

RESERVOIR SEDIMENTATION
DATA SUMMARY

Cottage Grove

74-4

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Dept of the Army, C of E			2. RIVER Coast Rk. Willamette			3. STATE Oregon																									
	4. SEC. 28 TWP. 21 S RANGE 3 W			5. NEAREST TOWN Cottage Grove			6. COUNTY Lane																									
	7. STREAM BED ELEV. 719			8. TOP OF DAM ELEV. 808			9. SPILLWAY CREST ELEV. 791																									
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		791		1,160		30,000		33,000		10/28/42																					
	b. POWER		-		-		-		-																							
	c. WATER SUPPLY		-		-		-		-																							
	d. IRRIGATION		-		-		-		-		16. DATE NORMAL OPER. BEGAN																					
	e. CONSERVATION		-		-		-		-																							
f. INACTIVE		750		290		3,000		3,000		10/28/42																						
17. LENGTH OF RESERVOIR			2.7			MILES AV. WIDTH OF RESERVOIR			0.66			MILES																				
WATERSHED	18. TOTAL DRAINAGE AREA				104				SQ. MI.				22. MEAN ANNUAL PRECIPITATION				53				INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA				102				SQ. MI.				23. MEAN ANNUAL RUNOFF				36(10) 1/				INCHES											
	20. LENGTH				15				MILES AV. WIDTH				7				MILES				24. MEAN ANNUAL RUNOFF				200,000 (10)				AC.-FT.			
	21. MAX. ELEV.				4717				MIN. ELEV.				719				25. CLIMATIC CLASSIFICATION								Humid							
	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.																	
28 Oct 1942										1,160		33,000		317																		
8-13 Dec 47		5.1		5.1		Range		10				32,873		316																		
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																				
8-13 Dec 47		53		199,500		299,000		1,020,000		199,500		1,020,000																				
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.-YR.		d. TOTAL TO DATE		e. AV. ANNUAL		f. PER SQ. MI.-YR.																				
8-13 Dec 47		127		24.9		0.244		127		24.9		0.244																				
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. TO DATE		a. PERIOD		b. TO DATE																		
8-13 Dec 47		-		-		-		0.0754		0.384		-		-																		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION												
	Crest	1-11	11-21	21-31	31-41	41-51	51-61						
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
8-13 Dec 47	2	5	8	20	20	25	20	(Estimated)					

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															
2/ 8-13 Dec 47	0-9.72	9.72-23.72	23.72-37.4	37.4-49.8	49.8-62.1	62.1-70.1	70.1-78.1	78.1-86.8	86.8-92.9	92.9-96.4	96.4-100				
	to 9.72	to 23.7	to 37.4	to 49.8	to 62.1	to 70.1	to 78.1	to 86.8	to 92.9	to 96.4	to 100				
	2.3	4.7	18.4	21.8	13.1	10.0	8.9	9.6	7.6	3.6	0				

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
1943	791.95	-	298,000	(No storage prior to October 28, 1942)			
1944	791.26	738.74	116,600				
1945	791.89	748.69	162,000				
1946	791.21	749.02	245,000	(From unpublished records)			
1947	791.27	748.09	192,600				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
719	0	0	770	705	13,200	(Normal pool)		
730	32	80	780	935	21,380			
735	70	330	791	1,160	32,820			
740	145	840						
750(M.P.)	290	3,000	795	-	37,620			
760	520	7,190						

47. REMARKS AND REFERENCES
 Ref: Report on Sedimentation Survey of Cottage Grove Reservoir dated July 1, 1949.
 Above average runoff has occurred since dam and reservoir have been in operation. Sediment consists of buff to grey colored clay, silt, or fine sand. An average of twenty samples showed 23 percent clay, 56 percent silt, and 21 percent sand.
 1/ Based on 10 years record upstream at London, Oregon; drainage area= 69 sq. miles
 2/ Reach increments in percent of reservoir area of normal pool.