

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Cold Springs Reservoir

74-16

Cold Springs Canyon, Despain Gulch

DATA SHEET NO.

DAM	1. OWNER Bureau of Reclamation		2. RIVER Umatilla/		3. STATE Oregon					
	4. SEC. TWP. 3-5 RANGE 29-33		5. NEAREST TOWN Cold Springs		6. COUNTY Umatilla					
	7. STREAM BED ELEV.		8. TOP OF DAM ELEV. 631.18		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					2/5/1908				
	b. POWER									
	c. WATER SUPPLY		1,540	49,709	49,709	16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION					2/5/1908				
	f. INACTIVE									
17. LENGTH OF RESERVOIR 2.3		MILES		AV. WIDTH OF RESERVOIR 1.3		MILES				
WATERSHED	18. TOTAL DRAINAGE AREA 188		SQ. MI.		22. MEAN ANNUAL PRECIPITATION 8-14		INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA 186		SQ. MI.		23. MEAN ANNUAL RUNOFF		INCHES			
	20. LENGTH		MILES		AV. WIDTH		MILES			
	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.	
2/5/08		-	-	-	-	1,540	49,709	264.4		
5/51		43	43	Cont. Detail	5 ft.	1,530	44,668	237.5		
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	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		
	5/51/		5,041	117.23	0.63	5,041	117.23	0.63		
	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	c. PERIOD	d. TOT. TO DATE		
	5/51		78	1,070	1,070	0.24	10.14	-	-	

Q Alluvium

26. DATE OF SURVEY	43. DEPTH DESIGNATION, RANGE IN FEET ABOVE AND BELOW CREST ELEVATION										
	79-71.5	61.5	51.5	41.5	31.5	21.5	11.5	1.5	1.5-0		
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
5/51	2.2	13	15	16	16	19	15	1.4	.01		

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 1/ 1951 survey								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
555	5	2	590	673	11,394	621.5	1,530	44,668
560	33	69	595	782	15,008	625	1,654	50,254
565	176	545	600	877	19,162			
570	298	1717	605	994	23,846			
575	400	3458	610	1,149	29,208			
580	485	5672	615	1,324	35,397			
585	564	8298	620	1,478	42,412			

47. REMARKS AND REFERENCES  
 1/ 1951 survey  
 Ref: Flaxman, E. M. Sedimentation in Cold Springs Reservoir - Umatilla County, Oregon. U.S. Soil Conservation Service, October 1953.