

RESERVOIR SEDIMENT
DATA SUMMARY

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

BEACH CITY LAKE

NAME OF RESERVOIR

21-60

DATA SHEET NO.

DAM	1. OWNER Dept. of Army, C. of E.		2. STREAM Sugar Creek		3. STATE Ohio			
	4. SEC. 35 TWP. 10 N RANGE 3 W		5. NEAREST P O Beach City		6. COUNTY Tuscarawas			
	7. LAT 40° 38' 06" LONG 81° 33' 30"		8. TOP OF DAM ELEVATION 995		9. SPILLWAY CREST ELEV. 976.5			
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	976.5	6,150	70,000	71,700	10 Nov 36		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					13 Aug 37		
	f. CONSERVATION	948.0	420	1,700	1,700			
	g. INACTIVE							
17. LENGTH OF RESERVOIR 14.4 MILES		AV. WIDTH OF RESERVOIR .67 MILES						
WATERSHED	18. TOTAL DRAINAGE AREA 300 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 35.4 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 299.3 SQ. MI.		23. MEAN ANNUAL RUNOFF 12.1 INCHES					
	20. LENGTH 33.5 MILES	AV. WIDTH 9.0 MILES	24. MEAN ANNUAL RUNOFF 194,000 AC.-FT.					
	21. MAX. ELEV. 1,170		MIN. ELEV. 930		25. ANNUAL TEMP MEAN 49.5 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.
	10 Nov 36 22 Apr 74	37.5	37.5	Contour Range	5 ft. 10	420 173	1,700 305	.0088 .0016
	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	
	22 Apr 74	37.4	194,000	295,000	7,280,000	194,000	7,280,000	
	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	
	22 Apr 74	1,395	37.2	0.12	1,395	37.2	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
22 Apr 74	* 65	176	176	2.2	82.0	200	200	

* Assumed

ENG FORM 1787
NOV 66

PREVIOUS EDITIONS ARE OBSOLETE.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION													
	13-18	8-13	3-8	0-3										
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
22 Apr 74	1.3	8.0	38.4	52.3										
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													
22 Apr 74	35.1	20.1	12.5	6.5	4.3	4.3	4.3	4.3	4.3	4.3				
45. RANGE IN RESERVOIR OPERATION														
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.							
Part) 1937	953.6	931.7	295,000	1949	959.5	948.2	182,000							
1938	952.2	931.7	238,000	1950	961.9	948.2	239,000							
1939	954.5	931.7	188,000	1951	961.0	948.2	285,000							
1940	964.4	931.6	196,000	1952	968.1	948.2	257,000							
1941	952.5	948.1	128,000	1953	951.7	948.1	104,000							
1942	954.3	948.0	146,000	1954	951.7	948.0	68,500							
1943	959.5	948.2	224,000	1955	962.6	948.1	143,000							
1944	953.8	948.0	108,000	1956	962.6	948.2	247,000							
1945	966.0	948.1	203,000	1957	962.9	948.3	179,000							
1946	960.0	948.2	230,000	1958	956.8	948.1	199,000							
1947	968.6	948.2	265,000	1959	973.2	948.3	234,000							
1948	961.3	948.2	201,000	(See Continuation Sheet)										
46. ELEVATION-AREA-CAPACITY DATA														
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY						
ORIGINAL			1974											
930	0	0	938	0	0									
940	50	140	940	13	10									
948	420	1,700	948	173	305									
47. REMARKS AND REFERENCES														
1. Information given in items 19, 31, 32, 33, 37, 38, 40, 41, 43 and 44 pertains to minimum pool elevation 948 feet.														
48. AGENCY MAKING SURVEY U. S. Army Engineer District														
49. AGENCY SUPPLYING DATA Huntington, W. Va.														
50. DATE <u>September 1974</u>														

BEACH CITY LAKE
RESERVOIR SEDIMENT DATA SUMMARY

45. Range in Reservoir Operation (Cont'd)

<u>Water Year</u>	<u>Max. Elev.</u>	<u>Min. Elev.</u>	<u>Inflow, Ac. Ft.</u>
1960	962.3	948.4	206,000
1961	961.4	947.5	192,000
1962	957.0	948.1	127,000
1963	971.8	948.1	132,000
1964	971.1	948.1	160,000
1965	953.1	948.1	130,000
1966	955.3	948.1	131,000
1967	955.3	948.2	166,000
1968	963.3	948.2	183,000
1969	976.3	948.4	261,000
1970	958.7	948.4	199,000
1971	962.6	948.2	181,000
1972	954.7	948.3	177,000
1973	956.4	948.2	286,000
(Part) 1974	958.6	948.5	189,000