

RESERVOIR SEDIMENT DATA SUMMARY

Big Wyacondah 27-1
NAME OF RESERVOIR

25- 22

DATA SHEET NO.

DAM	1. OWNER <u>L. A. Shelton</u>			2. STREAM <u>Little Wyacondah R</u>			3. STATE <u>Iowa</u>					
	4. SEC. <u>8</u> TWP. <u>68N</u> RANGE <u>14W</u>			5. NEAREST P. O. <u>Bloomfield 4 1/2 SW</u>			6. COUNTY <u>Davis</u>					
	7. LAT. <u>40° 42' 10"</u> LONG. <u>92° 29' 10"</u>			8. TOP OF DAM ELEVATION <u>897.5</u>			9. SPILLWAY CREST ELEV <u>894.8</u>					
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		<u>894.8</u>		<u>31.4</u>		<u>198.2</u>		<u>266.5</u>		<u>August 66</u>	
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY											
	e. IRRIGATION										16. DATE NORMAL OPER. BEGAN	
	f. CONSERVATION											
g. INACTIVE		<u>885.8</u>		<u>12.1</u>		<u>68.3</u>		<u>68.3</u>		<u>August 66</u>		
WATERSHED	17. LENGTH OF RESERVOIR <u>0.84 1/2</u> MILES				AV. WIDTH OF RESERVOIR <u>0.06</u> MILES							
	18. TOTAL DRAINAGE AREA <u>1.03</u> SQ. MI.				22. MEAN ANNUAL PRECIPITATION <u>34.26</u> INCHES							
	19. NET SEDIMENT CONTRIBUTING AREA <u>0.98</u> SQ. MI.				23. MEAN ANNUAL RUNOFF <u>6.7</u> INCHES							
	20. LENGTH <u>1.44</u> MILES		AV. WIDTH <u>0.72</u> MILES		24. MEAN ANNUAL RUNOFF <u>368</u> AC.-FT.							
	21. MAX. ELEV. <u>924</u>		MIN. ELEV. <u>870.2</u>		25. ANNUAL TEMP.: MEAN <u>50.9</u> RANGE <u>12 to 870 F.</u>							
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.	
	<u>Aug. 1966</u>		<u>-</u>	<u>-</u>		<u>-</u>	<u>12.1 2/</u> <u>31.4 3/</u>		<u>68.3 2/</u> <u>266.5 3/</u>		<u>0.19 2/</u> <u>0.72 3/</u>	
	<u>Aug. 1976</u>		<u>10</u>	<u>10</u>	<u>Range (D)</u>	<u>11</u>	<u>12.1 2/</u> <u>31.4 3/</u>		<u>52.6 2/</u> <u>248.2 3/</u>		<u>0.14 2/</u> <u>0.67 3/</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		
	<u>Aug. 1976</u>		<u>39.85</u>									
	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		
	<u>Aug. 1976</u>		<u>15.7 2/</u> <u>18.3 3/</u>	<u>1.57 2/</u> <u>1.83 3/</u>	<u>1.60 2/</u> <u>1.87 3/</u>	<u>15.7 2/</u> <u>18.3 3/</u>		<u>1.57 2/</u> <u>1.83 3/</u>		<u>1.60 2/</u> <u>1.87 3/</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. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE				
<u>Aug. 1976</u>		<u>56.2</u>	<u>1900 2/</u> <u>2283 3/</u>	<u>1900 2/</u> <u>2283 3/</u>	<u>2.30 2/</u> <u>0.69 3/</u>	<u>23.0 2/</u> <u>6.9 3/</u>						

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
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														
<p>1/ Includes 0.26 miles of principal arm.</p> <p>2/ Inactive pool only.</p> <p>3/ Total reservoir below emergency spillway elevation (894.8')</p>														
48. AGENCY MAKING SURVEY					Soil Conservation Service					50. DATE June 1979				
49. AGENCY SUPPLYING DATA					Soil Conservation Service									

FIGURE 2

SCS-ENG-34
REV. 12-71

RESERVOIR SEDIMENT DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Big Wyacondah 27-1
NAME OF RESERVOIR

25-22a
DATA SHEET NO.

DAM	1. OWNER L. A. Shelton			2. STREAM Little Wyacondah R.			3. STATE Iowa									
	4. SEC. 8 TWP. 68N RANGE 14W			5. NEAREST P.O. Bloomfield 4 SW			6. COUNTY Davis									
	7. LAT. 40° 42' 10" LONG. 92° 29' 10"			8. TOP OF DAM ELEVATION 897.5			9. SPILLWAY CREST ELEV. 894.8									
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		894.8		31.4		198.2		266.5		August 66					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION										August 66					
g. INACTIVE		885.8		12.1		68.3		68.3								
WATERSHED	17. LENGTH OF RESERVOIR 0.84 1/ MILES				AV. WIDTH OF RESERVOIR 0.06 MILES											
	18. TOTAL DRAINAGE AREA 1.03 SQ. MI.				22. MEAN ANNUAL PRECIPITATION 34.26 INCHES											
	19. NET SEDIMENT CONTRIBUTING AREA 0.98 SQ. MI.				23. MEAN ANNUAL RUNOFF 6.7 INCHES											
	20. LENGTH 1.44 MILES		AV. WIDTH 0.72 MILES		24. MEAN ANNUAL RUNOFF 368 AC.-FT.											
	21. MAX. ELEV. 924		MIN. ELEV. 870.2		25. ANNUAL TEMP: MEAN 50.9 RANGE 12 to 87 F.											
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, ACF		32. CAPACITY, ACRE-FEET		33. C/I. RATIO, AC.-FT. PER AC.-FT.	
	Aug. 1966		-		-				-		12.1 2/ 31.4 3/		68.3 2/ 266.5 3/		0.72	
	Aug. 1976		10		10		Range (D)		11		12.1 2/ 31.4 3/		52.6 2/ 248.2 3/		0.67	
	Jan. 1985		8.4		18.4		Range (D)		11		12.1 2/ 31.4 3/		45.7 2/ 239.7 3/		0.65	
	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			
	Aug. 1976		39.85													
	Jan. 1985		42.19													
	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			
	Aug. 1976		15.7 2/ 18.3 3/		1.57 2/ 1.83 3/		1.60 2/ 1.87 3/		15.7 2/ 18.3 3/		1.57 2/ 1.83 3/		1.60 2/ 1.87 3/			
	Jan. 1985		21.9 2/ 27.9 3/		1.16 2/ 1.47 3/		1.18 2/ 1.50 3/		21.9 2/ 27.9 3/		1.15 2/ 1.47 3/		1.18 2/ 1.50 3/			
	26. DATE OF SURVEY		39. AV. DRY WGT., LBS. PER CU. FT.		40. SED. DEP., TONS PERSQ. 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	
	Aug. 1976		56.2		1958 2/ 2289 3/		1958 2/ 2289 3/		2.30 2/ 0.69 3/		23.0 2/ 6.9 3/					
Jan. 1985		52.4		701 2/ 1151 3/		1347 2/ 1712 3/		1.68 2/ 0.55 3/		32.2 2/ 10.5 3/						

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION													
	Inactive	F. C. Pool												
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
Aug. 1976	86	14												
Jan. 1985	78	22												

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/ Includes 0.26 miles of principal arm.

2/ Inactive pool only.

3/ Total reservoir below emergency spillway elevation (894.8')

48. AGENCY MAKING SURVEY Soil Conservation Service

49. AGENCY SUPPLYING DATA Soil Conservation Service

50. DATE August 1985