

RESERVOIR SEDIMENTATION
DATA SUMMARY

Honey Creek No. F-1
NAME OF RESERVOIR

31-26
DATA SHEET NO.

DAM	1. OWNER Clayton Blue			2. RIVER Trib. of Honey Cr.			3. STATE Iowa				
	4. SEC. 22 TWP. 71N RANGE 20W			5. NEAREST TOWN Russell			6. COUNTY Lucas				
	7. STREAM BED ELEV. 921.8			8. TOP OF DAM ELEV. 948.5			9. SPILLWAY CREST ELEV. 915.5				
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	945.5	15.835	114.348	183.988	Nov. 5, 1955					
	b. POWER										
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN					
	d. IRRIGATION										
	e. CONSERVATION										
	f. INACTIVE 1/	936.0	8.151	39.640	39.640	Nov. 5, 1955					
17. LENGTH OF RESERVOIR 0.637 2/			MILES			AV. WIDTH OF RESERVOIR 0.040			MILES		
WATERSHED	18. TOTAL DRAINAGE AREA 1.213			SQ. MI.			22. MEAN ANNUAL PRECIPITATION 37.7			INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA 1.176(1.200)			SQ. MI.			23. MEAN ANNUAL RUNOFF 4.74 3/			INCHES	
	20. LENGTH 1.799		MILES		AV. WIDTH 0.674		MILES		24. MEAN ANNUAL RUNOFF 306.52 3/		
	21. MAX. ELEV. 1030		MIN. ELEV. 921.8		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.			
	Nov. 1955	-	-	Range	17	24.0(8.15)	184(39.6)	152(33)			
	Oct. 1958	2.92	2.92	"	"	" "	181(37.1)	149(31)			
	Oct. 1959	1.00	3.92	"	"	" "	179(34.8)	148(29)			
	Jan. 1961 4/	1.25	5.17	-	-	" "	179(34.8)	148(29)			
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW ACRE- FEET			36. WATER INFL. TO DATE AC-FT.				
	Cal. Year			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	d. MEAN ANNUAL	e. TOTAL TO DATE			
	1956	8.41 5/									
	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	d. TOTAL TO DATE	e. AV. ANNUAL	f. PER SQ. MI.-YEAR					
Oct. 1958	2.64(2.59)	0.91(0.89)	0.77(0.74)	2.64(2.59)	0.91(0.89)	0.77(0.74)					
Oct. 1959	2.38(2.21)	2.38(2.21)	2.02(1.85)	5.02(4.80)	1.28(1.22)	1.09(1.02)					
Jan. 1961 4/	0 (0)	0 (0)	0 (0)	5.02(4.80)	0.97(0.93)	0.82(0.78)					
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	c. PERIOD	d. TOT. TO DATE				
Oct. 1958	66.0 6/	1.1(1.1)	1.1(1.1)	0.5(2.3)	1.4(7)						
Oct. 1959	66.0	2.9(2.7)	1.6(1.5)	0.7(3.1)	2.7(12)						
Jan. 1961 4/	66.0	0 (0)	1.2(1.1)	0.5(2.4)	2.7(12)						

(Thousand Tons)

26. DATE OF SURVEY Nov. 1955	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	98%		2%									
Oct. 1959	96%		4%									
Jan. 1961 ^{4/}	96%		4%									

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															
Oct. 1958	42	32	9	6	5	5	<u>7/</u>	0	0	0					
Oct. 1959	37	28	15	10	5	4	0	1	0	0					
Jan. 1961 ^{4/}	37	28	15	10	5	4	0	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 0.305 miles of principal arm not included.

3/ Water years 1952-53 thru 1958-59 at gage 0.89 miles downstream.

4/ Surveys indicated no sediment deposited since 1959 survey.

5/ Amount partially estimated.

6/ Average of two samples taken in 1959.

7/ Principal spillway elevation (936.0) ends at 68% of total length.

48. AGENCY SUPPLYING DATA Soil Conservation Service

49. DATE Feb. 16, 1961