

RESERVOIR SEDIMENT DATA SUMMARY

Wapello

25-24

NAME OF RESERVOIR

DATA SHEET NO.

DAM	1. OWNER Iowa Conserv. Comm.		2. STREAM Pee Dee Creek		3. STATE Iowa			
	4. SEC. 34 TWP. 70N RANGE 15W		5. NEAREST P.O. Drakesville		6. COUNTY Davis			
	7. LAT. 40° 49' " LONG. 92° 35' "		8. TOP OF DAM ELEVATION 792.0		9. SPILLWAY CREST ELEV. 782.4			
RESERVOIR	10. STORAGE ALLOCATION	11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-Feet	14. GROSS STORAGE, ACRE-Feet	15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL					1936		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION							
	f. CONSERVATION	782.4	285	4,315	4,315	1936		
g. INACTIVE								
WATERSHED	17. LENGTH OF RESERVOIR 2.7 2/ MILES		AV. WIDTH OF RESERVOIR 0.16 MILES					
	18. TOTAL DRAINAGE AREA 7.80 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 34.26 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 7.35 SQ. MI.		23. MEAN ANNUAL RUNOFF 6.9 INCHES					
	20. LENGTH 4.4 MILES AV. WIDTH 1.8 MILES		24. MEAN ANNUAL RUNOFF 2,870 AC.-FT.					
	21. MAX. ELEV. 946 MIN. ELEV. 742		25. ANNUAL TEMP.: MEAN 50.9 RANGE 22.9-74.1					
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/I. RATIO, AC.-FT. PER AC.-FT.
	1937	0	0	Range (D)	29	285	4,315	1.50
	1951	14	14	Range (D)	29	285	4,117	1.43
	1971	20	34	Range (D)	29	285	3,928	1.37
	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		
	1951	34.3						
	1971	34.3						
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, 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	
1951	198	14.14	1.92	198	14.14	1.92		
1971	189	9.45	1.29	387	11.38	1.55		
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. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
1951	32.5 1/	1,361	1,361	0.33	4.59			
1971	32.5 1/	910	1,097	0.26	8.97			

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, 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

Mitchem, P. Stan, Sedimentation of Lake Wapello, Davis County, Iowa, Soil Conservation Service, May, 1980.

Land Use: 6% cropland, 56% pastureland, 36% woodland, 2% other.

1/ Nine samples taken in February, 1980. 58% clay, 40% silt, 2% sand.

2/ Two principal tributaries--250 feet, 3000 feet.

48. AGENCY MAKING SURVEY Iowa Conservation Commission
 49. AGENCY SUPPLYING DATA Soil Conservation Service
 50. DATE 5/80