

RESERVOIR SEDIMENTATION
DATA SUMMARY

Barnard Farm Reservoir
NAME OF RESERVOIR

32-5
DATA SHEET NO.

DAM	1. OWNER <u>S. W. Barnard</u>			2. RIVER <u>Indian Creek</u>			3. STATE <u>Nebraska</u>			
	4. SEC. <u>3</u> TWP. <u>4N</u> RANGE <u>6E</u>			5. NEAREST TOWN <u>Beatrice</u>			6. COUNTY <u>Gage</u>			
	7. STREAM BED ELEV. <u>1311.2</u>			8. TOP OF DAM ELEV.			9. SPILLWAY CREST ELEV. <u>1324.5</u>			
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					Aug. 1947				
	b. POWER									
	c. WATER SUPPLY					16. DATE NORMAL OPER. BEGAN				
	d. IRRIGATION									
	e. CONSERVATION	<u>1324.5</u>	<u>7.08</u>	<u>30.5</u>	<u>30.5</u>	Aug. 1947				
	f. INACTIVE									
WATERSHED	17. LENGTH OF RESERVOIR <u>0.276</u> MILES			AV. WIDTH OF RESERVOIR <u>.013</u> MILES						
	18. TOTAL DRAINAGE AREA (<u>432 Ac</u>) <u>0.675</u> SQ. MI.			22. MEAN ANNUAL PRECIPITATION <u>27.80</u> INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA <u>.661</u> SQ. MI.			23. MEAN ANNUAL RUNOFF INCHES						
	20. LENGTH MILES AV. WIDTH MILES			24. MEAN ANNUAL RUNOFF AC.-FT.						
	21. MAX. ELEV. MIN. ELEV. <u>1311.2</u>			25. CLIMATIC CLASSIFICATION						
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.		
	<u>Aug. '47</u>	<u>0</u>	<u>0</u>	<u>-</u>	<u>-</u>	<u>7.08</u>	<u>30.5</u>	<u>45.2</u>		
	<u>May '56</u>	<u>8.75</u>	<u>8.75</u>	<u>Range Detailed</u>	<u>7</u>	<u>7.08</u>	<u>22.22</u>	<u>32.9</u>		
	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			
	<u>May '56</u>	<u>8.27</u>	<u>.945</u>	<u>1.400</u>	<u>8.27</u>	<u>.945</u>	<u>1.400</u>			
		<u>.5639 1/</u>	<u>.064</u>	<u>0.095</u>	<u>.5639</u>	<u>.064</u>	<u>0.095</u>			
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			
<u>May, 1956</u>	<u>65 2/</u>	<u>1982</u>	<u>1982</u>	<u>3.1</u>	<u>27.1.</u>					
		<u>135 1/</u>	<u>135</u>							

1/ Above crest deposit 2/ Assumed av. dry weight

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

48. AGENCY SUPPLYING DATA Soil Conservation Service 49. DATE May, 1956