

RESERVOIR SEDIMENT

DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

Thomas Tank I

NAME OF RESERVOIR

61-4

DATA SHEET NO.

-34 Rev. 6-66

DAM	1. OWNER Bev Thomas			2. STREAM Trib. Cottonwood Wash			STATE Arizona					
	4. SEC. 35 TWP. 13N RANGE 20E			5. NEAREST P. O. Snowflake			6. COUNTY Navajo					
	7. LAT. 43° 28' " LONG. 10° 13' "			8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV. 92.1 *1					
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										1947	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY *0		92.1 *1		.7		3.09		3.09		16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION											
g. INACTIVE												
WATERSHED	17. LENGTH OF RESERVOIR .072 MILES				AV. WIDTH OF RESERVOIR .017 MILES							
	18. TOTAL DRAINAGE AREA .55 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 12.46 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA .549 SQ. MI.				23. MEAN ANNUAL RUNOFF 0.3 *2 INCHES							
	20. LENGTH 1.0 MILES		AV. WIDTH .6 MILES		24. MEAN ANNUAL RUNOFF 8.8 *2 AC.-F.T.							
	21. MAX. ELEV. 6000 *2		MIN. ELEV. 5800 *2		25. ANNUAL TEMP: MEAN 52°F RANGE 16-90°F *3							
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.			
	1947		--	--	--	--	.7	3.09	.35			
	6-27-68		21	21	Range	4	.7	1.38	.16			
	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			
	6-27-68		10.84									
	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				
	6-27-68		1.71	.08	.15	1.71	.08	.15				
	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				
6-27-68		77.9	250	250	2.6	55.3						

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.

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

\*0 Stock water  
 \*1 Assumed  
 \*2 Estimated  
 \*3 Arizona Climate - Snowflake, Arizona  
 Land Use: 100% rangeland  
 Geology : Moenkopi Formation

48. AGENCY MAKING SURVEY Arizona Watershed Planning Party, Soil Conservation Service  
 49. AGENCY SUPPLYING DATA Soil Conservation Service  
 50. DATE 7/11/68