

RESERVOIR SEDIMENTATION
DATA SUMMARY

Doniphan County Old Desilting Basin

NAME OF RESERVOIR

31-5

DATA SHEET NO.

DAM	1. OWNER Doniphan Co. Drainage Dist.		2. RIVER Chase Creek		3. STATE Kansas				
	4. SEC. 24 TWP. 2S RANGE 21E		5. NEAREST TOWN Blair		6. COUNTY Doniphan				
	7. STREAM BED ELEV.		8. TOP OF DAM ELEV.		9. SPILLWAY CREST ELEV.				
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					June 1920			
	b. POWER								
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN			
	d. IRRIGATION								
	e. CONSERVATION		26.6	159.2	159.2	June 1920			
	f. INACTIVE								
17. LENGTH OF RESERVOIR			MILES	AV. WIDTH OF RESERVOIR		MILES			
WATERSHED	18. TOTAL DRAINAGE AREA		1.62	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		33.14 (45) INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		1.58	SQ. MI.	23. MEAN ANNUAL RUNOFF		5.7* INCHES		
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF	AC.- FT.	
	21. MAX. ELEV.		MIN. ELEV.		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.
1920		-	-	-	-	26.6	159.2	98.3	
June 1937		10.0 1/	10.0	Topo- graphic Detailed	1 foot	-	23.6	14.6	
SURVEY DATA	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW			36. WATER INFL. TO DATE	
					a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE
					(inches)			(inches)	
	June 1937				6.2*			6.2*	
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 1937		135.6	13.56	8.58	135.6	13.56	8.58		
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	a. PERIOD	b. TOT. TO DATE
June 1937		84.4 (4)		15,770	15,770	8.52	85.2	34,240 2/	34,240 2/

* Estimated

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															
1. Gottschalk, L.C., and Brune, G.M. Sediment design criteria for the Missouri Basin Loess Hills. U.S. Soil Conserv. Serv. SCS-TP-97, 21 pp., illus., processed. Milwaukee, Wisconsin, 1950.															
2. Brown, C.B. Protecting bottomlands from erosional debris: A case history. Soil Conservation 3(4):93-96, October 1937.															
1/ Water diverted from basin after June 1930. 2/ 42 = $\frac{37b \times 39 \times 1,000,000}{35a \times 18 \times \frac{640 \times 62.4}{12}}$															
48. AGENCY SUPPLYING DATA <u>Region 5, Soil Conservation Service</u> 49. DATE <u>July 25, 1950</u>															
U. S. Dept. of Agriculture, Lincoln, Nebraska															