

RESERVOIR SEDIMENT DATA SUMMARY

SCS-34 Rev. 6-62

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Elkins Stock Pond No. 1
NAME OF RESERVOIR

37-1 a
DATA SHEET NO.

DAM	1. OWNER Milt Elkins			2. STREAM 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 ELEVATION 0*			8. TOP OF DAM ELEVATION 16*			9. SPILLWAY CREST ELEV. 10*					
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. MULTIPLE USE										May 1907	
	b. FLOOD CONTROL											
	c. POWER											
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION		10		4.33		18.61		18.61		May 1907	
	g. SEDIMENT											
h. INACTIVE												
WATERSHED	17. LENGTH OF RESERVOIR 0.13 MILES				AV. WIDTH OF RESERVOIR 0.052 MILES							
	18. TOTAL DRAINAGE AREA 0.58 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 16.99 INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA 0.57 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							
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.			
	May 1907		-	-	-	-	4.33	18.61	32.1			
	June 1937		30.0	30.0	Contour Detailed	1 ft.	4.28	15.78	27.2			
	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		2.83	0.094	0.16	2.83	0.094	0.16				
	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. AN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE				
June 1937		41.3(4)	144	144	0.51	15.21						

*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 Conserv. Serv., SCS-SS-20., 28 pp., illus., processed. Washington, D. C., July, 1938.

0.63 acre-foot of sediment deposited during flash flood of June 1937.

Region 5, Soil Conservation Service

48. AGENCY MAKING SURVEY U. S. Department of Agriculture

49. AGENCY SUPPLYING DATA Lincoln, Nebraska

50. DATE July 12, 1951