

Complex
25-18

RESERVOIR SEDIMENTATION
DATA SUMMARY

Pool # 21

Corps of

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Dept of the Army, Engineers		2. RIVER Mississippi		3. STATE Illinois				
	4. SEC. 10 TWP. 2S RANGE 9W		5. NEAREST TOWN Quincy, Ill.		6. COUNTY Adams (2)				
	7. STREAM BED ELEV. 437.0		8. TOP OF DAM ELEV. 470.0 (1)		9. SPILLWAY CREST ELEV. 450.0				
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 23, 1938			
	b. POWER								
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
	d. IRRIGATION								
	e. CONSERVATION								
	f. INACTIVE	470.0	9,380				May 5, 1939		
17. LENGTH OF RESERVOIR 18.3 MILES		AV. WIDTH OF RESERVOIR 0.80 MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 135,000 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 32.1 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA SQ. MI.		23. MEAN ANNUAL RUNOFF 6.88 INCHES						
	20. LENGTH 1041.3 MILES		AV. WIDTH 129.6 MILES		24. MEAN ANNUAL RUNOFF 49,500,000 AC.-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.	
	July 1938	15.7	15.7	Range	19	9380	78,040	0.6	
	Mar. 1954			Range	19	9380	69,570	0.5	
	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		
	July 1938		52,700,000	69,300,000	827,200,000	52,700,000	827,200,000		
	Mar. 1954								
	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.		
	July 1938	8470	539	.004	8470	539	.004		
Mar. 1954									
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		

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															
July 1938	0	0	0	0	0	0	0	0	0	0					
Mar. 1954	*	2	10	18	17	16	17	2	15	3					
			* - Scour.												
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW AC.-FT.								
See attached sheet.															
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES Elevations refer to mean sea level (1912 adjustment)															
(1) Non-Submersible earth dike elev. 484.0.															
(2) Principal waterway through dam is a 20 ft. high movable gate section. Gate sills at elevation 450.0, 13 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 470.0. As river flows increase from minimum, gates are raised to provide additional waterway, until gates are entirely out of water at a flow that would produce tailwater elevation 470.0.															
48. AGENCY SUPPLYING DATA										49. DATE					
Rock Island District, Corps of Engineers										8 October 1954					

45. Range in reservoir operation.

<u>Water Year</u>	<u>Max. Elev.*</u>	<u>Min. Elev.*</u>	<u>Inflow Million Acre-Feet</u>
1939	475.6	457.2	23.0
1940	470.2	464.2	13.4
1941	472.8	459.4	21.3
1942	475.5	463.0	31.2
1943	475.2	462.6	33.1
1944	480.8	469.3	31.3
1945	477.7	465.3	30.0
1946	477.2	467.1	28.3
1947	481.7	467.1	32.8
1948	479.5	461.9	20.6
1949	473.3	461.7	18.0
1950	477.1	461.1	24.4
1951	480.8	465.8	34.9
1952	480.2	464.4	26.9
1953	474.3	468.9	34.9

* - Calendar Year.