

RESERVOIR SEDIMENTATION
DATA SUMMARY

Rock Creek Improvement Co.

NAME OF RESERVOIR
Unnamed tributary to

74-12

DATA SHEET NO.

Pliocene & Pliostocene
sediments
& assoc. volcanics

DAM	1. OWNER <u>Rock Creek Improvement Co.</u>			2. RIVER <u>White River</u>			3. STATE <u>Oregon</u>						
	4. SEC. <u>14 TWP. 4S RANGE 11E</u>			5. NEAREST TOWN <u>Tygh Valley</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		16. DATE NORMAL OPER. BEGAN					
	a. FLOOD CONTROL					1938							
	b. POWER												
	c. WATER SUPPLY		13.00	250.00	250.00								
	d. IRRIGATION												
	e. CONSERVATION												
	f. INACTIVE					1938							
17. LENGTH OF RESERVOIR			MILES			AV. WIDTH OF RESERVOIR			MILES				
WATERSHED	18. TOTAL DRAINAGE AREA			5.62			SQ. MI.			22. MEAN ANNUAL PRECIPITATION	21	INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA			5.60			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						Sub-humid
	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.
1938		-	-	-	-	13	250	44.5					
10/9/51 ^{1/}		13	13	-	-	13	247	43.9					
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.						
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						
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					
10/9/51		70*	68.61	68.61	0.10	1.28	-	-					

*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

1/ Built 1941. Thoroughly cleaned in 1945.

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.

48. AGENCY SUPPLYING DATA SCS, Portland, Oregon 49. DATE Nov. 16, 1954