

RESERVOIR SEDIMENT DATA SUMMARY

#7 Durgens Creek

25- 25

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Charlie Scott		2. STREAM Trib of Durgens Ck.		3. STATE Missouri			
	4. SEC. 4 TWP. 60N RANGE 6W		5. NEAREST P.O. LaGrange 4 NE		6. COUNTY Lewis			
	7. LAT. 40° 0' 0" LONG. 91° 33' 30"		8. TOP OF DAM ELEVATION 563.3		9. SPILLWAY CREST ELEV. 557.9			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-FEET	14. GROSS STORAGE, ACRE-FEET	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL	557.9	47.6	262.7	339.6	8/12/69		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION					8/12/69		
g. INACTIVE 1/	549.5	14.5	76.9	76.9				
WATERSHED	17. LENGTH OF RESERVOIR .426 MILES		AV. WIDTH OF RESERVOIR .174 2/ MILES					
	18. TOTAL DRAINAGE AREA 2.03 3/ SQ. MI.		22. MEAN ANNUAL PRECIPITATION 35.24 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA .79 2/ SQ. MI.		23. MEAN ANNUAL RUNOFF 5.9 INCHES					
	20. LENGTH 1.2 MILES	AV. WIDTH 1.69 MILES	24. MEAN ANNUAL RUNOFF 639 AC.-F.T.					
	21. MAX. ELEV. 640	MIN. ELEV. 534.8	25. ANNUAL TEMP: MEAN 53 RANGE 16°- 103°					
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/I. RATIO, AC.-FT. PER AC.-FT.
	8/12/69	-	-	-	-	14.5 1/ 47.6 2/	76.9 1/ 339.6 2/	.53 2/ .12 1/
	9/1/76	7.1	7.1	Countour (D)	2' (CI) 9 (R)	13.6 1/ 46.7 2/	61.6 1/ 324.3 2/	.51 2/ .01 1/
	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	
	9/1/76	40.00						
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, 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	
	9/1/76	15.3	2.15	2.73 2/	15.3	2.15	2.73 2/	
	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. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
9/1/76	59.5	3535 2/	3535 2/	2.8 1/ .6 2/	19.9 1/ 4.5 2/	-	-	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
8-12-69	29	29	19	12	7	3	1					

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														
	8	16	13	9	10	8	11	10	10	5					

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
Original Capacity			1976 Capacity					
836	.25	.08	836	-	-			
836	.99	1.24	838	.16	.03			
840	2.60	4.71	840	1.33	1.98			
842	3.94	11.21	842	3.0	6.2			
844	5.72	20.82	844	4.64	13.78			
846	9.16	35.57	846	7.21	25.54			
848	12.21	56.88	848	10.75	43.39			
849.5	14.48	76.87	849.5	13.59	61.6			

47. REMARKS AND REFERENCES

1/ Sediment pool only.

2/ Total reservoir below emergency spillway elevation (557.9). Sediment not measured above elevation 549.5.

3/ There are two grade-stabilization structures located upstream which trap sediment from 745 acres.

48. AGENCY MAKING SURVEY USDA-SCS - Watershed Planning Staff - MO  
 49. AGENCY SUPPLYING DATA USDA-SCS  
 50. DATE 5/18/78