 TWP. 160N RANGE 68W				5. NEAREST P.O. Bisbee		6. COUNTY Towner								
	7. LAT. 48° 38' 0" LONG. 99° 22' 0"				8. TOP OF DAM ELEVATION 1585*		9. SPILLWAY CREST ELEV. 1577*								
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										11-68				
	b. MULTIPLE USE		1572.0		183.0		1694.8		1592.8						
	c. POWER										16. DATE NORMAL OPER. BEGAN				
	d. WATER SUPPLY														
	e. IRRIGATION														
	f. CONSERVATION										11-68				
g. INACTIVE															
17. LENGTH OF RESERVOIR		2.8		MILES		AV. WIDTH OF RESERVOIR		0.12		MILES					
WATERSHED	18. TOTAL DRAINAGE AREA				108.0		SQ. MI.		22. MEAN ANNUAL PRECIPITATION 18.49 (16 yr) INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA				78.0		SQ. MI.		23. MEAN ANNUAL RUNOFF 0.53 (16 yr) INCHES						
	20. LENGTH		30.8		MILES		AV. WIDTH		3.5		MILES				
	21. MAX. ELEV.				2000		MIN. ELEV.		1550		25. ANNUAL TEMP.: MEAN RANGE				
	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.
5-13-85		16.5		16.5		Range (D)		10		183.0		1694.8		0.56	
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			
5-13-85		18.49		3,051		10,200		48,816		3,051		48,816			
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			
5-13-85		102		6.18		0.079		102		6.18		0.079			
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	
5-13-85		40 Assumed		68.8		68.8		0.39		6.4		1335		1335	

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

REMARKS AND REFERENCES
 *Dam raised and principal spillway rebuilt during summer 1985.
 Land use in watershed: 41 percent pasture; 57 percent cropland (39 percent small grains and 18 percent summer fallow); 2 percent miscellaneous.
 Geology: Late Wisconsinan Glacial Drift

48. AGENCY MAKING SURVEY SCS, Bismarck, ND
 49. AGENCY SUPPLYING DATA Soil Conservation Service
 50. DATE 3-10-86