

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

East Branch Clarion River Lake

NAME OF RESERVOIR

4-21

DATA SHEET NO.

DAM	1. OWNER Corps of Engrs., U.S. Army		2. STREAM East Br. Clarion R.		3. STATE Pennsylvania											
	4. SEC TWP. Jones RANGE		5. NEAREST P O Wilcox, Pa. 15870		6. COUNTY Elk											
	7. LAT 41° 33' 36" LONG 78° 35' 36"		8. TOP OF DAM ELEVATION 1707.0		9. SPILLWAY CREST ELEV. 1685.0											
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		1685.0		1,370		18,950		84,260		Nov 1952 ^{1/}					
	b. MULTIPLE USE															
	c. POWER										16. DATE NORMAL OPER. BEGAN					
	d. WATER SUPPLY															
	e. IRRIGATION															
	f. CONSERVATION		1670.0		1,160		64,280		65,310		June 1952 ^{2/}					
	g. INACTIVE		1555.0		90		1,030		1,030							
WATERSHED	17. LENGTH OF RESERVOIR 6.2 MILES				AV. WIDTH OF RESERVOIR 0.345 MILES											
	18. TOTAL DRAINAGE AREA 72.4 SQ. MI.				22. MEAN ANNUAL PRECIPITATION (31 Yrs) 44.0 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 70.3 SQ. MI.				23. MEAN ANNUAL RUNOFF (18.9 Yrs) 21.6 INCHES											
	20. LENGTH 10 MILES		AV. WIDTH 7.2 MILES		24. MEAN ANNUAL RUNOFF (18.9 Yrs) 83,400 AC.-FT.											
	21. MAX. ELEV. 2250		MIN. ELEV. 1523		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.	
	June 1952		--		--		Contour (Detailed)		5 feet		1,370		84,260		1.01	
	May 1971		18.9		18.9		Range (Detailed)		23		1,370		83,406		1.00	
	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			
	May 1971		42.9"		83,400 (18.9 Yrs)		114,000 (W.Y. 1956)		1,575,400		83,400		1,575,400			
	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			
	May 1971		853.54		45.2		0.64		853.54		45.2		0.64			
	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		
May 1971		66.3		924		924		0.054		1.01		574		576		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE , CREST ELEVATION													
	162-145	145-125	125-105	105-85	85-65	65-45	45-25	25-15	Crest					
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
May 1971	4	16	21	17	17	11	12	2	-					
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														
May 1971	10	14	13	10	13	11	9	12	7	1				
45. RANGE IN RESERVOIR OPERATION														
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.							
July-Sept				1964	1671.26	1615.81	78,600							
1952	1557.99	1552.61	2,810	1965	1671.06	1611.98	69,900							
1953	1675.91	1541.07	108,100	1966	1671.02	1619.67	66,800							
1954	1671.52	1621.23	73,500	1967	1672.32	1618.59	87,400							
1955	1669.36	1617.69	79,600	1968	1672.26	1635.00	95,600							
1956	1676.58	1612.84	114,000	1969	1671.50	1620.78	74,900							
1957	1671.27	1559.28	86,200	1970	1672.10	1635.96	106,600							
1958	1659.15	1553.00	85,500											
1959	1670.38	1627.50	90,500											
1960	1673.46	1623.58	99,500											
1961	1671.33	1603.97	86,400											
1962	1670.55	1625.49	77,800											
1963	1671.10	1626.50	74,500											
46. ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
1523	0	0	1610	500	16,860									
1530	3	6	1620	590	22,280									
1540	30	140	1630	700	28,710									
1550	70	620	1640	800	36,130									
1555	90	1,025	1650	900	44,640									
1560	125	1,570	1660	1,030	54,350									
1570	190	3,140	1670	1,160	65,310									
1580	260	5,410	1680	1,300	77,890									
1590	340	8,440	1685	1,370	84,260									
1600	420	12,280												
47. REMARKS AND REFERENCES														
1/ Elevation 1555 obtained in Nov 1952														
2/ Flood control available June 1952														
48. AGENCY MAKING SURVEY U.S. Army Engineer District, Pittsburgh														
49. AGENCY SUPPLYING DATA Corps of Engineers, Pittsburgh, Pa.														
50. DATE February 1973														