

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Cowan 7

NAME OF RESERVOIR

60-42

DATA SHEET NO.

DAM	1. OWNER Robert Cowan			2. STREAM Walnut Gulch			3. STATE Arizona					
	4. SEC. 18 TWP. 20S RANGE 23E			5. NEAREST P. O. Tombstone			6. COUNTY Cochise					
	7. LAT. 31° 42' " LONG. 110° 02' "			8. TOP OF DAM ELEVATION 4650			9. SPILLWAY CREST ELEV. 4640					
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		4640		2.2		12		12		16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION										6/63	
WATERSHED	17. LENGTH OF RESERVOIR .12 MILES				AV. WIDTH OF RESERVOIR .03 MILES							
	18. TOTAL DRAINAGE AREA 0.40 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 11.5 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 0.4 SQ. MI.				23. MEAN ANNUAL RUNOFF 0.35 INCHES							
	20. LENGTH 0.4 MILES		AV. WIDTH 0.03 MILES		24. MEAN ANNUAL RUNOFF 8 AC.-FT.							
	21. MAX. ELEV. 4930		MIN. ELEV. 4630		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.			
	6/63				Contour	1 foot	2.1	14	1.7			
	6/67		4	4	Contour	1 foot	2.1	13.5	1.7			
	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		
	6/63							(1963-67)		(1963-67)		
	6/67		11.02		7.5		14	30		30		
	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				
	6/63					(1963-67)	(1963-67)	(1963-67)				
6/67		0.4	0.1	0.25	0.4	0.1	0.25					
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					
6/63												
6/67		75	410	410	.83	3.3	16,100	16,100				

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.
1963	4636	4628	14.3				
1964	4637	4628	6.5				
1965	4635	4628	3.7				
1966	4636	4628	4.9				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
4628	0	0						
4630	0.3 ac	0.35 acft						
4632	0.6	1.3						
4634	0.9	2.4						
4636	1.2	4.5						
4638	1.7	7.5						
4640	2.1	12.0						

47. REMARKS AND REFERENCES

4628 = dry

48. AGENCY MAKING SURVEY _____

49. AGENCY SUPPLYING DATA _____

50. DATE _____

RESERVOIR SEDIMENT
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U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Cowan, 7

NAME OF RESERVOIR

60-42a

DATA SHEET NO.

DAM	1. OWNER Bob Cowan			2. STREAM Walnut Gulch			3. STATE Arizona							
	4. SEC. 18 TWP. 20 S RANGE 23E			5. NEAREST P.O. Tombstone			6. COUNTY Cochise							
	7. LAT 31° 44' 00" N LONG 109° 1' 30" W			8. TOP OF DAM ELEVATION 4,545			9. SPILLWAY CREST ELEV. 4540							
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										1959			
	b. MULTIPLE USE													
	c. POWER													
	d. WATER SUPPLY (Livestock)		4540		2.1		14.		14		16. DATE NORMAL OPER. BEGAN			
	e. IRRIGATION													
	f. CONSERVATION										1959			
g. INACTIVE														
WATERSHED	17. LENGTH OF RESERVOIR 0.11 MILES				AV. WIDTH OF RESERVOIR 0.03 MILES									
	18. TOTAL DRAINAGE AREA 0.4 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 13 INCHES									
	19. NET SEDIMENT CONTRIBUTING AREA 0.4 SQ. MI.				23. MEAN ANNUAL RUNOFF 0.35 INCHES									
	20. LENGTH 1.3 MILES		AV. WIDTH 0.4 MILES		24. MEAN ANNUAL RUNOFF 7.5 AC.-FT.									
	21. MAX. ELEV. 4,900		MIN. ELEV. 4,530		25. ANNUAL TEMP: MEAN 65°F RANGE 20°F - 100°F									
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.	
	June 1963		-	-	Topographic		1ft Contour		3.0		14		1.9	
	June 1967		4	4	"		"		3.0		13.8		1.8	
	Jan. 1973		6	10	"		"		3.0		13.1		1.7	
	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			
	June 1963		0						13.1		52.5			
	June 1967		12.2		13.1	16.9	52.5		13.1		52.5			
	Jan. 1973		13.3		6.1	11.7	36.7		8.9		89.2			
	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							
June 1963		-			0.2	.05	0.12	0.2	.05	0.12				
June 1967		0.2	.05	0.12	0.7	.10	0.25	0.7	.10	0.25				
Jan. 1973		0.7	.10	0.25										
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							
June 1963		75												
June 1967		75	196	190										
Jan. 1973		75	408	604										

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															
Soil Conservation Service										50. DATE _____					