

RESERVOIR SEDIMENT
DATA SUMMARY

SCS-34 Rev. 6-62

Judia Wash Retarding Dam

NAME OF RESERVOIR

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

60 - 36

DATA SHEET NO.

DAM	1. OWNER San Jose Canal Company			2. STREAM Judia Wash			3. STATE Arizona									
	4. SEC. 19 & 20 WP. 7S RANGE 27E			5. NEAREST TOWN Solomon			6. COUNTY Graham									
	7. STREAM BED ELEVATION 3010.0			8. TOP OF DAM ELEVATION 3036.0			9. SPILLWAY CREST ELEV. 3030.0									
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. MULTIPLE USE															
	b. FLOOD CONTROL		3030.0		20.88		158.79		158.79		1/57					
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION															
	g. SEDIMENT										1/57					
	h. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 0.30 MILES				AV. WIDTH OF RESERVOIR 0.11 MILES											
	18. TOTAL DRAINAGE AREA 4.60 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 8.95 (64) INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 4.57 SQ. MI.				23. MEAN ANNUAL RUNOFF 0.35* INCHES											
	20. LENGTH 8.10 MILES		AV. WIDTH 0.57 MILES		24. MEAN ANNUAL RUNOFF 85.86* AC.-FT.											
	21. MAX. ELEV. 3250		MIN. ELEV. 3010.0		25. CLIMATIC CLASSIFICATION Arid											
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/W RATIO AC.-FT. PER SQ. MI.	
	1/57		--		--		Contour (D)		1.0 (C.I.)		20.88		158.79		34.52	
	1/24/64		7.0		7.0		Range (D)		5 (R)		20.88		154.24		33.53	
	7/23/64		0.6		7.6		Range (D)		8 (R)		20.88		153.16		33.30	
	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			
	1/24/64		9.84													
	7/23/64		9.26 (1.52) 1/						154*							
	26. DATE OF SURVEY		37. PERIOD SEDIMENT DEPOSITS 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			
	1/24/64		4.55		0.65		0.14		4.55		0.65		0.14			
	7/23/64		1.08		1.80		0.39		5.63		0.74		0.16			
	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. AN.		b. TOT. TO DATE		a. PERIOD		b. TOT. TO DATE			
	1/24/64		76.9 (2)		234.5		234.5		0.41 2.87							
7/23/64		76.9*		653.2		268.0		0.47 3.55		8,643						

*Estimated

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, 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/ Precipitation occurred one storm from 9:30 P.M. to 12:30 A.M. on 7/14/64. There was no runoff to reservoir after 1/24/64 survey until 7/14/64 and no additional runoff prior to 7/23/64 survey. Runoff volume of 7/14/64 storm was estimated at 0.63 in. Peak flow on Judia Wash estimated at 1,200 C.F.S. Storm estimated to be 25% event. Emergency Spillway flowed 3" deep for short period of time.

12" Outlet Pipe
 Land Use in Watershed: 100% Rangeland
 Geology: 100% Quaternary-Tertiary silt, sand, and gravel.

48. AGENCY MAKING SURVEY USDA-SCS, Watershed Planning Party, Phoenix, Arizona
 49. AGENCY SUPPLYING DATA USDA-SCS
 50. DATE 2-7-64