

RESERVOIR SEDIMENT
DATA SUMMARY

Boysen

NAME OF RESERVOIR

43-7

DATA SHEET NO.

DAM	1. OWNER Bureau of Reclamation			2. STREAM Wind River			3. STATE Wyoming					
	4. SEC. 16 TWP. 5 N RANGE 6 E			5. NEAREST P. O. Thermopolis			6. COUNTY Frontier					
	7. LAT. 43° 25' 00" LONG. 108° 10' 37"			8. TOP OF DAM ELEVATION 4758			9. SPILLWAY CREST ELEV. 4725 1/					
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL SURFACE AREA, ACRES		13. ORIGINAL CAPACITY, ACRE-Feet 4/		14. GROSS STORAGE, ACRE-Feet 4/		15. DATE STORAGE BEGAN	
	a. FLOOD CONTROL		4725 2/		19,660		146,652		819,132		Oct. 11, 1951	
	b. MULTIPLE USE											
	c. POWER										16. DATE NORMAL OPER. BEGAN	
	d. WATER SUPPLY											
	e. IRRIGATION											
	f. CONSERVATION		4717		17,079		413,241		672,480			
g. INACTIVE		4685 3/		9,444		259,239		259,239				
WATERSHED	17. LENGTH OF RESERVOIR 18 MILES				AV. WIDTH OF RESERVOIR 1.7 MILES							
	18. TOTAL DRAINAGE AREA 7,700 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 8-48 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 7,670 SQ. MI.				23. MEAN ANNUAL RUNOFF 3.2 INCHES							
	20. LENGTH 150 MILES		AV. WIDTH 51 MILES		24. MEAN ANNUAL RUNOFF 1,311,000 (46) AC.-FT.							
	21. MAX. ELEV. 13,785		MIN. ELEV. 4,607		25. ANNUAL TEMP. MEAN 47.4 RANGE 108 to -35 5/							
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/W RATIO, AC.-FT. PER AC.-FT.			
	10/11/51		0	0	Contour (D)	5 ft	19,660	819,132	106			
	8/ 1/64		12.8	12.8	Range (D)	82	19,560	802,004	104			
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-Feet 6/			36. WATER INFL. TO DATE, AC.-FT. 6/				
					a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE			
	8/1/64		8-48		972,505	1,505,681	12,448,069	972,505	12,448,069			
	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				
	8/1/64		17,129 (17,893) 7/	1,338 (1,398)	0.17 (0.18)	17,129 (17,893)	1,338 (1,398)	0.17 (0.18)				
	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			
8/1/64		83.0 (41)		307 (325)	307 (325)	0.163 (0.094)	2.09 (1.20)	1,830 (1,912)	1,830 (1,912)			

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	110-90	90-70	70-60	60-50	50-40	40-30	30-20	20-10	10-0	0-10	10-20	20-27
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
8/1/64	3.09	0.47	10.71	14.46	10.96	20.05	12.14	19.56	4.29	2.21	0.79	1.27

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														
8/1/64	0	0	3	5	16	22	19	16	16	3					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1952	4721.43	4662.00	1,260,781	1959	4716.57	4692.62	700,921
1953	4720.19	4705.58	795,012	1960	4702.84	4686.42	452,444
1954	4725.20	4712.00	879,134	1961	4708.34	4686.58	632,115
1955	4721.40	4703.30	595,374	1962	4724.98	4696.73	1,209,912
1956	4724.74	4684.18	1,246,907	1963	4727.61	4711.77	1,107,957
1957	4729.85	4702.52	1,505,681	1964	4725.09	4703.56	1,050,831
1958	4723.18	4701.66	1,011,000				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
4620	26	126	4665	5,882	101,843	4710	14,807	544,760
4625	83	324	4670	6,535	133,088	4715	16,303	622,531
4630	265	1,196	4675	7,488	167,877	4720	17,951	708,348
4635	577	3,227	4680	8,523	207,907	4725	19,560	802,004
4640	1,263	7,828	4685	9,277	252,137	4730	21,449	904,526
4645	2,422	16,952	4690	9,650	299,731	4735	23,133	1,015,982
4650	3,418	31,724	4695	10,693	350,477	4740	25,456	1,137,454
4655	4,280	50,880	4700	12,363	408,370	4745	27,353	1,269,476
4660	5,087	74,593	4705	13,727	473,245	4752	30,856	1,473,118

47. REMARKS AND REFERENCES
 1/ Top of movable gates
 2/ Joint use--flood control and conservation
 3/ Includes dead storage below elevation 4657
 4/ Recomputed by electronic computer. Values differ slightly from those originally determined
 5/ Maximum and minimum recorded
 6/ Estimated
 7/ Deposits below maximum water surface elevation 4752