

RESERVOIR SEDIMENT
DATA SUMMARY

Hubbard Brook Experiment Forest, Weir #3

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

NAME OF RESERVOIR

94501

DATA SHEET NO.

DAM	1. OWNER USDA--Forest Service			2. STREAM Trib. of Hubbard Brook			STATE NH									
	4. SEC. N/A TWP. N/A RANGE N/A			5. NEAREST P.O. West Thornton 3			6. COUNTY Grafton									
	7. LAT. 43° 56' " LONG. 71° 45"			8. TOP OF DAM ELEVATION 1602 ft			9. SPILLWAY CREST ELEV. 1600 ft									
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										1957					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION 1/		1600'		0.012		0.074		0.074		1957					
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 0.006 MILES			AV. WIDTH OF RESERVOIR 0.003 MILES												
	18. TOTAL DRAINAGE AREA 0.164 SQ. MI.			22. MEAN ANNUAL PRECIPITATION INCHES												
	19. NET SEDIMENT CONTRIBUTING AREA 0.164 SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES												
	20. LENGTH 0.500 MILES			AV. WIDTH 0.328 MILES			24. MEAN ANNUAL RUNOFF AC.-F.T.									
	21. MAX. ELEV. 2400 ft.			MIN. ELEV. 1600 ft			25. ANNUAL TEMP: MEAN 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.	
	7/16/81 2/		24		2/		Control				0.012		0.074			
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET			36. WATER INFL. TO DATE, AC.-FT.								
			51"		a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		a. MEAN ANNUAL		b. TOTAL TO DATE			
	7/16/81 2/-				270		481		6480		270		6480			
	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			
	7/16/81 2/		0.118		0.005		0.030		0.118		0.005		0.030			
	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			
7/16/81 2/		23.805		15.5		15.5		6.75		159						

25. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION											
	10-Crest											
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
7/16/81 2/	100											

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
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
7/16/81	40	45	5	10										

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1957-1982	1603 ft	1600 ft.					

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

1/ This structure is a weir for measuring stream flow and does not regulate flow.

2/ 4 surveys were made between 1957 and 1965. Since 1965 surveys are made annually. When the surveys are made, the sediment is removed from the weir. These data are the sums of 24 years of data.

48. AGENCY MAKING SURVEY USDA Forest Service

49. AGENCY SUPPLYING DATA USDA Forest Service

50. DATE 2/8/82