Compiled

DEPARTMENT OF THE ARMY — CORPS OF ENGINEERS

RESERVOIR SEDIMENTATION DATA SUMMARY

Pool #16 — NAME OF RESERVOIR

25-14 — DATA SHEET NO.

1. OWNER Dept of the Army, C of E	2. RIVER Mississippi	3. STATE Illinois-Iowa
4. SEC. 31 TWP. 17N RANGE 5W	5. NEAREST TOWN Muscatine, Ia.	6. COUNTY Rock Island-Muscatin
7. STREAM BED ELEV. 522.0	8. TOP OF DAM ELEV. 547	9. SPILLWAY CREST ELEV. 545.0 1/

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					July 10, 1937
b. POWER					
c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN
d. IRRIGATION					
e. CONSERVATION					April 14, 1938
f. ~~Inactive~~ Navigation	545.0	13,000	113,370	113,370	

17. LENGTH OF RESERVOIR 25.7 MILES — AV. WIDTH OF RESERVOIR 0.79 MILES

WATERSHED

18. TOTAL DRAINAGE AREA 99,400 SQ.MI.		22. MEAN ANNUAL PRECIPITATION 32.1	INCHES
19. NET SEDIMENT CONTRIBUTING AREA	SQ.MI.	23. MEAN ANNUAL RUNOFF 7.26	INCHES
20. LENGTH 909 MILES	AV. WIDTH 109.4 MILES	24. MEAN ANNUAL RUNOFF 38,500,000	AC.-FT.
21. MAX. ELEV.	MIN. ELEV. 522.0	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.
March 1938			Range	25	13,000	113,370	—
Nov. 1949	11.7	11.7				106,347	—

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
Nov. 1949		37,963,000	50,813,000	443,029,000	37,963,000	443,029,000

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.-YR.	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ.MI.-YR.
Nov. 1949	7023	600	—	7023	600	—

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. TO DATE	a. PERIOD	b. TO DATE
Nov. 1949				0.53	6.19		

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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														
Nov. 1949	11	3	14	17	16	8	9	9	9	4					

45. RANGE IN RESERVOIR OPERATION 2/

~~XXXXX~~ YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	~~XXXXX~~ YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.
Calendar 1938	551.1	534.7	41.5	1946	549.4	538.7	40.3
1939	547.8	535.0	36.3	1947	548.3	537.2	41.5
1940	545.2	534.8	23.4	1948	549.0	535.0	32.0
1941	547.4	535.8	35.1	1949	545.2	536.0	
1942	550.4	534.8	45.1	1950	548.0	536.1	
1943	549.0	537.8	50.8				
1944	551.5	536.1	43.7				
1945	549.8	536.0	41.8				

1,000,000 Calendar

46. ELEVATION-AREA-CAPACITY DATA

ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY

47. REMARKS AND REFERENCES

1/ Principal waterway through dam is a 20 ft. high movable gate section. Gate sills at elevation 525.0 3 ft. above lowest point of pre-construction stream bed. Gates operated to maintain 9.0 ft. navigation channel depths above dam but pool elevation at the dam cannot exceed elevation 545.0. As river flows increase from minimum, gates are raised to provide additional waterway and pool at the dam is lowered until gates are entirely out of water at a flow that would produce tailwater elevation 543.5.

2/ Inflows are expressed in million acre-feet.

48. AGENCY SUPPLYING DATA Department of the Army, Corps of Engineers, Rock Island District

49. DATE 20 September 1951