

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

SUTTON LAKE

NAME OF RESERVOIR

19-62

DATA SHEET NO.

DAM	1. OWNER <b>Dept. of Army, C. of E.</b>		2. STREAM <b>Elk River</b>		3. STATE <b>West Virginia</b>		
	4. SEC. <b>TWP. RANGE</b>		5. NEAREST P.O. <b>Sutton 1E</b>		6. COUNTY <b>Braxton</b>		
	7. LAT. <b>38° 39' 40"</b>		LONG. <b>80° 41' 40"</b>		8. TOP OF DAM ELEVATION <b>1,017</b>		
				9. SPILLWAY CREST ELEV. <b>1,000</b>			
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		<b>1,000</b>		<b>3,875</b>		
	b. MULTIPLE USE		<b>925 1/</b>		<b>201,130</b>		
	c. POWER				<b>60,090</b>		
	d. WATER SUPPLY				<b>265,270</b>		
	e. IRRIGATION				<b>64,140</b>		
f. CONSERVATION		<b>850 2/</b>		<b>4,050</b>			
g. INACTIVE				<b>4,050</b>			
16. DATE NORMAL OPER. BEGAN				<b>24 Feb 1960</b>			
17. LENGTH OF RESERVOIR		<b>20.5</b>		MILES		AV. WIDTH OF RESERVOIR	
						<b>0.30</b>	
						MILES	
WATERSHED	18. TOTAL DRAINAGE AREA		<b>537</b>		SQ. MI.		
	22. MEAN ANNUAL PRECIPITATION		<b>54.5</b>		INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		<b>530.9</b>		SQ. MI.		
	23. MEAN ANNUAL RUNOFF		<b>27.1</b>		INCHES		
	20. LENGTH		<b>80</b>		MILES		
AV. WIDTH		<b>6.7</b>		MILES			
24. MEAN ANNUAL RUNOFF		<b>777,000</b>		AC.-FT.			
21. MAX. ELEV.		<b>4,710</b>		MIN. ELEV.		<b>807</b>	
25. ANNUAL TEMP. MEAN		<b>52°</b>		RANGE			
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.				
	<b>24Feb1960</b>				<b>Contour</b>		
	<b>21Jan1973</b>		<b>12.9 112.9 1</b>		<b>5 feet</b>		
					<b>3,880</b>		
					<b>265,270</b>		
					<b>0.34</b>		
					<b>3,880</b>		
					<b>264,640</b>		
				<b>0.34</b>			
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	
<b>21Jan1973</b>		<b>53.7</b>		<b>813,000</b>		<b>1,202,000</b>	
				<b>10,500,000</b>		<b>813,000</b>	
				<b>10,500,000</b>		<b>10,500,000</b>	
26. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, ACRE-Feet		38. TOTAL SED. DEPOSITS TO DATE, ACRE-Feet			
		a. PERIOD TOTAL d. AV. ANNUAL c. PER SQ. MI.-YEAR		a. TOTAL TO DATE b. AV. ANNUAL c. PER SQ. MI.-YEAR			
<b>21Jan1973</b>		<b>1101 3/</b>		<b>85.3</b>		<b>0.16</b>	
				<b>1101</b>		<b>85.3</b>	
				<b>0.16</b>			
26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.	
				a. PERIOD b. TOTAL TO DATE		a. AV. ANN. b. TOT. TO DATE	
<b>21Jan1973</b>		<b>60*</b>		<b>209</b>		<b>209</b>	
				<b>.03</b>		<b>.42</b>	
				<b>100</b>		<b>100</b>	

\* Assumed  
PREVIOUS EDITIONS ARE OBSOLETE.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION <u>4/</u>													
	150-193	100-150	75-100	50-75	0-50									
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
21Jan1973	94.2	29.0	-39.6	8.5	7.9									
26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR <u>4/</u>													
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
21Jan1973	4.8	40.2	55.1	14.3	6.2	-6.2	-15.4	-2.8	1.3	2.5				
45. RANGE IN RESERVOIR OPERATION														
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.							
1961	950.2	831.9	907,000	1972	944.9	848.1	1,202,000							
1962	927.7	849.0	852,000											
1963	933.9	849.6	907,000											
1964	926.6	849.5	643,000											
1965	926.7	849.3	661,000											
1966	931.4	849.4	481,000											
1967	942.5	849.1	922,000											
1968	934.2	845.8	700,000											
1969	926.1	849.6	627,000											
1970	936.9	846.4	793,000											
1971	936.3	847.9	914,000											
46. ELEVATION-AREA-CAPACITY DATA <u>4/</u>														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
ORIGINAL			1973 RESURVEY											
850	270	4,050	850	255	3,450									
875	590	14,710	875	580	13,990									
900	955	33,700	900	955	32,920									
925	1,520	64,140	925	1,530	63,610									
950	2,205	110,980	950	2,205	110,400									
975	3,100	177,560	975	3,100	176,930									
1,000	3,875	265,270	1,000	3,875	264,640									
47. REMARKS AND REFERENCES														
<ol style="list-style-type: none"> <li>Storage for low-flow augmentation, recreation and allied conservation purposes.</li> <li>Storage for sediment reserve and general conservation purposes.</li> <li>Includes an estimated additional 470 acre-feet of sediment deposited in the original stream channel and not included in the area-capacity computations.</li> <li>Does not include 470 acre-feet of estimated additional sediment deposited in the original stream channel.</li> </ol>														
48. AGENCY MAKING SURVEY U. S. Army Engineer District						50. DATE <u>June 1973</u>								
49. AGENCY SUPPLYING DATA <u>Huntington, W. Va.</u>														