

RESERVOIR SEDIMENT  
DATA SUMMARY

Big Sandy Creek Watershed

SCS-34 Rev. 6-66

NAME OF RESERVOIR

48-7a

DATA SHEET NO.

DAM	1. OWNER <u>Double El SCD</u>			2. STREAM <u>Big Sandy Creek</u>			3. STATE <u>Colorado</u>					
	4. SEC. <u>23</u> TWP. <u>11S.</u> RANGE <u>63W</u>			5. NEAREST P.O. <u>Peyton</u>			6. COUNTY <u>El Paso</u>					
	7. LAT. <u>39° 4' 00"</u> LONG <u>104° 24' 30"</u>			8. TOP OF DAM ELEVATION <u>121.5</u>			9. SPILLWAY CREST ELEV. <u>117.5</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		<u>117.5</u>		<u>46</u>		<u>295.6</u>		<u>326.1</u>		May 1962	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION											
	g. INACTIVE		<u>105.9</u>				<u>30.5</u>		<u>30.5</u>		May 1962	
17. LENGTH OF RESERVOIR			<u>0.30</u> MILES			AV. WIDTH OF RESERVOIR			<u>0.24</u> MILES			
WATERSHED	18. TOTAL DRAINAGE AREA			<u>4.71</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION			<u>17</u> INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA			<u>4.64</u> SQ. MI.			23. MEAN ANNUAL RUNOFF			<u>0.7</u> INCHES		
	20. LENGTH		<u>3.0</u> MILES		AV. WIDTH		<u>1.6</u> MILES		24. MEAN ANNUAL RUNOFF			<u>176</u> AC.-FT.
	21. MAX. ELEV. <u>7,280</u>			MIN. ELEV. <u>6,660</u>			25. ANNUAL TEMP: MEAN <u>48</u>			RANGE <u>28-70</u>		
	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	
May 1962		-	-	-		-		<u>46</u>		<u>326.1</u>		<u>1.9</u>
July 1965		<u>3.1</u>	<u>3</u>	Range		<u>15</u>		<u>44</u>		<u>302.1</u>		<u>1.7</u>
Feb. 1974		<u>8.6</u>	<u>11.7</u>	Range		<u>15</u>		<u>44</u>		<u>303.9*</u>		<u>1.7</u>
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		
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					
July 1965		<u>24.0</u>	<u>1/</u>	<u>7.74</u>	<u>1.67</u>	<u>24.0</u>	<u>7.74</u>	<u>1.67</u>				
Feb. 1974		<u>2.1</u>	<u>2/</u>	<u>0.24</u>	<u>0.05</u>	<u>26.1</u>	<u>2.23</u>	<u>0.48</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					
July 1965		-	-	-	-	<u>2.4</u>	<u>1/</u>	<u>7.4</u>	<u>1/</u>			
Feb. 1974		-	-	-	-	<u>0.68</u>	<u>8.00</u>					

\* 3.9 Acre-feet of additional storage provided from borrow excavation in floodwater pool in 1966.

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
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.							
	<u>2/</u>	302.1 +3.9 <u>306.0</u> 303.9 <u>2.1</u>	July, 1965 volume March, 1966 excavation March, 1966 volume Feb., 1974 volume July, 1965-Feb., 1974 sediment volume											
46. ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
47. REMARKS AND REFERENCES														
<p><u>1/</u> Most of the sediment in the reservoir was deposited during an extremely large storm on June 17, 1965. Of the 31.4 acre-feet of sediment measured in July, 1965, 7.4 acre-feet was deposited in alluvial fans above emergency spillway crest (elevation 117.5). In about March 1966, 3.9 acre-feet of material was excavated from floodwater pool for use in repair of the dam and emergency spillway. About 0.6 acre-feet of this was sediment deposited in 1965.</p>														
48. AGENCY MAKING SURVEY				Soil Conservation Service				50. DATE				March 5, 1974		
49. AGENCY SUPPLYING DATA				Soil Conservation Service										