

RESERVOIR SEDIMENT  
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Hardesty Reservoir  
NAME OF RESERVOIR

48-9

DATA SHEET NO.

DAM	1. OWNER			2. STREAM <u>Hungerford Hollow</u>			3. STATE <u>Colorado</u>					
	4. SEC. <u>15,22</u> TWP. <u>23S</u> RANGE <u>60W</u>			5. NEAREST P.O. <u>Fowler</u>			6. COUNTY <u>Pueblo</u>					
	7. LAT. <u>38° 02' 30"</u> LONG <u>104° 06' 30"</u>			8. TOP OF DAM ELEVATION <u>4512</u>			9. SPILLWAY CREST ELEV. <u>4511</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										16. DATE NORMAL OPER. BEGAN	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY											
	e. IRRIGATION		<u>4511</u>		<u>88</u>		<u>563</u>		<u>588</u>		1908	
	f. CONSERVATION										1908	
	g. INACTIVE											
17. LENGTH OF RESERVOIR <u>0.45</u> MILES				AV. WIDTH OF RESERVOIR <u>0.31</u> MILES								
18. TOTAL DRAINAGE AREA <u>13.48</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>12</u> INCHES								
19. NET SEDIMENT CONTRIBUTING AREA <u>13.34</u> SQ. MI.				23. MEAN ANNUAL RUNOFF <u>0.2 1/2</u> INCHES								
20. LENGTH MILES		AV. WIDTH MILES		24. MEAN ANNUAL RUNOFF <u>144</u> AC.-FT.								
21. MAX. ELEV.			MIN. ELEV.			25. ANNUAL TEMP: MEAN <u>52.5°</u> RANGE <u>30°-77°</u> F (Rocky)						
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.	
	<u>1908</u>		<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>88</u>		<u>563</u>		<u>3.9</u>	
	<u>March, 1968</u>		<u>60</u>	<u>60</u>	<u>Range</u>	<u>22</u>	<u>88</u>		<u>527</u>		<u>3.7</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		
	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		
	<u>March, 1968</u>		<u>36.3 2/</u>	<u>0.61</u>	<u>0.045</u>		<u>36.3</u>	<u>0.61 2/</u>		<u>0.045 2/</u>		
	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			
<u>March, 1968</u>							<u>6.4 2/</u>					

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

1/ Atlas HA-212, USGS 1966

2/ A section in the center of the dam washed out in 1930 and was not repaired until about 1947. During this period little or no sediment was deposited in the reservoir. The actual period of deposition is thus 43 years and the actual rate of deposition 0.063 acre feet per square mile per year.

48. AGENCY MAKING SURVEY Soil Conservation Service

49. AGENCY SUPPLYING DATA Same

50. DATE May 5, 1969