

RESERVOIR SEDIMENT  
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

Rock Creek Site #5

NAME OF RESERVOIR

5-20

DATA SHEET NO.

DAM	1. OWNER <u>Md. Natl. Capital Park</u>			2. STREAM <u>Rock Creek</u>			3. STATE <u>Maryland</u>					
	4. SEC. <u>TWP.</u> RANGE			5. NEAREST P. O. <u>Rockville</u>			6. COUNTY <u>Montgomery</u>					
	7. LAT <u>39° 06' 24"</u> LONG. <u>77° 08' 12"</u>			8. TOP OF DAM ELEVATION <u>363.6</u>			9. SPILLWAY CREST ELEV. <u>351.0</u>					
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		351.0		185.55		3690.00		4276.38		8/66	
	b. MULTIPLE USE		323.5		70.27		586.38		586.38			
	c. POWER											
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION											
	g. INACTIVE										10/66	
17. LENGTH OF RESERVOIR <u>.73</u> MILES					AV. WIDTH OF RESERVOIR <u>0.4</u> MILES							
WATERSHED	18. TOTAL DRAINAGE AREA <u>12.77</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>37.66</u> INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA <u>12.48</u> SQ. MI.				23. MEAN ANNUAL RUNOFF <u>19.10</u> INCHES							
	20. LENGTH <u>6.723</u> MILES		AV. WIDTH <u>1.90</u> MILES		24. MEAN ANNUAL RUNOFF <u>13,007.56</u> AC.-FT.							
	21. MAX. ELEV. <u>610</u>		MIN. ELEV. <u>298</u>		25. ANNUAL TEMP.: MEAN <u>54.2°</u> RANGE <u>-1° to +95° F</u>							
	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.		
8/66		-	-	-	-	185.55	4276.38		.329			
8/66		-	-	-	-	(70.27)	(586.38)		-			
9/68		2.0	2.0	Range Detail	17	(70.27)	(529.24)		-			
5/72 <u>1/</u>		3.75	5.75	"	17	(70.27)	(531.07) <u>1/</u>		-			
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 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					
8/66		-	-	-	-	-	-	-	-	-		
9/68		(57.14)	(28.57) <u>1/</u>	(2.29)	(57.14)	(28.57)	(2.29)	(57.14)	(28.57)	(2.29)		
5/72		(55.31) <u>1/</u>	(14.75) <u>1/</u>	(1.18) <u>1/</u>	(112.4) <u>1/</u>	(19.56) <u>1/</u>	(1.57)	(112.4) <u>1/</u>	(19.56) <u>1/</u>	(1.57)		
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	a. PERIOD	b. TOT. TO DATE			
8/66		-	-	-	-	-	-	-	-	-		
9/68		(70.0) *	(3490.2)	(3490.2)	(4.87)	(9.74)	-	-	-	-		
5/72		(70.5)	(1825.4)	(2410.7) <u>1/</u>	(3.33) <u>1/</u>	(19.18) <u>1/</u>	-	-	-	-		

1/ See remarks  
( ) Permanent pool only  
\* Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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														
9/68			35	17	16	16	6	10							
5/72			35	17	16	16	6	10							
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 Maintenance, operations and the construction of a pipeline across this site required partial draining of the permanent pool during the period 1968-1972. Data from sediment surveys in 1968 and 1972 indicate that this fluctuation caused the capacity of the permanent pool to increase. It is suspected that this discharge created a flushing action which scoured fine sediment from the lake. This affected the lower third of the permanent pool and partly restored sediment storage capacity of that portion. Determinations of the amount of sediment flushed out were not made. For sediment volumes computations it is assumed that average annual sediment yields for the intervening years did not change significantly over that of previous years. Dredging of a sediment trap in the upstream portion of the permanent pool occurred between 12/1/71 and 1/13/72 and created an additional volume of 3.9 acre-feet of sediment which had been stored.															
48. AGENCY MAKING SURVEY															
49. AGENCY SUPPLYING DATA Soil Conservation Service															
50. DATE 7/13/76															