

SECTION 319 NONPOINT SOURCE POLLUTION CONTROL PROGRAM
WATERSHED PROJECT FINAL REPORT

JONES LAKE/ ROSE HILL LAKE
WATERSHED IMPLEMENTATION PROJECT

Prepared by

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Central Plains Water Development District

For

Hand County Conservation District
Project Sponsor

This project was conducted in cooperation with the state of South Dakota and the United States Environmental Protection Agency, Region 8.

Grant # C9-9998185-02

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EXECUTIVE SUMMARY

PROJECT TITLE: JONES LAKE/ ROSE HILL LAKE WATERSHED IMPLEMENTATION PROJECT

SECTION GRANT NUMBER(S) C9-99818502-0

PROJECT START DATE 5/3/2003

PROJECT COMPLETION DATE 11/23/2005

FUNDING:	TOTAL BUDGET	463,695.00
	TOTAL EPA GRANT(S)	210,955.00
	TOTAL EXPENDITURES OF EPA FUNDS	12,564.00
	TOTAL SECTION 319 MATCH ACCRUED	35,393.38
	TOTAL EXPENDITURES	67,966.00

The project goal was “improve the water quality of Sand Creek and Rose Hill Lake by at least a 20 percent reduction in the total phosphorous loading and a 9 percent reduction in the total nitrogen loading to the lake. Improve the water quality of Turtle Creek and Jones Lake by at least a 2-3 percent reduction in the total phosphorous loading to the lake. Implement practices that would maintain the improved water quality and support of the beneficial uses of semi permanent and permanent fish life propagation, immersion and limited-contact recreation, wildlife propagation, and stock watering”.

During the project, several producers inquired about participation in the project. However, most of the practices for which producers expressed interest did not fit within the scope of the project work plan. Many producers installed grazing management related practices using the Farm Service Agency’s Emergency Conservation Program (ECP). The alternative water sources for livestock installed using the EC program improved pasture/range management and resulted in attaining 1.24 percent of the project goal for the Jones Lake Watershed and 0.34 percent of the goal for the Rose Hill Lake Watershed. The load reductions achieved are summarized in Table 1.

Table 1. Jones Lake/ Rose Hill Lake Load Reduction Summary Table.

Load Reduction by Parameter	Watershed	
	Jones Lake	Rose Hill Lake
Metric Tons/yr Soil Erosion	139	68
Phosphorus (P)		
Kg/yr Reduction Goal Required	282	506
Kg/yr Reduced	3.5	1.7
Kg/ from AFOs	0	0
Percent of TMDL Attained	1.24	0.34
Percent Reduction	0.04	0.07
Nitrogen		
Kg/yr Goal Required		1,843
Kg/yr Reduced		45.59
Percent of TMDL Attained		2.47
Percent Reduction		0.2

PROJECT SUMMARY

During spring 2000, a watershed assessment was initiated to identify the sources of nonpoint source pollution and develop feasible restoration alternatives for the Jones Lake and Rose Hill Lake Watersheds (Figures 1 and 2). To conduct the assessment, several monitoring sites were established throughout the watersheds. Water quality data and flow measurements for the tributaries were collected and recorded through spring 2001. Water quality samples were also collected from the lakes. During 2002, the final reports were completed and made available to the public.

The major goals of the Jones Lake/Rose Hill Lake Watershed Improvement Project were to improve the water quality in Sand Creek upstream and including Rose Hill Lake as well as the water quality in Turtle Creek upstream and including Jones Lake. Improvement of these waterbodies would improve the overall water quality in the James River Basin.

Jones Lake and Rose Hill Lake are listed on the state's 303(d) list for high and increasing trophic states. Using AGNPS Modeling of the watersheds, restoration alternatives were developed. By implementing the proposed best management practices (BMP), phosphorus loads to Rose Hill Lake would be reduced by 20 percent and nitrogen loads by 9 percent, to attain the TMDL goal. The Jones Lake watershed was expected to result in 2 percent to 3 percent reductions in the phosphorus load to the lake. The Lake shore restoration activities recommended were also selected to improve water quality and advanced efforts to reach the TMDL. Seventy-four percent of the project budget was designated for improvements in the Rose Hill watershed; the remaining 26 percent for Jones Lake. Additional goals included maintaining the improved water quality and the lakes' designated beneficial uses. (See page 6 for the Objective/Tasks Accomplishments)

The population in the project area is principally supported by agriculture. Most of the land is used for grazing and raising crops. Some of the cropland serves as feeding areas for cattle during the winter. The topography of the watersheds is composed of flat land with some low hills and stream channels. The normal annual precipitation for this area is 18.6 inches, most of which is received between the months of April and September. Severe thunderstorms occasionally occur creating heavy rainfall events.

During 2004, a survey (Appendix A) was sent to all landowners residing in the Jones Lake and Rose Hill Lake watersheds. The mailing included a letter that briefly explained the project and requested the recipients return the survey with their response to three questions.

Twenty-two of the fifty-four surveys mailed were returned with comments. Ten of the landowners responded that they raise cattle and are interested the practices available. Most of the individuals that expressed interest in nutrient management have land in one of the two watersheds, but their feedlots are not. The same can be said of those interested in lakeshore stabilization, only that the landowner may have mistaken the BMP for a form of water development, as alternative water sources for cattle was listed as an example of lakeshore stabilization. Three of the respondents that reported raising cattle expressed no interest in the practices offered by the project.

Nine of the surveys returned were not complete or the individual marked "no" to currently raising livestock. The returned surveys that were not complete did have comments that indicated that the land being sold, rented out, or being passed down to relatives.

In the survey responses, some individuals commented they are reducing their herd size because of lack of water, grass or a combination of the two brought on by the recent dry years. One of the individuals that decreased his herd was the owner of a feedlot identified for assistance through this project by the Agriculture Non Point Source (AGNPS) model. Even though the producer did not install a nutrient management system, the NPS pollution reduction realized from the decrease in herd size was included in load reduction calculations for the project. The responses to the survey are summarized in Table 2.

Table 2. Watershed Project Interest Survey

Surveys Returned	Survey Returned But No Response	Jones Lake Watershed	Rose Hill Lake Watershed	Currently Raising Livestock		Herd Size Compared to 2001 Herd Size			Interest in Practices Available			
				YES	NO	INCREASED	SAME	DECREASED	PLANNED GRAZING	GRASSED WATERWAYS	NUTRIENT MANAGEMENT	LAKESHORE STABILIZATION
1		X		X			X				X	
2		X		X				X			X	
3		X		X			X				X	
4		X		X				X				X
5		X			X							
6	X	X										
7		X			X							
8	X	X										
9		X			X							
10		X		X				X				
11		X		X			X					
12		X		X			X					X
13			X	X				X				
14			X	X				X	X	X	X	X
15			X	X		X			X		X	X
16			X	X				X			X	
17			X	X				X				
18			X		X							
19	X		X									
20	X		X									
21			X	X								X
22			X		X							
TOTAL	4	12	10	13	5	1	4	7	2	1	6	5

Project Location

Jones Lake is a 100.5 acre (40.7 ha) man-made impoundment located in central Hand County, South Dakota. A Dam constructed across Turtle Creek 3 miles south of the town of St Lawrence created the lake. The lake has a maximum depth of 16 feet (4.9 m) an average depth of 7.5 feet (2.3 meters), 2.1 miles (3.4 km) of shoreline, and holds 752 acre-feet of water. Jones Lake is subject to periods of stratification during the summer. The lake outlet empties into Turtle Creek. Turtle Creek eventually reaches the James River south of the town of Redfield located in Spink County, South Dakota.

The Jones Lake watershed comprises a small portion of the Turtle Creek hydrologic unit, which has a priority rank of 18 in the South Dakota Unified Watershed Assessment.

Jones Lake Watershed

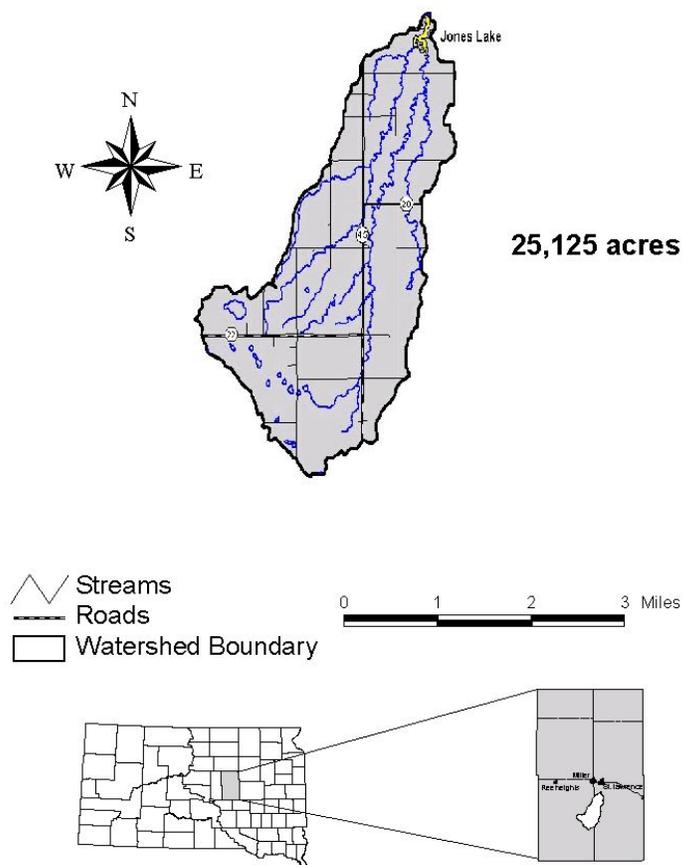


Figure 1. Jones Lake Watershed Map.

Rose Hill Lake is a 33.8 acre (13.7 ha) man-made impoundment located in southern Hand County, South Dakota (Figure 2). A dam constructed across Sand Creek 10 miles south of the town of Wessington created the lake. The lake has a maximum depth of 26 feet (7.9 m), an average depth of 9.3 feet (2.8 meters), 2.1 miles (3.4 km) of shoreline, and holds 470 acre-feet of water. Rose Hill Lake is subject to periods of stratification during the summer. The outlet for the lake empties into Sand Creek, which eventually reaches the James River southeast of the town of Woonsocket in Sanborn County, South Dakota.

The Rose Hill Lake watershed comprises a small portion of the Middle James hydrologic unit. When the 54 hydrologic units in the state were prioritized, the Middle James was given a priority ranking of 25 in the South Dakota Unified Watershed Assessment.

Rosehill Watershed

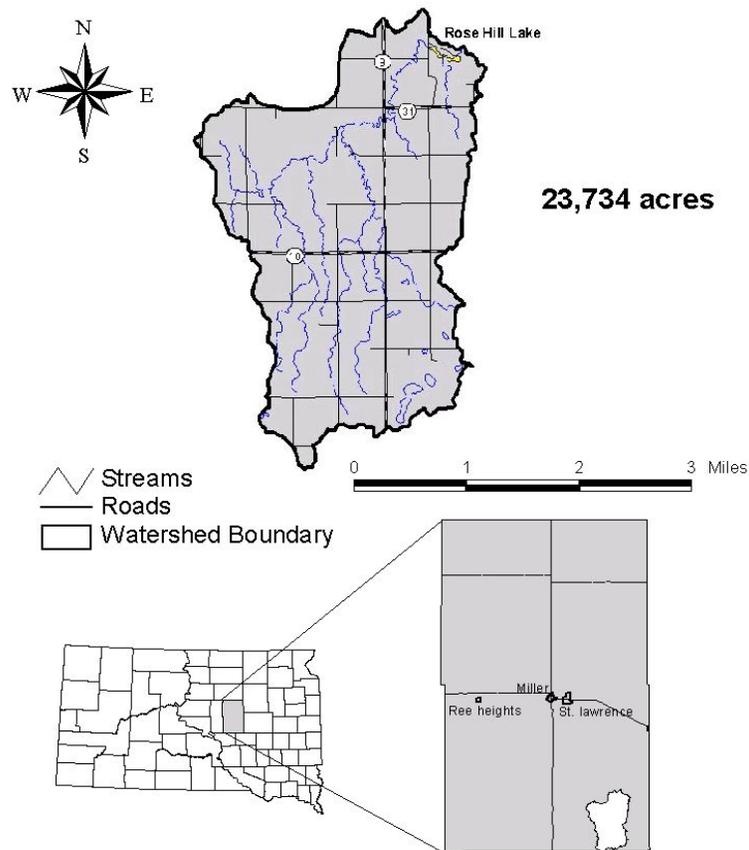


Figure 2. Rose Hill Lake Watershed Map.

PROJECT GOALS, OBJECTIVES AND ACTIVITIES

The goal of the project is to “improve the water quality of Sand Creek and Rose Hill Lake by at least a 20 percent reduction in the total phosphorous loading and a 9 percent reduction in the total nitrogen loading to the lake. Improve the water quality of Turtle Creek and Jones Lake by at least a 2-3 percent reduction in the total phosphorous loading to the lake. Implement practices that would maintain the improved water quality and support of the beneficial uses of semi permanent and permanent fish life propagation, immersion and limited-contact recreation, wildlife propagation, and stock watering”.

A summary of the BMPs installed during the project appears in Table 3. The table includes a comparison of the BMPs planned versus installed and the load reductions realized from the installation.

Objective 1: Establish Best Management Practices (BMPs) and other practices that will advance efforts to reach the goals of the project.

Task 1: The Project Coordinator will document all project activities and report to local organizations where the information is important (Conservation Board meetings, Water Development District meetings, Local Producer Workshops). Other activities to be documented would include, but are not limited to: landowner/operator contacts, development/ follow-up of contracts, workshop and tour attendance, media and news releases and installation of BMPs. Contracts and conservation plans will be developed by the Project Coordinator with assistance from the SD DENR and NRCS. All information and activities collected during the project will be compiled in a final report.

Task 2: Implement planned grazing systems over 5,300 acres over a period of three years in the Sand Creek Watershed. Systems will include cross fencing (7 miles @ \$.66/ ft) water development (tanks (13 @ \$1,300), pipeline (5 miles 1 ¼ PVC @ \$1.46/ ft), rural water hookups (3 @ \$1,934 each), and dam/ dugout construction, clean-out, and repair (10 @ \$2,000 each)), and incentives (\$1 per acre/ year with a 3 year maximum). Recipients of grant funds will be required to sign a maintenance agreement for the anticipated life span of the BMP. Applicants will be prioritized according to the subwatershed in which the system will be located. Priority will be given to those areas in closest proximity to riparian areas. All designs will be completed by the Grassland Management and Planning Team.

Products: The planned grazing systems will lead to improved range condition, which will reduce the amount of run-off.

Accomplishments: One producer received funds for 130 acres of planned grazing through the project. Other producers within both Jones Lake and Rose Hill watersheds received cost share funds for grazing practices through the Emergency Conservation Program (ECP), which is administered through the Farm Service Agency. Acres

installed using EC funds in the Jones Lake watershed totaled 1163; Rose Hill Lake watershed 961 acres. Total acres for both watersheds equal 2,124. The location of systems installed is shown in Figure 3.

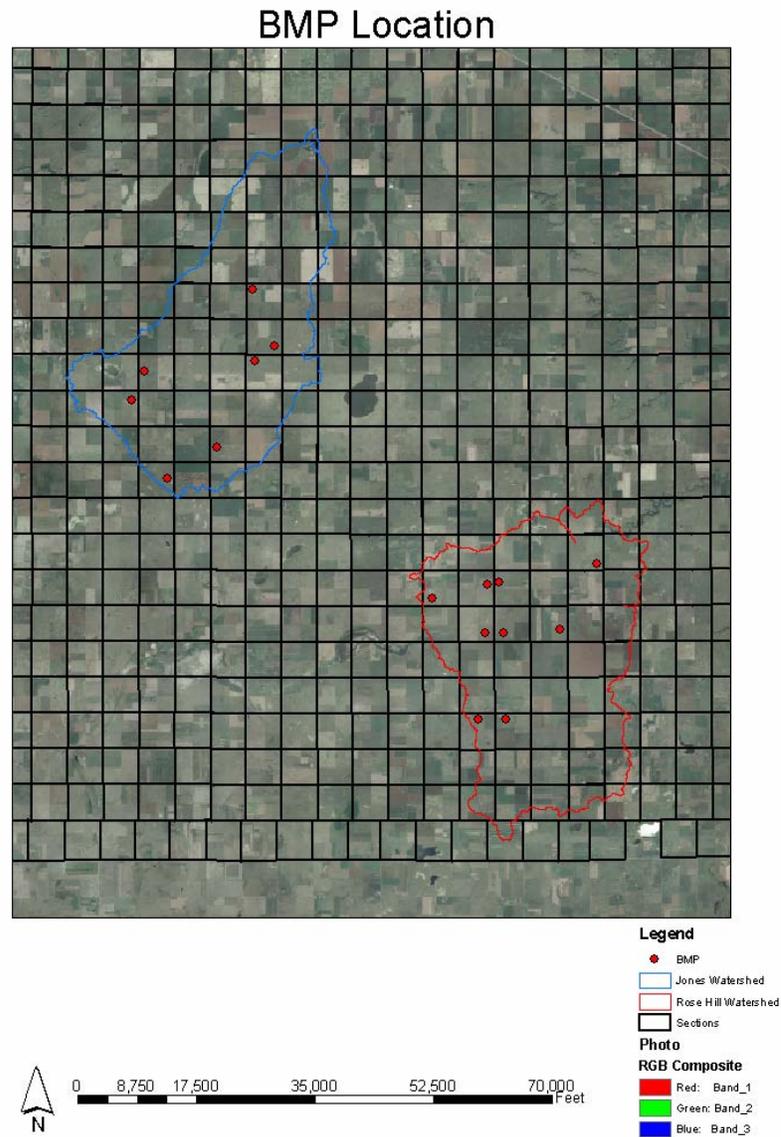


Figure 3. Location of Best Management Practices Installed.

Task 3: Implement best management practice (BMP) on 1.5 acres of cropland in the Sand Creek watershed. BMP will include grassed waterways. Recipients of grant funds will be required to sign a maintenance agreement for the anticipated life span of the BMP. Applicants will be prioritized according to the subwatershed in which the practice will be located with priority given to those systems located in close proximity to riparian areas.

Products: Cropland BMP will increase residue amounts on cropland and provide buffers leading to a decrease in run-off. Benefits will include sediment and phosphorus load reduction.

Accomplishments: There was no cropland BMPs installed during the project. Those producers that have installed grassed waterways, have done so through the Continuous Conservation Reserve Program (CCRP) so that they could receive an annual payment for the practice. These practices were installed prior to the start of the project.

Task 4: Implement best management practice (BMP) on 1.5 acres of cropland in the Turtle Creek watershed. BMP will include grassed waterways. Recipients of grant funds will be required to sign a maintenance agreement for the anticipated life span of the BMP. Applicants will be prioritized according to the subwatershed in which the practice will be located.

Products: Cropland BMP will increase residue amounts on cropland and provide buffers leading to a decrease in run-off. Benefits will include sediment and phosphorus reduction.

Accomplishments: There were no cropland BMPs installed during the life of the project. Those producers that have installed grassed waterways have done this through the Continuous Conservation Reserve Program (CCRP) so that they can get an annual payment for this practice. These practices were installed prior to the start of the project.

Objective 2: Develop projects and programs that will provide nutrient management throughout the watershed.

Task 5: Establish 4 agricultural waste systems in the Sand Creek watershed in the form of lagoons, diversions, and berms. The average cost for these systems will be \$35,000 each. Recipients of grant funds will be required to sign a maintenance agreement for the anticipated life span of the system. Systems will be given priority according to their ranking in the assessment final report. All designs will be completed by the Ag Waste Management Team including ag waste management plans. Any additional information, including prioritization ranking can be found in the Rose Hill Lake/ Sand Creek Watershed Assessment Final Report.

Products: The establishment of animal waste management systems will reduce the amount of nutrient rich runoff entering the tributaries and ultimately Rose Hill Lake.

Accomplishments: No agricultural waste systems were designed or installed in the Sand Creek Watershed. One of the producers identified by the AGNPS model as needing a system has retired and rents out his pasture and lots. Since the AGNPS feedlot rating was calculated, the lots have been cleaned up and are used only during calving season. Even though the lots have been cleaned, there is little

reduction in sediment and nutrient loads leaving the lot because the area lacks a vegetative cover.

Another producer contacted the Natural Resource Conservation Service (NRCS) and the Watershed Coordinator several times about having a system installed. He and the NRCS engineers were unable to design a convenient, cost effective system.

Task 6: Establish 2 agricultural waste systems in the Turtle Creek watershed in the form of lagoons, diversions, and berms. The average cost for these systems will be \$35,000 each. Recipients of grant funds will be required to sign a maintenance agreement for the anticipated life span of the system. Systems will be given priority according to their ranking in the assessment final report. All designs will be completed by the Ag Waste Nutrient Team including ag waste management plans. Any additional information, including prioritization can be found in the Jones Lake/ Turtle Creek Watershed Assessment Final Report.

Products: The establishment of animal waste management systems will reduce the amount of nutrient rich runoff entering the tributaries and ultimately Jones Lake.

Accomplishments: No agricultural waste systems were designed or installed in the Turtle Creek Watershed. One of the individuals identified by the AGNPS model as needing a system has decreased his herd size. Using an aerial photograph of the feedlot taken during 2004, it was determined that the yards are still being used to an extent that any reduction in nutrients is minimal.

Objective 3: Repair damage to Jones Lake and Rose Hill Lake.

Task 7: Stabilize 2.8 miles of shoreline by restricting livestock access to the lake along the eastern shore of Jones Lake.

Products: Shoreline stabilization will reduce the inlake turbidity and decrease the amount of sediment leaving the lake.

Accomplishments: No shoreline stabilization was completed. A land owner by Jones Lake was contacted by phone about the possibilities of fencing cattle out the lake and establishing an alternate water source for the cattle. He was reluctant to participate in the program.

Task 8: Stabilize 2.8 miles of shoreline by restricting livestock access to the lake along the shore of Rose Hill Lake.

Products: Shoreline stabilization will reduce the inlake turbidity and decrease the amount of sediment leaving the lake.

Accomplishments: No shoreline stabilization was completed. A landowner with an operation by Rose Hill Lake was contacted by phone about the possibility of

fencing out the shoreline around his portion of the lake and installing an alternate water source for the cattle. The landowner was not interested in this practice.

Even though the surveys results indicated interest in shoreline stabilization, none of the individuals who responded actually owned or leased land next to either Jones Lake or Rose Hill Lake. Interest expressed may have been related to examples used in the survey document. One of the examples listed under shoreline stabilization was alternative water sources.

Objective 4: Maintain water quality and beneficial uses by providing information and education to the public in regard to progress and the benefits of the tasks being accomplished and by monitoring water quality so programs can be modified to ensure the aforementioned goals are accomplished.

Task 9: Publish and distribute an informational brochure explaining the problems in the Jones Lake/ Rose Hill Lake Watersheds and the plans to correct those problems. (2,000@ \$0.40 each) Produce a semi-annual newsletter updating the residents in the watershed of progress made towards the goals of the project. (6 mailings @ \$170/ mailing)

Products: A brochure that can be distributed to local individuals, high school, alumni, visitors, and any interested party with the intention of eliciting public support of the project.

Accomplishments: Two hundred copies of a brochure explaining the scope of the project, practices available for cost share and a map of the two watersheds was produced. The brochure was distributed at the local Annual Ranchers Workshop (56 people attended) and Information Show (163 people attended) that is conducted by the local NRCS, Conservation Districts and Weed Boards. (See Appendix B)

Task 10: Facilitate a yearly tour of the project in conjunction with a special local event and a final tour at the completion of the project. A total of four tours will be provided.

Products: The tour will show project progress and help to further explain not only the short-term benefits of individual tasks but also the long-term benefits of the overall project.

Accomplishments: No tours were conducted as there were no practices to showcase.

Task 11: Publish articles in the local papers (Miller and Wessington) on a semiannual basis updating project status throughout the year.

Products: These articles will provide ongoing updates of the project between the yearly tours.

Accomplishments: Two articles were printed to inform the public about this project in the Miller Press. (See Appendix C)

Task 12: Produce semi annual reports for GRTS. A final report will be written at the end of the project. Vouchers and salaries will be paid for through the project co-sponsor.

Products: Semi annual reports and a final report with a budget.

Accomplishments: Five semiannual reports for GRTS were produced during the project.

The project was able to inform some producers about the watershed project using the flyers made available at the local workshops sponsored by the SDSU Cooperative Extension, Hand County Conservation District and Hand County Natural Resources Conservation Service. Other producers learned of the benefits of installing conservation practices at the workshops even though they haven't and probably will not install practices.

That many producers will not likely install practices is felt to be related to many of the producers in the two watersheds being at an age where the cost of some practices is greater than what they can get in benefit during their lifetime. Some producers would consider beneficial management practices, but there are limiting factors such as depth to ground water or topography of the land that prevent them from achieving what they would like to have. These factors have been considered as reasons that maybe this is not a good time for an implementation project for these two watersheds, but maybe in the future a need for a similar project could be reestablished.

Table 3. Jones Lake/Rose Hill Lake Project Planned Versus Installed BMPs Comparison

TASK/RESPONSIBLE ORGANIZATIONS	OUT PUT	QUANTITY PLANNED	QUANTITY INSTALLED			LOAD REDUCTIONS JONES LAKE WATERSHED			LOAD REDUCTIONS ROSE HILL LAKE WATERSHED		
			319	OTHER	TOTAL	Soil Loss Reduced (Tons/yr)	Phosphorus Reduced (Kg/yr)	percent of TMDL Attained	Soil Loss Reduced (Tons/yr)	Phosphorus Reduced (Kg/yr)	percent of TMDL Attained
Objective 1 Implementation of BMPs	Planned Grazing Systems	5300 Acres	520 acres	1604 acres	2124 acres	153	3.5	1.24percent	75	1.7	0.34percent
	Grassed Waterways	1.5 Acres	0 Acres	0 Acres	0 Acres	0	0	0	0	0	0
	Buffer Strips	1.5 Acres	0 Acres	0 acres	0 Acres	0	0	0	0	0	0
Objective 2 Nutrient Management	Ag. Waste Systems	6 Systems	0 Systems	0 Systems	0 Systems	0	0	0	0	0	0
Objective 3 Lake Repair	Lakeshore Stabilization (fencing and supplies)	5.6 miles	0 miles	0 miles	0 miles	0	0	0	0	0	0
Objective 4 Information & Education and Maintain Water Quality	Informational Brochure	2000 brochures		200 copies of brochures	200 copies of brochures	NA	NA	NA	NA	NA	NA
	Yearly Tour	4 Tours	0 Tours		0 Tours	NA	NA	NA	NA	NA	NA
	Newspaper Articles	6 Articles		2 Articles	2 Articles	NA	NA	NA	NA	NA	NA

Monitoring/Evaluation

Project monitoring and evaluation consisted primarily of documenting project activities and BMPs installation. Water quality sampling was not included in the project work plan.

Five GRTS progress reports summarizing project progress were submitted to DENR during the project.

Drought conditions may have had a negative impact on project participation. Because of an extended period of dry weather, producers may have had fewer financial resources to pay for their share of the cost of installing practices.

During the project, several producers inquired about participation in the project. However, most of the practices for which the producers expressed interest did not fit within the scope of the project work plan. Many producers installed grazing management related practices using the Farm Service Agency's Emergency Conservation Program (ECP). The alternate water sources for livestock using the program improved pasture/range management and resulted in attaining 1.24 percent (3.5 Kg/yr) of the project goal for the Jones Lake Watershed and 0.34 percent (1.7 Kg/yr) of the goal for the Rose Hill Lake Watershed. These reductions can be found in Table 1. Phosphorus reductions realized for both the Jones Lake and Rose Hill Lake Watersheds were adjusted using the thirty year flow record because it more correctly approximates the flow used to develop the TMDL.

The initial sediment and nutrient loadings were calculated using AGNPS data obtained during the Jones Lake/ Rose Hill Lake Watershed Assessment. The individual sediment loadings for each BMP installed were calculated using RUSLE2, an erosion prediction program. RUSLE2 is an advanced form of the Revised Universal Soil Loss Equation (RUSLE). The equation used soil and vegetation characteristics to predict erosion in Tons/acre/year. Once the Tons/year of sediment was calculated, a spreadsheet was used to convert the data to Kilograms/year of Phosphorus.

Sponsors and Other Supporting Agencies

The lead project sponsor for this project was the Hand County Conservation District. In addition, several other agencies are involved in the project as partners or participants. The agencies and contribution to the project are listed in Table 4.

Table 4. Supporting Agencies and Their Contributions

Agency	Responsibility
EPA 319	Funding (CWA Section 319 Grant through DENR)
Farm Service Agency	Technical Assistance for ECP and CCRP Information
Natural Resource Conservation Service	Technical Assistance for Grazing Management, Soil Erosion Information, Nutrient Management
SD DENR	Technical Assistance for Watershed Modeling, Loading Reductions
SD Conservation Commission	Funding (Conservation Commission Grant)
Central Plains Water Development District	Project Co-Sponsor, Administrative Support, Funding for office equipment
Hand County Conservation Districts	Lead Project Sponsor, Technical Assistance, Funding for office supplies

ASPECTS OF THE PROJECT THAT DID NOT WORK WELL

Because of the limited number of producers and the small nature of both watersheds, it was difficult to find producers that were willing to participate in the project. Reasons why producers elected to not participate include:

Planned Grazing Systems

Some producers were interested in this practice, but did not want to install a complete grazing system. Most of the producers didn't have enough practices to merit applying for the Environmental Quality Incentive Program (EQIP), but did participate in the Emergency Conservation Program. ECP is emergency funding for livestock water during drought

Grassed Waterways

Producers were not interested in this practice. Those producers that have installed grassed waterways did so through the Continuous Conservation Reserve Program (CCRP). The program offers the advantage of an annual payment in addition to cost share and incentives for installing the practice.

Agricultural Waste Systems

Most producers were not interested in this practice as they could not get the full value of the system before they retire. One individual inquired about a system, but he and his engineers were unable to design a system that was convenient and cost effective.

Project Budget/Expenditures

Table 5 shows the planned project budget and amount expended for each budget category. During the project, additional USDA funds became available when the Emergency Conservation Program was initiated. This made a new source of match available for the project. The EPA 319 funds that were spent on planned grazing systems are an error due to a misprint in the Project Information Packet. Approximately 18 percent of the total funds spent were from the EPA 319 grant.

Future Activity Recommendations

It is recommended that the Natural Resource Conservation Service (NRCS) and Hand County Conservation District consider conducting a survey in the future to determine the practices landowners in the Jones and Rose Hill watersheds have an interest. The information gained could be used to develop a new project for the two watersheds. It is also recommended that NRCS and the Hand County Conservation District continue to work with landowners that were interested but hesitant to install the BMPs available through this project.

Table 5. Project Budget Comparison.

Item		Total	USDA	CCRP	EQIP	319 Grant	Consolidated	Commission	Local	* Cons. Dist.	* CPWDD
Coordinator-Salary Fringe	planned	\$47,475				\$47,475					
	expended	\$4,019				\$4,019					
Administrative Support	planned	\$7,500									\$7,500
	expended	\$3,000								\$1,500	\$1,500
Travel	planned	\$6,000				\$4,500					\$1,500
	expended	\$172									\$172
Office Rent	planned	\$5,400								\$5,400	
	expended	\$0								\$0	
Equipment/Supplies	planned	\$1,800								\$900	\$900
	expended	\$300								\$100	\$200
<hr/>											
Planned Grazing Systems	planned	\$105,600			\$79,200				\$26,400		
	expended	\$60,445	\$19,979		\$0	\$8,545	\$8,544		\$23,377		
BMPs	planned	\$13,400		\$6,700				\$3,340	\$3,360		
	expended	\$0		\$0				\$0	\$0		
<hr/>											
Ag. Waste Systems	planned	\$229,050				\$129,510	\$13,200	\$42,000	\$42,000		\$2,340
	expended	\$0				\$0	\$0	\$0	\$0		\$0
<hr/>											
Lakeshore Stabilization (fencing and supplies)	planned	\$41,200				\$26,380	\$14,820				
	expended	\$0				\$0	\$0				
<hr/>											
Informational Brochure	planned	\$1,820				\$910				\$910	
	expended	\$30				\$0				\$30	
Yearly Tour	planned	\$4,000				\$2,000				\$2,000	
	expended	\$0				\$0				\$0	
Newspaper Articles	planned	\$450				\$180				\$270	
	expended	\$0				\$0				\$0	
Total	planned	\$463,695	\$0	\$6,700	\$79,200	\$210,955	\$28,020	\$45,340	\$71,760	\$9,480	\$12,240
Total	expended	\$67,966	\$19,979	\$0	\$0	\$12,564	\$8,544	\$0	\$23,377	\$1,630	\$1,872

APPENDIX A

Attention: Land Owners/ Operators,

Hello, my name is Duane Nielsen and I have been hired by the Central Plains Water Development District to conduct the watershed implementation project on the Cottonwood Lake/ Lake Louise Watersheds including Medicine Creek and Wolf Creek.

Between June 1999 and October 2000, a watershed assessment was conducted to determine any sources of impairment to the Cottonwood Lake and Lake Louise Watersheds. Through this assessment, we provided sufficient data to conduct an implementation project. This implementation project consists of cost sharing practices that will aid in reducing the amount of sediment and nutrient loads to the lake. Some of these practices include nutrient management, grassed waterways, shoreline stabilization, and planned grazing. Since the project is in its third year, all of the funding for planned grazing has been assigned. There are funds yet available for nutrient management, grassed waterways, and shoreline stabilization.

As part of this implementation we are conducting a mid-project survey of all the land owners within the watershed. Enclosed you will find a survey and an envelope in which to return the survey. We ask that you fill this out with the best of your knowledge and return it as soon as possible. The more information that we can attain from you, the more accurate this survey will be. I would like to stress that this survey and the practices previously mentioned are **voluntary** and any information that you share is kept confident.

Thank you for your cooperation and if there is anything that seems unclear or you have any questions, you can contact me at the Hand County NRCS office in Miller (605) 853-2410 ext.3.

Sincerely,

A handwritten signature in cursive script that reads "Duane Nielsen".

Duane Nielsen
Project Coordinator

Watershed Evaluation Survey

Name: _____

Are you currently raising livestock?

YES NO

Comments:

If YES, how do you classify your herd size compared to your 2000 herd size?

- a) increased herd size
- b) about the same
- c) decreased herd size

Please explain:

Would you be interested in any of the cost sharable practices mentioned below? (Check if interested.)

- grassed waterways
- nutrient management systems (lagoons, diversions, berms, etc.)

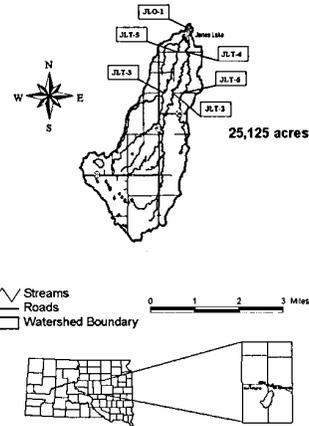
Comments:

APPENDIX B

Jones Lake/ Rose Hill Lake Watershed Improvement Project

The Jones Lake/ Rose Hill Lake Watersheds are located in southern Hand County, which lies in central South Dakota. The major goals of the project are to improve the water quality in Sand Creek upstream and including Rose Hill Lake as well as the water quality in Turtle Creek upstream and including Jones Lake. Improvement of these waterbodies will improve the overall water quality of the James River Basin. This project was made possible through funding from the Environmental Protection Agency 319 funds, Natural Resources Conservation Service's Environmental Quality Incentive Program (EQIP), SD Board of Water and Natural Resource's Consolidated Water Facilities Construction Program, SD Department of Agriculture's Coordinated Soil and Water Conservation Grant Program and various local sources.

Applicants can apply for funds through the Project Coordinator located in the Hand County NRCS Field Support Office at 605-853-2410 ext 3.



Jones Lake Watershed

Cost-sharing Practices

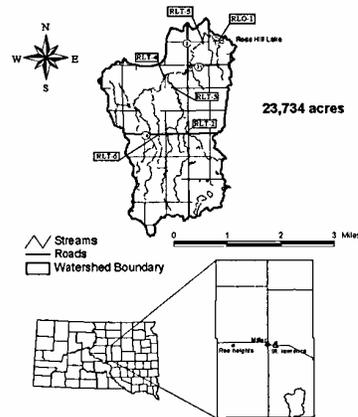
Funds have been acquired for various practices to improve the watersheds. Practices planned are:

- Planned Grazing Systems
- Grassed Waterways
- Agricultural Waste Management Systems
- Shoreline Stabilization

Cost-share to the Customer will be set at a maximum of 75% of the cost according to the NRCS cost list.

Eligibility and Application

Any operator operating land within the Jones Lake or Rose Hill Lake watersheds is eligible to collect cost-share funds.



Rose Hill Watershed

APPENDIX C

Obituaries

Beulla M. Kenyon

1925-2002

Beulla "Bee" Kenyon, 77, of Chamberlain, died Sunday, June 16, 2002, at the Mid Dakota Hospital at Chamberlain.

Funeral services will be held Wednesday, June 19, at 10:30 a.m. at the St. James Catholic Church in Chamberlain, with Father Bill Pitcavage, S.C.J., officiating. Burial will be in the Riverview Cemetery, Chamberlain.

Beulla "Bee" Mary Bedsaul was born March 2, 1926, at Tilford, SD, to William Claude and Ella Belle (Ackley) Bedsaul. She graduated from Lead High School in 1943 and received a teaching certificate from the Black Hills Teachers Normal. She taught country school in Newcastle, Wyo. She married Charles Kenyon at Newcastle, Wyo., December 7, 1946.

She also taught school at St. Lawrence, and they lived in Miller for many years. Bee and Charles operated the Taft Hotel in Chamberlain. For many years, she worked in different positions at the St. Joseph's Indian School.

She was a member of St. James

Catholic Church. She loved her grandchildren, and attended their many school events throughout their lives. She loved the color purple, bowling and baseball, notably the Chicago Cubs and Atlanta Braves. She was an avid collector of baseball cards and music boxes and was a voracious reader.

She is survived by one son, Chuck Kenyon and partner Donna Thompson of Chamberlain; five daughters, Pat (George) Wolf of Chamberlain, Carol (Ronald) Meier of Hayward, Wis., Cathy (Mick) Zeman of Chamberlain, Sandy (Lonnie) Wolcott of Reliance, and Dr. Rita (James) Kenyon-Jump of Kalamazoo, Mich.; one daughter-in-law, Linda Kenyon of Sioux Falls; 11 grandchildren and three great-grandchildren; three brothers; and numerous nieces and nephews.

She was preceded in death by her parents; her husband, Charles, on April 16, 1973; one son, Michael, on April 15, 2000; one sister and two brothers.

Several meet for Father's Day activities

Eugene and Myrtle Etbauer and Bill Etbauer traveled to Sioux Falls Sunday to spend Father's Day in the Ron and Leona Poppenga home. Fred and Brenda Klocko and Cassie, Larchwood, Iowa, joined them there for a family get-together.

Hugh and Jan Sedgwick, Keith Bridge and Junior and Donna Bridge met in Kimball for a Father's Day dinner.

Evelyn Wulff was a supper guest in the Wes and Santrese Wulff home in Kimball Sunday evening. Sunday, Verlyn and Todd Eilertson,

Gann Valley News

Elaine Wulff
HC 3 Box 30
Gann Valley, SD 57341
605-293-3217

Vivian DeJong Rearick, Bonilla. The winners were Tanner Woolledge, Shawn Speck, Richard Mittelstedt, Vivian DeJong, Randy Woolledge, Lou Harres, Tony Krebs, Hugh

Hand County District receives conservation grant

The Hand Conservation District will get a \$45,340 grant from the State's Coordinated Soil and Water Conservation Grant Fund, according to an announcement Monday from Governor Bill Janklow.

The grant is to help establish animal waste systems, add fencing to stabilize 5.6 miles of lake shoreline, and install grass waterways to improve the water quality in Sand Creek and Rose Hill Lake, and in Turtle Creek and Jones Lake. The grant will help pay for a part of the project's total cost of \$497,970.

"The Coordinated Soil and Water Conservation Grants Program is a great example of governments working together," Janklow said. The grant money is being matched with other money, including local and federal government funds, to provide more than \$3,797,409 in seven projects. Overall, the grant funds are being matched at average rates of \$6.64 to \$1.

Other conservation districts awarded grant funds are Brookings, Hamlin, Hughes, Hyde, Lincoln and Shannon. Money for the Coordinated Soil and Water Conservation Grant Fund comes from unclaimed gas tax refunds for agriculture users. The South Dakota Department of Agriculture administers the fund, from which the South Dakota Conservation Commission awards the grants.

Farmers Union Camp set for Hand County youth



Miller. Back row, l to r, Dan Mentzer, Zach Polenter, Dana Fansburg, Kris Fawcett, Michael Pettit, Desirae

AM 1, grades 1-3, l by Dennis Simons. r, Blayne Lettau, Tage Hargens, Darin Peterka, n, Jordan DeBoer, rs. Front row, istadt, Danica yley Ruhnke, rew Belle, ich and

AM 2, grades 1-3, l by Michelle Steptoe. Back row, l to o, Kyle Clement, Kelsey Johnson, ke, Masin Chapin, ee. Front row, e, Tara Parmely, rWerff and e.

AM 3, grades 1-3, back, l-r, s, Alexis Watts, MacKenzie Pfeifle, r Strasburg, Ryan Koeck, k, Preston ont row, iurg, if Schaff.

Low scores: Joyce Wieland, 46; Gladys Dietrich, 48; Diane Moncur, 49; Barb Haberling, 51; Barb Lager, 51; Bridgett Augspurger, 52; Kim Blackwell, 52; Lori Peterka, 52; Margaret Moncur, 53; Susan Mareska, 54.
Hole-outs: Sharon Oligmueller, #5.

Teener Baseball Results

"A"

JUNE 6

Miller 4, Wessington Springs 4

(no stats)

JUNE 12

Miller 1, Wolsey 1

(Called after 9th Inning)

Pitchers: Ben Zell 7 Innings, Scott Hamiel 2 Innings

JUNE 15

Orient Round Robin

Game 1

Miller 0, Frederick 18

Game 2

Miller 9, Orient 4

Pitcher: Michael Prince 6 Innings

JUNE 18

Game 1

Miller 2, Redfield 9

Pitcher: Cody Foreman (5K, 3BB)

Hits: 2B-Brandon Gortmaker, 1B-Jay Weik, D.J. Yost, Colin Hargens

Game 2

Miller 3, Redfield 10

Pitcher: Ben Zell (3K, 8BB)

Hits: 1B-Josh Hoffman (2), Brandon Gortmaker, Mitch Lakner

"B"

JUNE 3

Game 1

Miller 2, Huron 12

Pitchers: Aaron Stevens 2-1/3 Innings,

Dan Hall 2-2/3 Innings

Hits: 1B-Darin Swartz, Brandon Gortmaker, Caleb Yost

Game 2

Miller 2, Huron 12

Pitchers: Brock Werdel 4-1/3 Innings,

Brandon Gortmaker 2/3 Innings

Hits: 2B-Darin Swartz, 1B-Brandon Gortmaker (2), Brock Werdel, Logan Fischer

JUNE 6

Miller 1, Wessington Springs 15

Hits: 2B-Logan Fischer, 1S-Dan Hall

JUNE 9

Game 1

Redfield @ Miller

(rained out after 2 Innings)

Pitcher: Josh Koeck

Game 2

Miller 13, Redfield 12

(resumed after rain delay)

Pitcher: Brock Werdel-7 Innings

Hits: 3B-Brandon Gortmaker, 1B-Dan Hall (2), Darin Swartz (2), Grant Rediger (2), Brandon Gortmaker, Brock Werdel, Logan Fischer

JUNE 10

Game #1

Miller 1, Orient 10

Pitchers: Logan Fischer 2-1/3 Innings,

Dan Hall 2-2/3 Innings

Hits: 1B-Logan Fischer, Dan Hall, Slone Waldrop, Josh Koeck, Grant Rediger

Game 2

Miller 5, Orient 16

Pitchers: Dan Hall 3-1/3 Innings, Jordan Kienow 1-2/3 Innings

Hits: 2B-Brock Werdel, 1B-Dan Hall (2), Darin Swartz, Brandon Gortmaker, Brock Werdel, Grant Rediger

JUNE 12

Miller 12, Wolsey 24

in Redfield. Check-in time is 8 a.m. at the park, and game time is 9 a.m. Registration deadline is July 10. Call 605-472-1405 for more information.

SDSU alumni, friends golf outing at Miller

Alumni and friends of South Dakota State University are invited to join coaches and staff from SDSU for an afternoon of golf at Miller Country Club Thursday, June 26. The SDSU Alumni and Friends Golf Tournament is to support athletic scholarships at SDSU.

At 1 p.m., the four-person scramble begins. Registrations can be made for either a team or singles. Dinner will be served at 5:30 p.m., and the public is encouraged to attend, even if they did not golf.

Reservations should be made by contacting Kevin or Kim Blackwell, 853-2473 (H) or 853-3964 (W).

Water project funds available to improve County lakes

Conservation practices to be implemented by area producers will improve local watersheds.

The Cottonwood Lake/Lake Louise Watersheds cover parts of Faulk, Spink, Hand and Hyde Counties. The major goal of the projects is to improve the water quality in Medicine Lake, Cottonwood Lake, Wolf Creek and Lake Louise.

The Jones Lake/Rose Hill Lake Watersheds are both located in southern Hand County. The goal set for this project is to improve the water quality in Turtle Creek, Jones Lake, Sand Creek and Rose Hill Lake.

Improvement of these watersheds will improve the overall water quality of the James River Basin.

These projects are made possible through funding from Federal, State and local sources. Funds have been acquired for conservation practices to improve the watersheds. These practices include: grazing enhancement systems, grassed waterways, riparian buffer strips, agricultural waste management systems, and shoreline stabilization. Cost-share to the customer will be a maximum of 75 percent of the installation cost, according to the NRCS cost list.

Any person operating land within

the Cottonwood Lake/Lake Louise or Jones Lake/Rose Hill Lake watersheds is eligible to apply for cost-share funds prior to installation of the practice. Applicants can apply for funds through Duane Nielsen, Project Coordinator, located in the County NRCS Field Support Office. For more information, call 853-2410, Ext. 3.

Miller Press
June 25, 2003

1. L H Construction - 1156
2. Rude Transportation - 1151
3. American Bank & Trust - 1137
4. Del's Taxidermy - 1129
5. Bright Boys - 1129
6. Roy's Angels - 1124
7. Crystals - 1113
8. Resel Oil - 1112
9. Turtle Creek Saloon - 1103
10. Blue Yummy - 1088
11. Freddie's - 855
12. Export Series - 782
13. Schutte's Crew - 688

High scores: Reed Bixler 47, Dave Martinmaas 45, Tom Welch 43, Lyle Resel 42, Glenn Hoekman 42, Paul Kappler 41, Kevin Sowar 41, Armon Zens 40.

High handicap scores: Joe Morrisette 59, Don Seibrecht 52, Tim Davis 52, Reed Bixler 52, Dave Martinmaas 51, Chad Seltling 51, Kirk Diekhoff 50, Marvin Mitchell 50, Glenn Hoekman 50.
Tournament: June 26, 5 p.m. Shoot 2 rounds of 50 shots each (Must start first round by 7:15)

Summer League starts July 10 for 8 weeks through August 28
3 shooter teams may have 4 and take best score

email your submissions to: