

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

DELAWARE LAKE  
NAME OF RESERVOIR

19-46a  
DATA SHEET NO.

DAM	1. OWNER Dept. of Army, C. of E.		2. STREAM Olentangy River		3. STATE Ohio				
	4. SEC. 566 TWP. Troy RANGE 19		5. NEAREST P O Delaware, Ohio		6. COUNTY Delaware				
	7. LAT 40° 21' 31" LONG 83° 04' 10"		8. TOP OF DAM ELEVATION 957		9. SPILLWAY CREST ELEV. 947				
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	947	8,550	118,000	132,000	1/20 Mar 51			
	b. MULTIPLE USE	915	1,270	5,600	14,000				
	c. POWER								
	d. WATER SUPPLY								
	e. IRRIGATION					16. DATE NORMAL OPER. BEGAN			
	f. CONSERVATION	910	950	8,400	8,400	20 Mar 51			
	g. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR		16.6	MILES	AV. WIDTH OF RESERVOIR		0.8	MILES	
	18. TOTAL DRAINAGE AREA		386	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		36.81	INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA		384	SQ. MI.	23. MEAN ANNUAL RUNOFF		11.95	INCHES	
	20. LENGTH	32	MILES	AV. WIDTH	12	MILES	24. MEAN ANNUAL RUNOFF	246,000	AC.-FT.
	21. MAX. ELEV.	1260	MIN. ELEV.	877	25. ANNUAL TEMP MEAN 51 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. RATIO, AC.-FT. PER AC.-FT.	
	20 Mar 51			Contour	5 feet	1,270	14,000		
	9 May 60	9.14	9.14	Range	28	1,270	13,480		
	6 May 75	14.99	24.13	Range	8	1,310	12,900		
	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 May 60	35.70	223,600	327,800	2,044,000	223,600	2,044,000		
	6 May 75	36.96	252,200	427,900	3,780,900	241,400	5,824,900		
	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 May 60	517	56.56	0.15	517	56.56	0.15			
6 May 75	601	40.09	0.10	1118	46.33	0.12			
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 May 60	65*	208	208	.40	3.68	263	263		
6 May 75	65*	148	171	.33	7.98	166	200		
	*Assumed								

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION													
	25-38	15-25	5-15	0-5										
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
9 May 60 6 May 75	8.9	39.1	64.1	-12.1										
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
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
9 May 60 6 May 75	24.2	24.2	14.5	5.8	8.7	18.3	3.9	0.4						
	4.9	4.0	37.6	7.2	16.1	28.6	2.2	-0.4	-0.2					
45. RANGE IN RESERVOIR OPERATION														
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.							
Part 1951	915.4	884.1	95,700	1964	937.0	909.9	252,200							
1952	922.2	909.4	308,900	1965	920.2	909.8	144,800							
1953	922.8	909.6	123,400	1966	925.6	909.9	173,700							
1954	919.8	904.1	100,000	1967	929.9	904.8	280,200							
1955	925.8	909.7	152,600	1968	933.2	910.0	235,000							
1956	923.2	908.7	235,700	1969	933.0	909.9	317,300							
1957	931.1	909.9	274,500	1970	927.8	899.4	306,300							
1958	922.8	909.8	276,700	1971	923.0	909.7	184,700							
1959	944.8	909.4	327,800	1972	935.6	909.9	333,900							
1960	915.8	909.8	160,500	1973	925.5	909.2	427,900							
1961	932.4	909.9	218,900	Part 1974	928.5	909.9	267,600							
1962	921.7	909.8	156,900	1975	932.8	909.6	292,100							
1963	939.4	909.8	177,600											
46. ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
	ORIGINAL			1975										
915	1,270	14,000	915	1,310	12,900									
910	950	8,400	910	957	7,200									
905	600	4,700	905	456	3,700									
900	400	2,300	900	360	1,800									
895	190	790	895	130	600									
890	70	180	890	63	80									
885	5	16	885	2	1									
880	1	2	880	0	0									
47. REMARKS AND REFERENCES														
1. Date impoundment of minimum pool was started. Dam closure was made on 12 August 1947.														
2. Information given in items 19, 31, 32, 37, 38, 40, 41, 43 and 44 pertains to seasonal pool elevation 915 feet.														
48. AGENCY MAKING SURVEY	U. S. Army Engineer District							50. DATE	November 1975					
49. AGENCY SUPPLYING DATA	Huntington, W. Va.													