

U.S. DEPARTMENT OF AGRICULTURE
**RESERVOIR SEDIMENTATION
DATA SUMMARY**

Honey Creek No. A-4

SOIL CONSERVATION SERVICE
31-25

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER O. H. Cottingham			2. RIVER Trib. of Honey Cr.		3. STATE Iowa			
	4. SEC. 8 TWP. 71N RANGE 20W		5. NEAREST TOWN Russell		6. COUNTY Lucas				
	7. STREAM BED ELEV. 977.0		8. TOP OF DAM ELEV. 1,001.0		9. SPILLWAY CREST ELEV. 996.0				
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	996.0	5.349	38.213	64.928	Aug. 17, 1957			
	b. POWER								
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
	d. IRRIGATION								
	e. CONSERVATION								
f. INACTIVE 1/	991.0	5.651	26.715	26.715	Aug. 17, 1957				
17. LENGTH OF RESERVOIR 0.263 2/ MILES		AV. WIDTH OF RESERVOIR 0.050 MILES							
WATERSHED	18. TOTAL DRAINAGE AREA 0.355 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 31.7 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 0.338(0.346) SQ. MI.		23. MEAN ANNUAL RUNOFF 4.74 3/ INCHES						
	20. LENGTH 0.795 MILES		AV. WIDTH 0.447 MILES		24. MEAN ANNUAL RUNOFF 89.67 3/ AC.-FT.				
	21. MAX. ELEV. 1,035		MIN. ELEV. 977.0		25. CLIMATIC CLASSIFICATION Humid				
	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.
Aug. 1957		-	-	Range	7	11.0(5.65)	64.9(26.7)	183(75)	
Oct. 1958		1.17	1.17	"	"	" "	63.5(25.3)	179(71)	
Aug. 1959		0.83	2.00	"	"	" "	63.3(25.1)	178(71)	
Jan. 1961 1/		1.42	3.42	"	-	" "	63.3(25.1)	178(71)	
SURVEY DATA	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AC-FT.	
	Cal. Year								
	1957		33.66 5/						
	1958		32.66 5/						
1959		46.65 5/							
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	
Oct. 1958		1.39(1.37)			1.19(1.17)			3.52(3.38)	
Aug. 1959		0.20(0.20)			0.24(0.25)			0.71(0.72)	
Jan. 1961 1/		0 (0)			0 (0)			1.59(1.58)	
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	
Oct. 1958 6/		66.0 6/		5.1(4.9)		5.1(4.9)		1.8(4.4)	
Aug. 1959		66.0		1.0(1.0)		3.4(3.3)		1.2(3.0)	
Jan. 1961 1/		66.0		0 (0)		2.0(1.9)		0.7(1.7)	

(Thousand Tons)

26. DATE OF SURVEY Aug. 1957	43. DEPTH DESIGNATION RANGE IN FEET ABOVE, AND BELOW, CREST ELEVATION									
	"Inactive Pool"	#F.C. Pool#								
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
Oct. 1958		99%		1%						
Aug. 1959		99%		1%						
Jan. 1961 <u>4/</u>		99%		1%						

26. DATE OF SURVEY Aug. 1957	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															
Oct. 1958							<u>1/</u>								
Aug. 1959	20	20	10	13	13	12	11	1	0	0					
Jan. 1961 <u>4/</u>	21	21	10	14	13	11	9	1	0	0					

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 Quantities shown in parenthesis (except item 39) refer to amounts in the inactive pool only.

1/ Storage used for sediment pool.

2/ Additional 0.081 miles of principal arm not included.

3/ Water years 1952-53 thru 1958-59 at gage 6.42 miles downstream.

4/ Surveys indicated no sediment deposited since survey in 1959.

5/ Amount partially estimated.

6/ Average of two samples taken in 1959

7/ Principal spillway elevation (991.0) ends at 70% of total length.

48. AGENCY SUPPLYING DATA Soil Conservation Service

49. DATE Feb. 16, 1961