

RESERVOIR SEDIMENT DATA SUMMARY

Muffie

42-5

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER <u>Glen Rodgers</u>			2. STREAM <u>Burnett Creek</u>			3. STATE <u>Wyoming</u>						
	4. SEC. <u>18</u> TWP. <u>49N</u> RANGE <u>82W</u>			5. NEAREST P.O. <u>Buffalo 9SSE</u>			6. COUNTY <u>Johnson</u>						
	7. LAT. <u>44° 9' 22"</u> LONG. <u>106° 46' 10"</u>			8. TOP OF DAM ELEVATION <u>100.0</u>			9. SPILLWAY CREST ELEV. <u>95.0</u>						
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										Mar. 1971		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION		<u>95.0</u>		<u>16.40</u>		<u>189.53</u>		<u>190.17</u>				
	f. CONSERVATION												
	g. INACTIVE		<u>69.0</u>		<u>0.32</u>		<u>0.64</u>		<u>0.64</u>		Mar. 1971		
WATERSHED	17. LENGTH OF RESERVOIR <u>0.74</u> <u>1/</u> MILES			AV. WIDTH OF RESERVOIR <u>0.04</u> MILES									
	18. TOTAL DRAINAGE AREA <u>2.58</u> <u>2/</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <u>13.11</u> <u>3/</u> INCHES									
	19. NET SEDIMENT CONTRIBUTING AREA <u>2.58</u> <u>2/</u> SQ. MI.			23. MEAN ANNUAL RUNOFF <u>1.0</u> INCHES									
	20. LENGTH <u>3.41</u> MILES			AV. WIDTH <u>0.76</u> MILES			24. MEAN ANNUAL RUNOFF <u>137.5</u> AC.-FT.						
	21. MAX. ELEV. <u>7726</u>			MIN. ELEV. <u>5280</u>			25. ANNUAL TEMP.: MEAN <u>45.4</u> RANGE <u>-36 to 106</u>						
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.	
	Mar. 1971		-	-			-	16.4		190.17		1.38 <u>2/</u>	
	Mar. 8, 1988		17	17	Range (D)		8	16.4		122.28		0.89 <u>2/</u>	
	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			
	Mar. 8, 1988		13.60		-	-	-		-	-			
	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					
	Mar. 8, 1988		67.89	3.99	1.55	67.89	3.99	1.55					
	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						
Mar. 8, 1988		68.4	2,309	2,309	2.1	35.7	-	-					

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

1/ Three principal arms - 0.44, 0.16, and 0.14 miles.

2/ The reservoir is filled by Blue Gap Ditch which diverts water from Little North Fork Crazy Woman Creek about two miles upstream from the dam.

3/ Buffalo, 1165: 43-year record.