

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Bloomfield

25-16

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER <b>City of Bloomfield</b>			2. RIVER <b>None</b>			3. STATE <b>Iowa</b>			
	4. SEC. <b>23</b> TWP. <b>69 N</b> RANGE <b>14 W</b>			5. NEAREST TOWN <b>Bloomfield</b>			6. COUNTY <b>Davis</b>			
	7. STREAM BED ELEV. <b>0 assumed</b>			8. TOP OF DAM ELEV. <b>39</b>			9. SPILLWAY GREST ELEV. <b>33</b>			
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. 1937				
	b. POWER									
	c. WATER SUPPLY		73.7	896	896					
	d. IRRIGATION									
	e. CONSERVATION									
	f. INACTIVE					1938				
WATERSHED	17. LENGTH OF RESERVOIR <b>0.97</b> MILES			AV. WIDTH OF RESERVOIR <b>.094</b> MILES						
	18. TOTAL DRAINAGE AREA <b>2.25</b> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <b>34</b> INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA <b>2.13</b> SQ. MI.			23. MEAN ANNUAL RUNOFF <b>Est. 112</b> INCHES						
	20. LENGTH <b>2</b> MILES			AV. WIDTH <b>1</b> MILES			24. MEAN ANNUAL RUNOFF <b>Est. 600</b> AC.-FT./sq. mi.			
	21. MAX. ELEV.			MIN. ELEV.			25. CLIMATIC CLASSIFICATION <b>Humid</b>			
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 <sup>1/</sup> AC.-FT. PER SQ. MI.		
	Sept. 1937	-	-	-	-	73.7	896	398		
	25 Sept. '51	14.0	14.0	Range (D)	20	73.7	831	369		
	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	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			
	25 Sept. 1951	64.59	4.61	2.16	64.59	4.61	2.16			
	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	a. PERIOD	b. TOT. TO DATE		
25 Sept. 1951	60 (assumed)		2,823	2,823	0.515	7.21	-	-		

1/ C/I ratio estimated to be 0.66 in 1937 and 0.62 in 1951. Trap efficiency estimated at 96% up to 1951.

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  
 Total load estimated to be 2,950 tons/sq.mi./yr.