

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

Millet Swale Reservoir

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

61-2b

DATA SHEET NO.

DAM	1. OWNER Silver Crk. Irr. Co.		2. STREAM Millet Swale		3. STATE Arizona				
	4. SEC. 20 TWP. 12N RANGE 22E		5. NEAREST P.O. Taylor		6. COUNTY Navajo				
	7. LAT 34° 23' " LONG. 110° 00' "		8. TOP OF DAM ELEVATION 110.0*		9. SPILLWAY CREST ELEV. 106.0*				
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	106.0*	199.3	1342.0	1342.0	11/58			
	c. POWER								
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
	e. IRRIGATION								
	f. CONSERVATION					6/1/59 1/			
g. INACTIVE									
WATERSHED	17. LENGTH OF RESERVOIR 0.84 MILES		AV. WIDTH OF RESERVOIR 0.37 MILES						
	18. TOTAL DRAINAGE AREA 40.0 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 11.73 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 39.7 SQ. MI.		23. MEAN ANNUAL RUNOFF 0.3 INCHES						
	20. LENGTH 13.5 MILES	AV. WIDTH 3.0 MILES	24. MEAN ANNUAL RUNOFF 640 AC.-FT.						
	21. MAX. ELEV. 6610	MIN. ELEV. 5700	25. ANNUAL TEMP.: MEAN 50.8 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.	
	6/1/59 1/	--	--	--	--	199.3	1342.0	2.10	
	6/62	3	3	Range (D)	7	199.3	1259.4	1.97	
	6/66	4	7	Range (D)	7	199.3	1118.5	1.75	
	7/72	6	13	Range (D)	7	199.3	969.2	1.51	
	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		
	6/62	10.45							
	6/66	10.47							
	7/72	13.15							
	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		
	6/72	82.60	27.53	0.69	82.60	27.53	0.69		
6/66	140.90	35.23	0.89	223.50	31.93	0.80			
7/72	149.30	24.92	0.63	372.80	28.68	0.72			
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		
6/62	67 (2)	1012	1012	2.0	6.2				
6/66	80 (2)	1693	1401	2.4	16.7				
7/72	83.6 (3)	1215	1315	2.1	27.8				

* 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
 1/ Sediment ranges installed.
 Reservoir is used for flood control and irrigation water supply.
 Principal spillway has 12" outlet pipe.
 Emergency spillway has never functioned.
 Land Use: 100% rangeland.
 Geology: 95% Triassic Moenkopi Formation, 3% Triassic Chinle Formation, 2% Quaternary basalt.

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Soil Conservation Service
 50. DATE 12/7/72

RESERVOIR SEDIMENT DATA SUMMARY

Millet Swale Reservoir
NAME OF RESERVOIR

61 - 2c
DATA SHEET NO.

DAM	1. OWNER Silver Creek Irr Co.		2. STREAM Trib. of Silver CK		3. STATE Arizona			
	4. SEC. 20 TWP. 12N RANGE 22E		5. NEAREST P.O. Taylor		6. COUNTY Navajo			
	7. LAT. 34° 23' " LONG. 110° 00' "		8. TOP OF DAM ELEVATION 111.0*		9. SPILLWAY CREST ELEV. 106.0*			
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					11/58		
	b. MULTIPLE USE	106.00*	199.3	1342.0	1342.0			
	c. POWER					16. DATE NORMAL OPER. BEGAN 6/1/59 1/		
	d. WATER SUPPLY							
	e. IRRIGATION							
	f. CONSERVATION							
g. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR 0.84 MILES		AV. WIDTH OF RESERVOIR 0.37 MILES					
	18. TOTAL DRAINAGE AREA 40.0 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 11.73 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 39.7 SQ. MI.		23. MEAN ANNUAL RUNOFF 0.3 INCHES					
	20. LENGTH 13.5 MILES		AV. WIDTH 3.0 MILES		24. MEAN ANNUAL RUNOFF 640 AC.-FT.			
	21. MAX. ELEV. 6610		MIN. ELEV. 5700		25. ANNUAL TEMP.: MEAN 50.8 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.
	6-1/59	-	-		-	199.3	1342.0	2.10
	6-62	3	3	Range (D)	7	199.3	1259.4	1.97
	6-66	4	7	Range (D)	7	199.3	1118.5	1.75
	7-72	6	13	Range (D)	7	199.3	969.2	1.51
	6-77	5	18	Range (D)	6	199.3	866.6	1.35
	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		
	6-62	10.45						
	6-66	10.47						
	7-72	13.15						
	6-77	11.90						
	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	
	6-62	82.6	27.5	0.69	82.6	27.5	0.69	
6-66	140.9	35.2	0.89	223.5	31.9	0.81		
7-72	149.3	24.9	0.63	372.8	28.7	0.72		
6-77	102.6	20.5	0.52	475.4	26.4	0.66		
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	
6-62	67(2)	1007	1007	2.0	6.2			
6-66	80(2)	1693	1401	2.4	16.7			
7-72	83.6(3)	1215	1315	2.1	27.8			
6-77	80*	753	1159	2.0	35.4			

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/ Sediment ranges installed. Reservoir is used for flood control and irrigation water supply. Principal Spillway has 12" outlet pipe. Emergency Spillway has never functioned. Land Use: 100% rangeland. Geology: 95 % Triassic Moenkopi Formation, 3% Triassic Chinle Formation 2% Quaternary Basalt.</p>															
48. AGENCY MAKING SURVEY Soil Conservation Service					50. DATE July, 1977										
49. AGENCY SUPPLYING DATA Soil Conservation Service															

RESERVOIR SEDIMENT DATA SUMMARY

Millet Swale Reservoir
NAME OF RESERVOIR

61-2d
DATA SHEET NO.

DAM	1. OWNER Silver Creek Irr. Co.			2. STREAM Millet Swale			3. STATE Arizona					
	4. SEC. 20 TWP. 12N RANGE 22E			5. NEAREST P.O. Taylor, AZ			6. COUNTY Navajo					
	7. LAT. 34° 23' " LONG. 110° 00' "			8. TOP OF DAM ELEVATION 110.0*			9. SPILLWAY CREST ELEV. 106.0*					
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				199.3		1342.0		1342.0		11/58	
	b. MULTIPLE USE		106.0*									
	c. POWER										16. DATE NORMAL OPER. BEGAN	
	d. WATER SUPPLY											
	e. IRRIGATION											
	f. CONSERVATION										6/1/59	
WATERSHED	17. LENGTH OF RESERVOIR 0.84 MILES				AV. WIDTH OF RESERVOIR 9.37 MILES							
	18. TOTAL DRAINAGE AREA 40.0 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 11.73 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 39.7 SQ. MI.				23. MEAN ANNUAL RUNOFF 0.3 INCHES							
	20. LENGTH 13.5 MILES		AV. WIDTH 3.0 MILES		24. MEAN ANNUAL RUNOFF 640 AC.-FT.							
	21. MAX. ELEV. 6610		MIN. ELEV. 5700		25. ANNUAL TEMP.: MEAN 50.8 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.		
	6/1/59 ^{1/}						7	199.3	1342.0	2.10		
	6/62		3	3	Range (D)		7	199.3	1259.4	1.97		
	6/66		4	7	Range (D)		7	199.3	1118.5	1.75		
	7/72		6	13	Range (D)		7	199.3	969.2	1.51		
	6/77		5	18	Range (D)		7	199.3	866.6	1.35		
	1/83		5.5	23.5	Range (D)		7	199.3	731.8	1.14		
	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			
	6/62		10.45									
6/66		10.45										
7/72		13.15										
6/77		11.90										
1/83		13.25										
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					
6/72		82.6	27.53	0.69	82.6	27.53	0.69					
6/66		140.9	35.23	0.89	223.5	31.93	0.80					
7/72		149.3	24.92	0.63	372.8	28.68	0.72					
6/77		102.6	20.52	0.52	475.4	26.40	0.67					
1/83		134.9	24.53	0.62	610.3	25.97	0.65					
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					
6/62		67(2)	1012	1012	2.0	6.2						
6/66		80(2)	1693	1401	2.4	16.7						
7/72		83.6(3)	1215	1315	2.1	27.8						
7/77		No Samples	Taken									
1/83		No Samples	Taken									

RESERVOIR SEDIMENT DATA SUMMARY

Millet Swale Reservoir
NAME OF RESERVOIR

61-2e
DATA SHEET NO.

DAM	1. OWNER Silver Creek Irr. Co.		2. STREAM Millet Swale		3. STATE Arizona			
	4. SEC. 20 TWP. 12N RANGE 22E		5. NEAREST P.O. Taylor, AZ		6. COUNTY Navajo			
	7. LAT. 34° 23' " LONG. 110° 00' "		8. TOP OF DAM ELEVATION 110.00*		9. SPILLWAY CREST ELEV. 106.0*			
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	106.0*	199.3	1342.0	1342.0	11/58		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					6/1/59 1/		
	f. CONSERVATION							
WATERSHED	g. INACTIVE							
	17. LENGTH OF RESERVOIR 0.84 MILES		AV. WIDTH OF RESERVOIR 0.37 MILES					
	18. TOTAL DRAINAGE AREA 40.0 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 11.73 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 39.7 SQ. MI.		23. MEAN ANNUAL RUNOFF 0.3 INCHES					
	20. LENGTH 13.5 MILES	AV. WIDTH 3.0 MILES	24. MEAN ANNUAL RUNOFF 640 AC.-FT.					
21. MAX. ELEV. 6610	MIN. ELEV. 5700	25. ANNUAL TEMP.: MEAN 50.8 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.
	9/88	5.7	29.2	Range (D)	7	199.3	562.00	0.88
	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	
	9/88	15.36						
	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	
	9/88	169.8	29.79	0.75	780.0	26.7	0.67	
	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
9/88	No Samples	Taken						

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/ Sediment ranges installed.
 Reservoir is used for flood control and irrigation water supply.
 Principal Spillway has 12" outlet pipe.
 Emergency Spillway has never functioned.
 Land Use: 100% rangeland.
 Geology: 95% Triassic Moenkopi Formation, 3% Triassic Chinle Formation,
 @5 Quaternary Basalt.

48. AGENCY MAKING SURVEY Soil Conservation Service
 49. AGENCY SUPPLYING DATA Soil Conservation Service

50. DATE 3/1/93