

RESERVOIR SEDIMENTATION  
DATA SUMMARY

Elkins Stock Pond No. 2  
NAME OF RESERVOIR

37 - 2

DATA SHEET NO.

DAM	1. OWNER Milt Elkins			2. RIVER Br. of Frozenman Cr.		3. STATE South Dakota				
	4. SEC. 21 TWP. 6N RANGE 26E			5. NEAREST TOWN Hayes		6. COUNTY Stanley				
	7. STREAM BED ELEV. 0*			8. TOP OF DAM ELEV. 11*		9. SPILLWAY CREST ELEV. 6*				
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					May 1911				
	b. POWER									
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION	6	1.41	4.34	4.34					
	f. INACTIVE					May 1911				
17. LENGTH OF RESERVOIR				MILES	AV. WIDTH OF RESERVOIR				MILES	
WATERSHED	18. TOTAL DRAINAGE AREA		0.33	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		16.99	INCHES		
	19. NET SEDIMENT CONTRIBUTING AREA		0.33	SQ. MI.	23. MEAN ANNUAL RUNOFF			INCHES		
	20. LENGTH		MILES	AV. WIDTH		MILES	24. MEAN ANNUAL RUNOFF		AC.-FT.	
	21. MAX. ELEV.		MIN. ELEV.		25. CLIMATIC CLASSIFICATION				Semi-arid	
	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.	
May 1911		-	-	-	-	1.41	4.34	13.2		
June 1937		26.0	26.0	Contour detailed	1 ft.	1.26	3.18	9.64		
SURVEY DATA	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	
	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		1.16	0.045	0.136	1.16	0.045	0.136		
	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		36.6 (4)	108	108	1.03	26.73			

\* Assumed

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

Connaughton, Mark P. Advance report on the sedimentation survey of Hayes Lake, Hayes, South Dakota. U. S. Soil Conservation Service. SCS-SS-20, 28 pp., illus., processed. Washington, D. C. July 1938.

0.66 acre foot of sediment deposited is result of one storm in June 1937.

Region 5, Soil Conservation Service  
U. S. Dept. of Agriculture  
Lincoln, Nebraska

48. AGENCY SUPPLYING DATA

49. DATE July 12, 1951