

RESERVOIR SEDIMENTATION
DATA SUMMARY

Pool # 11

26-3

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Dept of the Army, CE			2. RIVER Mississippi			3. STATE Iowa			
	4. SEC. 7 TWP. 89N RANGE 3E			5. NEAREST TOWN Dubuque, Iowa			6. COUNTY Dubuque			
	7. STREAM BED ELEV. 567.0			8. TOP OF DAM ELEV. 603.0 (1)			9. SPILLWAY CREST ELEV. 583.0			
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					Sept. 14, 1937				
	b. POWER									
	c. WATER SUPPLY									
	d. IRRIGATION					16. DATE NORMAL OPER. BEGAN				
	e. CONSERVATION					April 18, 1939				
	f. INACTIVE	603.0	21,100 (3)	154,526						
WATERSHED	17. LENGTH OF RESERVOIR 32.0 MILES			AV. WIDTH OF RESERVOIR 1.07 MILES						
	18. TOTAL DRAINAGE AREA 81,600 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 28.3 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA SQ. MI.			23. MEAN ANNUAL RUNOFF 7.22 INCHES						
	20. LENGTH 783.2 MILES			AV. WIDTH 104.2 MILES			24. MEAN ANNUAL RUNOFF 31,400,000 AC.-FT.			
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION Sub-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.		
	April 1938	14.8	14.8	Range	32	21,100	171,684	2.1		
	Feb. 1953			Range	32	21,100	154,526	1.9		
	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			
	April 1938		32,900,000	45,000,000	486,600,000	32,900,000	486,600,000			
	Feb. 1953									
	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.			
	April 1938	17,158	1159	.014	17,158	1159	.014			
Feb. 1953										
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														
1938	0	0	0	0	0	0	0	0	0	0					
1953	11	21	17	13	14	11	9	*	4	*					

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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. 613.5. (2) Principal waterway through dam is a 20-ft. high movable gate section. Gate sills at elevation 583.0, 16 ft. above lowest point of pre-construction stream bed. Gates operated to maintain 9-ft navigation channel depths above dam but pool elevation at the dam cannot exceed elev. 603.0. 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 elev. 603.0. (3) Surface area revised from 22,000 acres.

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

49. DATE 8 January 1953

45. Range in reservoir operation

<u>Water year</u>	<u>Max.Elev.*</u>	<u>Min. Elev.*</u>	<u>Inflow Million Acre-Feet</u>
1939	604.8	590.8	15.1
1940	604.1	590.6	10.1
1941	603.9	601.5	14.6
1942	606.8	601.7	19.0
1943	606.2	598.3	21.2
1944	606.2	592.0	18.4
1945	606.3	599.0	18.0
1946	605.0	599.0	16.5
1947	603.6	600.9	17.1
1948	603.4	601.6	12.1
1949	603.5	601.8	10.2
1950	603.6	601.7	15.4
1951	610.4	602.0	19.5
1952	610.3	601.7	22.7

* Calendar year.