

RESERVOIR SEDIMENTATION
DATA SUMMARY

Buckeye Lake

21-9

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER State of Ohio			2. RIVER S. Fork Licking River			3. STATE Ohio			
	4. SEC. 21 TWP. 17 N RANGE 17, 18W			5. NEAREST TOWN Millersport			6. COUNTY Fairfield, Parry, Licking			
	7. STREAM BED ELEV. -			8. TOP OF DAM ELEV. -			9. SPILLWAY CREST ELEV. 892.6			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. SURFACE AREA ACRES	13. STORAGE ACRE- FEET	14. ACCUMULATED ACRE- FEET	15. DATE STORAGE BEGAN				
	a. FLOOD CONTROL					1832				
	b. POWER									
	c. WATER SUPPLY									
	d. IRRIGATION					16. DATE NORMAL OPER. BEGAN				
	e. CONSERVATION	892.6	2,640 <u>1/</u>	19,940 <u>1/</u>	19,940 <u>1/</u>	1832				
	f. INACTIVE									
WATERSHED	17. LENGTH OF RESERVOIR 7.4			MILES			AV. WIDTH OF RESERVOIR			MILES
	18. TOTAL DRAINAGE AREA 49.2			SQ. MI.			22. MEAN ANNUAL PRECIPITATION 41			INCHES
	19. NET SEDIMENT CONTRIBUTING AREA 45.1			SQ. MI.			23. MEAN ANNUAL RUNOFF			INCHES
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF			AG.- FT.
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION Humid					
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/W RATIO AC- FT. PER SQ. MI.		
	1832	-	-	-	-	2,640 <u>1/</u>	19,940 <u>1/</u>	405		
	July 21, 1939	107	107	Range Recon.	16	2,640	15,790	321		
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AG- FT.			
				a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	d. MEAN ANNUAL	e. TOTAL TO DATE		
	26. DATE OF SURVEY	37. PERIOD SEDIMENT DEPOSITS ACRE- FEET			38. TOTAL SED. DEPOSITS TO DATE ACRE- FEET.					
		a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.- YEAR	d. TOTAL TO DATE	e. AV. ANNUAL	f. PER SQ. MI.- YEAR			
	July 21, 1939	4,150	38.8	0.860	4,150	38.8	0.860			
	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. ANNUAL	b. TOT. TO DATE	c. PERIOD	d. TOT. TO DATE			
July 21, 1939	50 *	937	937	0.19	20.81					

1/ At present spillway elevation (lowered in 1908). From 1836 to 1908, spillway elevation was 893.4, surface area 3,636 acres, and capacity 22,090 acre-feet. From 1832 to 1836, spillway elevation was lower and surface area was 3,136 acres. Natural lake of 650 acres originally.
* Estimated

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION													
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													

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	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.

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

47. REMARKS AND REFERENCES
 Sanderson, E. E. Sedimentation of Reservoirs in Ohio. Ohio Water Resources Board, Columbus, Ohio, April 1948.
 Harbeck, G. E., Jr. Reservoirs in the United States. U. S. Geological Survey, Cir. 23, Washington, D. C., March 1948

Drainage area has been 115 square miles (net) part of the time in the past, when fed partly by feeder from S. Fork Kirkersville River.
 Lake originally used as feeder for Ohio canal system.

48. AGENCY SUPPLYING DATA Region 3, Soil Conservation Service 49. DATE May 18, 1950