

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Three Bar F Debris Basin

NAME OF RESERVOIR

60-40a

DATA SHEET NO.

Watershed burned over by wildfire in June 1959.

DAM	1. OWNER USDA - F. S.		2. STREAM Trib. of Rock Cr.		3. STATE Arizona			
	4. SEC. 3 TWP. 4 N RANGE 10 E		5. NEAREST P.O. Roosevelt 10 NW		6. COUNTY Gila			
	7. LAT. 33° 43' " LONG. 111° 19' "		8. TOP OF DAM ELEVATION -		9. SPILLWAY CREST ELEV. -			
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							
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION							
g. INACTIVE	N/A 1	0.013	N/A 2/	0.04		3-25-63		
WATERSHED	17. LENGTH OF RESERVOIR - MILES		AV. WIDTH OF RESERVOIR - MILES					
	18. TOTAL DRAINAGE AREA 0.107 SQ. MI.		22. MEAN ANNUAL PRECIPITATION (7) 31.49 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 0.107 SQ. MI.		23. MEAN ANNUAL RUNOFF (7) 1.77 INCHES					
	20. LENGTH 0.616 MILES AV. WIDTH 0.174 MILES		24. MEAN ANNUAL RUNOFF (7) 10.10 AC.-FT.					
	21. MAX. ELEV. 5105		MIN. ELEV. 3850		25. ANNUAL TEMP: MEAN RANGE			
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.
	3-25-63	-	0	See Remark 4/			0.04	0.004
	10-1-63	0.51	0.51					
	10-1-64	1.00	1.51					
	10-1-65	1.00	2.51					
	10-1-66	1.00	3.51					
	10-1-67	1.00	4.51					
	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	
	10-1-63	-	2.04		1.04	2.04	1.04	
	10-1-64	-	2.73	2.73	2.73	2.50	3.77	
	10-1-65	30,10	7.36	7.36	7.36	4.43	11.13	
	10-1-66	34.47	20.49	20.49	20.49	9.01	31.62	
	10-1-67	23.87	1.48	1.48	1.48	7.34	33.10	
	26. DATE OF SURVEY	37. 5/ 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		
10-1-63	0.00	0.00	0.00	0.00	0.00	0.00		
10-1-64	0.04	0.04	0.37	0.04	0.03	0.28		
10-1-65	0.01	0.01	0.09	0.05	0.02	0.19		
10-1-66	0.02	0.02	0.19	0.07	0.02	0.19		
10-1-67	0.00	0.00	0.00	0.07	0.02	0.10		
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	
10-1-63		0	0					
10-1-64	110*	886	671					
10-1-65		224	455					
10-1-66		448	455					
10-1-67		0	455					

N/A - Not Applicable

* - Assumed

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															
<p>1/ Entire pool used to collect bedload sediment and debris.</p> <p>2/ Sediment and debris also captured above pool elevation.</p> <p>3/ Each "survey" consists of data accumulated from measurements made after each appreciable sediment capture.</p> <p>4/ Cross-sectioning or volumetric measurements; ranges or contours not used.</p> <p>5/ Basin cleaned as needed to maintain capacity.</p> <p>6/ Includes sediment volumes captured above spillway level.</p> <p>7/ Basin filled during storm of 9-5-70 and undetermined amount of sediment escaped from pond.</p>															
48. AGENCY MAKING SURVEY Rocky Mountain Forest and Range Expt. Sta.															
49. AGENCY SUPPLYING DATA Same															
														50. DATE 9-10-71	

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	4. SEC.		TWP.	RANGE		5. NEAREST P. O.			6. COUNTY					
	7. LAT.		" LONG.		8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.						
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													
	f. CONSERVATION													
	g. INACTIVE													
17. LENGTH OF RESERVOIR		MILES			AV. WIDTH OF RESERVOIR			MILES						
WATERSHED	18. TOTAL DRAINAGE AREA				SQ. MI.		22. MEAN ANNUAL PRECIPITATION				INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				SQ. MI.		23. MEAN ANNUAL RUNOFF				INCHES			
	20. LENGTH			MILES		AV. WIDTH		MILES		24. MEAN ANNUAL RUNOFF			AC.-FT.	
	21. MAX. ELEV.			MIN. ELEV.			25. ANNUAL TEMP.: MEAN RANGE							
	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.	
10-1-68		1.00	5.51	See Remark					0.04		0.004			
10-1-69		1.00	6.51						0.04		0.004			
10-1-70		1.00	7.51	4/					0.00		0.000			
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					
10-1-68		33.34		15.58	15.58	15.58		8.83	48.68					
10-1-69		29.40		8.10	8.10	8.10		8.72	56.78					
10-1-70		31.88		20.31	20.31	20.31		10.20	77.09					
26. DATE OF SURVEY		37. 5/ 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							
10-1-68		0.00	0.00	0.00	0.07 6/	0.01	0.09							
10-1-69		0.00	0.00	0.00	0.07	0.01	0.09							
10-1-70		0.09	0.09	0.08	0.16 7/	0.02 7/	0.10 7/							
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							
10-1-68			0	216										
10-1-69			0	216										
10-1-70		110*	2016 7/	455 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						
47. REMARKS AND REFERENCES															
48. AGENCY MAKING SURVEY															
49. AGENCY SUPPLYING DATA															
50. DATE _____															