

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Willard Barnet Pond  
NAME OF RESERVOIR

74-10

DATA SHEET NO.

DAM	1. OWNER Willard Barnet			2. RIVER Buck Creek			3. STATE Oregon		
	4. SEC. 22 TWP. 2S RANGE 16E			5. NEAREST TOWN Kent			6. COUNTY Sherman		
	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			
	10. FLOOD CONTROL					1941			
	10. POWER								
	10. WATER SUPPLY		1.04	2.91	2.91	16. DATE NORMAL OPER. BEGAN			
	10. IRRIGATION								
	10. CONSERVATION					1941			
	10. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR .05 MILES			14. AV. WIDTH OF RESERVOIR .03 MILES					
	18. TOTAL DRAINAGE AREA .210 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 11 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA .209 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					
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.	
	1941 10/4/51	- 10	- 10	- Range Detailed	- 3	1.04 1.04	2.91 2.41	13.86 11.48	
	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	e. 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	e. AV. ANNUAL	f. PER SQ. MI.-YEAR		
	10/4/51	0.50	0.05	0.24	0.50	0.05	0.24		
	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 P.PM		
			a. PERIOD	b. TOTAL TO DATE	a. AV. ANNUAL	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
10/24/51	70*	366	366	1.72	17.18	-	-		

\*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.