

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Bonita Canyon

NAME OF RESERVOIR

70-6

DATA SHEET NO.

DAM	1. OWNER <b>The Irvine Co.</b>			2. RIVER <b>Bonita Creek</b>			3. STATE <b>California</b>				
	4. SEC. <b>20</b> TWP. <b>6 S</b> RANGE <b>9 W</b>			5. NEAREST TOWN <b>Orange</b>			6. COUNTY <b>Orange</b>				
	7. STREAM BED ELEV. <b>92</b>			8. TOP OF DAM ELEV. <b>151</b>			9. SPILLWAY CREST ELEV. <b>143</b>				
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE- FEET	14. ACCUMULATED ACRE- FEET	15. DATE STORAGE BEGAN					
	a. FLOOD CONTROL					Jan. 1938					
	b. POWER										
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION	<b>143</b>	<b>19</b>	<b>326</b>	<b>326</b>						
	e. CONSERVATION										
	f. INACTIVE										
17. LENGTH OF RESERVOIR <b>0.42</b>		MILES		AV. WIDTH OF RESERVOIR <b>0.07</b>		MILES					
WATERSHED	18. TOTAL DRAINAGE AREA <b>4.00</b>		SQ. MI.		22. MEAN ANNUAL PRECIPITATION <b>14</b>		INCHES				
	19. NET SEDIMENT CONTRIBUTING AREA <b>4.00</b>		SQ. MI.		23. MEAN ANNUAL RUNOFF		INCHES				
	20. LENGTH		MILES		AV. WIDTH		MILES		24. MEAN ANNUAL RUNOFF		AG.-FT.
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION <b>Semi-arid</b>						
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.			
	<b>Jan. 1938</b>	-	-	-	-	<b>19</b>	<b>326</b>	<b>81.5</b>			
	<b>June 1939</b>	<b>2 1/2</b>	<b>2</b>	<b>Range Recon.</b>	<b>5</b>	<b>19</b>	<b>305</b>	<b>76.3</b>			
SURVEY DATA	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AG-FT.					
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE.				
SURVEY DATA	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				
	<b>June 1939</b>	<b>21</b>	<b>10.5</b>	<b>2.63</b>	<b>21</b>	<b>10.5</b>	<b>2.63</b>				
SURVEY DATA	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. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE			
	<b>June 1939</b>	<b>60*</b>	<b>3,437</b>	<b>3,437</b>	<b>3.22 1/2</b>	<b>6.44</b>					

\* Assumed

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
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/ Seasons under items 27 and 41 include flood runoff of March 1938 and full season 1938-39. Age computed as 2 years.

Region 7, Soil Conservation Service  
 U. S. Department of Agriculture

48. AGENCY SUPPLYING DATA Portland, Oregon      49. DATE August 29, 1950