

Plio. & Pleisto. sediments
& assoc. volcanics

RESERVOIR SEDIMENTATION
DATA SUMMARY

Vernon Christ Pond

NAME OF RESERVOIR

74-13

DATA SHEET NO.

DAM	1. OWNER <u>Vernon Christ</u>				2. RIVER <u>Five Mile Creek</u>			3. STATE <u>Oregon</u>								
	4. SEC. 2 TWP. <u>1S</u> RANGE <u>12E</u>				5. NEAREST TOWN <u>Dufur</u>			6. COUNTY <u>Wasco</u>								
	7. STREAM BED ELEV.				8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV.								
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									1941						
	b. POWER															
	c. WATER SUPPLY			0.92		1.61		1.61		16. DATE NORMAL OPER. BEGAN						
	d. IRRIGATION															
	e. CONSERVATION															
	f. INACTIVE									1941						
17. LENGTH OF RESERVOIR					MILES		AV. WIDTH OF RESERVOIR					MILES				
WATERSHED	18. TOTAL DRAINAGE AREA				.089		SQ. MI.		22. MEAN ANNUAL PRECIPITATION				18		INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA				.088		SQ. MI.		23. MEAN ANNUAL RUNOFF						INCHES	
	20. LENGTH			MILES		AV. WIDTH		. MILES		24. MEAN ANNUAL RUNOFF				AC.-FT.		
	21. MAX. ELEV.			MIN. ELEV.		25. CLIMATIC CLASSIFICATION						Semi-arid				
	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.						
1941	-	-	-	-	0.92		1.61		18.0							
10/10/51	10	10	Range Detailed	4	0.92		1.39		15.6							
SURVEY DATA	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		d. MEAN ANNUAL		b. TOTAL TO DATE								
	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	d. TOTAL TO DATE		b. AV. ANNUAL		c. PER SQ. MI.-YEAR							
	10/10/51	0.22	0.02	0.227	0.22		0.02		0.227							
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										
10/10/51	70*	346	346	1.24	13.66	-	-									

* 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	-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

Flaxman, E. M. and Hobba, R. L. "Some Factors Affecting Rates of Sedimentation in the Columbia River Basin", March 1954, 20 pp., illus. Being processed for publication.