

RESERVOIR SEDIMENTATION
DATA SUMMARY

Honey Creek No. E-1
NAME OF RESERVOIR

31-27

DATA SHEET NO.

DAM	1. OWNER On the Road			2. RIVER Trib. of Honey Cr.			3. STATE Iowa					
	4. SEC. 3-10 TWP. 71N RANGE 20W			5. NEAREST TOWN Russell			6. COUNTY Lucas					
	7. STREAM BED ELEV. 951.0			8. TOP OF DAM ELEV. 978.0			9. SPILLWAY CREST ELEV. 978.0					
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	978.0	11.077	113.093	142.197	July 18, 1955						
	b. POWER											
	c. WATER SUPPLY											
	d. IRRIGATION					16. DATE NORMAL OPER. BEGAN						
	e. CONSERVATION					July 18, 1955						
	f. INACTIVE 1/	968.0	5.376	29.104	29.104							
17. LENGTH OF RESERVOIR 0.431 2/			MILES			AV. WIDTH OF RESERVOIR 0.060			MILES			
WATERSHED	18. TOTAL DRAINAGE AREA 0.478			SQ. MI.			22. MEAN ANNUAL PRECIPITATION 31.7			INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA 0.452 (0.470)			SQ. MI.			23. MEAN ANNUAL RUNOFF 4.74 3/			INCHES		
	20. LENGTH 0.900			MILES			AV. WIDTH 0.531			MILES		
	24. MEAN ANNUAL RUNOFF 120.87 3/									AC.-FT.		
	21. MAX. ELEV. 1,024			MIN. ELEV. 951.0			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 1955	-	-	Range	8	16.5 (5.38)	142 (29.1)	297 (61)				
	June 1958	2.92	2.92	"	"	" "	140 (27.3)	294 (57)				
	Sept. 1959	1.25	4.17	"	"	" "	138 (25.7)	291 (54)				
	Jan. 1961 4/	1.33	5.50	-	-	" "	138 (25.7)	291 (54)				
	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						
	Cal. Year											
	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	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR						
June 1958	1.78 (1.78)	0.61 (0.61)	1.35 (1.30)	1.78 (1.78)	0.61 (0.61)	1.35 (1.30)						
Sept. 1959	1.48 (1.61)	1.18 (1.29)	2.61 (2.74)	3.26 (3.39)	0.78 (0.81)	1.73 (1.72)						
Jan. 1961 4/	0 (0)	0 (0)	0 (0)	3.26 (3.39)	0.59 (0.62)	1.31 (1.32)						
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					
June 1958 6/	66.0 6/	1.9 (1.9)	1.9 (1.9)	0.4 (2.1)	1.3 (6)							
Sept. 1958	66.0	3.8 (3.9)	2.5 (2.5)	0.6 (2.8)	2.3 (12)							
Jan. 1961 4/	66.0	0 (0)	1.9 (1.9)	0.4 (2.1)	2.3 (12)							

(Thousand Tons)

26. DATE OF SURVEY July 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														
June 1958	100%					0								
Sept. 1959	7/7													
Jan. 1961 <u>4/</u>	7/7													

26. DATE OF SURVEY July 1955	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															
June 1958						8/2	0	0	0	0					
Sept. 1959	27	21	22	18	10	5	0	0	0	0					
Jan. 1961 <u>4/</u>	34	23	21	17	5	0	0	0	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 refer to amounts in the inactive pool only (except item 39). 8/ Principal spillway elevation (968.0)

1/ Storage used for sediment pool. ends at 56% of total length.

2/ Additional 0.080 miles of principal arm not included.

3/ Water years 1952-53 thru 1958-59 at gage 4.25 miles downstream.

4/ Surveys indicated no sediment deposited since 1959 survey.

5/ Amount partially estimated.

6/ Average of two samples taken in 1959.

7/ More sediment below principal than total because of scouring above principal.

48. AGENCY SUPPLYING DATA Soil Conservation Service

49. DATE Feb. 16, 1961