

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Lower Willow Creek

NAME OF RESERVOIR

76-20

DATA SHEET NO.

DAM	1. OWNER LWC Drainage District			2. STREAM Lower Willow Creek			3. STATE Montana										
	4. SEC. 2 TWP. 9N RANGE 14W			5. NEAREST P. O. Hall			6. COUNTY Granite										
	7. LAT. 46° 34' " LONG. 113° 18' "			8. TOP OF DAM ELEVATION 4729			9. SPILLWAY CREST ELEV. 4723.3										
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										4/17/62						
	b. MULTIPLE USE																
	c. POWER																
	d. WATER SUPPLY																
	e. IRRIGATION		4723.3		173		4,651		4,929		16. DATE NORMAL OPER. BEGAN						
	f. CONSERVATION		4673.5		32		278		278								
	g. INACTIVE																
										4/17/62							
17. LENGTH OF RESERVOIR				0.95		MILES		AV. WIDTH OF RESERVOIR				0.28		MILES			
18. TOTAL DRAINAGE AREA				73.3		SQ. MI.		22. MEAN ANNUAL PRECIPITATION				20		INCHES			
19. NET SEDIMENT CONTRIBUTING AREA				73.03		SQ. MI.		23. MEAN ANNUAL RUNOFF				5.0 ^E		INCHES			
20. LENGTH		12		MILES		AV. WIDTH 6.1		MILES		24. MEAN ANNUAL RUNOFF				19,545		AC.-FT.	
21. MAX. ELEV.		7936		MIN. ELEV.		4643		25. ANNUAL TEMP: MEAN				RANGE					
WATERSHED	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.		
	9/62		--		--		--		--		173		4929		0.25		
	9/73		11½		11½		Range		8		170		4910.29		0.25		
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				
	9/73		22 ^E		21,500 ^E		29,600 ^E		258,500 ^E		21,700 ^E		282,000 ^E				
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					
9/73		18.71		1.63		.0223		18.71		1.63		.0223					
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					
9/73		70		34		34		.0331		.38							

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							
47. REMARKS AND REFERENCES															
Survey in 1973 while reservoir was dry E estimated															
E = estimated															
1. Item 37A is a measured volume															
2. Item 32 is gross storage volume (14) less measured sediment volume (37A)															
48. AGENCY MAKING SURVEY														49. AGENCY SUPPLYING DATA	
Soil Conservation Service														50. DATE 1/2/75	