

RESERVOIR SEDIMENT
DATA SUMMARY

Glendo
NAME OF RESERVOIR

33-19
DATA SHEET NO.

DAM	1. OWNER U.S. Dept. of Int., Bur. of Recl.		2. STREAM North Platte		3. STATE Wyoming			
	4. SEC. 13 & 24 TWP. 29N RANGE 68W		5. NEAREST P.O. Glendo 4.5 SE		6. COUNTY Platte-Converse			
	7. LAT. 42° 28' 45" LONG. 104° 56' 59"		8. TOP-OF DAM ELEVATION 4675		9. SPILLWAY CREST ELEV. 4653			
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	4653	17,986	272,367	797,018	Oct. 18, 1957		
	b. MULTIPLE USE	4635	12,455	3459,987	524,651			
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					April 1959		
	g. INACTIVE	24570	3,210	464,664	64,664			
17. LENGTH OF RESERVOIR		528.7	MILES	AV. WIDTH OF RESERVOIR		1.00 MILES		
WATERSHED	18. TOTAL DRAINAGE AREA		19,504	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		13.25 (30) INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA		4,190	SQ. MI.	23. MEAN ANNUAL RUNOFF		1.11 INCHES	
	20. LENGTH	151	MILES	AV. WIDTH	129	MILES	24. MEAN ANNUAL RUNOFF	61,154,550 AC.-FT.
	21. MAX. ELEV.		10,274	MIN. ELEV.	4508	25. ANNUAL TEMP. MEAN		47.1 RANGE 725-72
	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.
Oct. 18, 1957			Contour (D)	68 (R) 10 ft (CI)	17,986	797,018	0.68	
May 3, 1972	14.54	14.54	Range (D)	68 (R)	17,986	789,402		
SURVEY DATA	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		
	Oct. 18, 1957							
	May 3, 1972	13.07	1,077,220	1,674,790	15,709,430	1,077,220	15,709,430	
	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		
Oct. 18, 1957								
May 3, 1972	7,616	524	0.13	7,616	524	0.13		
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		
Oct. 18, 1957								
May 3, 1972	*70	198	198	0.066	0.956	565	544	

*Assumed.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION										
	145-133	133-113	113-93	93-73	73-53	53-33	33-13	13-C			
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
May 3, 1972	1.3	2.8	5.3	18.5	24.2	19.7	26.2	2.0			

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														
May 3, 1972	2.0	2.1	4.2	9.4	12.0	12.2	17.6	14.3	20.3	5.9					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1958	4628.56	4508.00	1,242,550	1970	4645.34	4573.11	1,155,440
1959	4638.19	4573.00	875,050	1971	4649.08	4585.03	1,674,790
1960	4635.91	4570.97	909,680	1972	4637.16	4560.42	1,250,220
1961	4627.97	4569.39	693,870	1973	4650.94	4588.05	2,136,060
1962	4636.33	4567.52	960,590				
1963	4632.65	4567.32	1,092,430				
1964	4633.07	4561.08	1,115,090				
1965	4638.35	4577.84	1,051,680				
1966	4630.74	4548.10	1,072,710				
1967	4639.64	4564.79	921,510				
1968	4635.73	4571.50	1,175,090				
1969	4632.88	4560.73	1,145,980				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
1957 Survey			1972 Survey					
4508	0	0	4508	0	0			
4510	19	19	4510	18	18			
4520	93	579	4520	74	473			
4530	285	2,469	4530	273	2,213			
4540	642	7,104	4540	642	6,788			
4550	1,470	17,664	4550	1,470	17,348			
4560	2,360	36,814	4560	2,280	36,098			
4570	3,210	64,664	4570	3,130	63,148			
4580	4,040	100,914	4580	4,000	98,798			
4590	5,200	147,114	4590	5,090	144,248			
4600	6,630	206,264	4600	6,520	202,298			
4610	7,830	278,564	4610	7,770	273,748			
4620	9,240	363,914	4620	9,170	358,448			
4630	11,120	465,714	4630	10,970	459,148			
4640	13,790	590,264	4640	13,760	582,798			
4650	17,050	744,464	4650	17,050	736,848			
4653	17,986	797,018	4653	17,986	780,402			

47. REMARKS AND REFERENCES

- 1 Uncontrolled.
- 2 Top of dead storage—el. 4545.
- 3 Includes irrigation use = 100,000 acre-ft and power and reregulation uses = 359,987 acre-ft.
- 4 Includes dead storage capacity of 11,349 acre-ft at el. 4545.
- 5 No. Platte R., 21.3 mi; Whiskey Gulch 2.1 mi; Cottonwood Cr, 1.0 mi; & Muddy Cr. 4.3 mi.
- 6 Computed inflow for the 1958-73 period.
- 7 Average temperature of coldest and warmest month at Glentock, Wyo. station.

"Sedimentation Surveys of Pathfinder and Seminoe Reservoirs—North Platte River, Wyoming," U.S. Dept. of the Interior, Bureau of Reclamation, May 1953.

48. AGENCY MAKING SURVEY U.S. Dept. of the Interior, Bureau of Reclamation, No. Platte River Projects, Casper, Wyo.

49. AGENCY SUPPLYING DATA Bureau of Reclamation, U.S. Dept. of the Interior

50. DATE April 15, 1975