

**Storm Lake Water Quality Project Annual Report: October 2004-September
2005**

Project Name: Storm Lake Water Quality Project

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Soil and Water Conservation District: Buena Vista

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Commissioner's Signature:

Fiscal Year 2005 Annual Report Narrative Summary

Fiscal Year 2005 was the first full year the project was funded. Project progress had many highs and lows. Overall acceptance of the project is at an all time high, which is important because there have been previous projects funded in the watershed. I have spent the year building relationships with land owners and operators. Gaining trust and respect has opened doors for future conservation and planning in the watershed. Since the producers have been offered project benefits for the last ten years, I had to approach them with a new view. I feel the time I have spent on outreach and one on one contacts will have its pay off in the next fiscal year. All project objectives were given attention, though some were not completed. In this narrative, I will highlight these objectives, and define accomplishments, progress, and problems.

Best Management Practice Implementation:

100 acres of pasture was to be addressed for stream bank stabilization. This practice was placed at top priority for the project. The area was essential for watershed management because it is directly north of Little Storm Lake, a DNR managed wetland. Powell Creek enters LSL at the south end, which outlets into Storm Lake. For over ten years, 100 head of cattle have been allowed full access to the creek to reach both sides of the pasture and use Powell Creek as their main water source. Over the years, this has led to unstable and widened creek banks. Cattle use also prevented vegetation growth for up to 15 feet in the "riparian zones". History of the land owner and operators showed high conservation participation, but this area was sensitive with the past dealings with DNR and LSL. Program availability through CRP was also a factor, but with a little time, I was able to develop a plan with Marginal Pasture Wetland Buffer. I approached the operators first, and offered a CRP program to pay land rent, 90% cost-share on all practices installed, and the land owner would retain complete ownership. They were interested in this and asked for a complete estimate with local contractors. I took the challenge, and developed an estimate complete with watering facility and fence. When this was complete, the operator came in for an office visit, gave his approval, and took the estimate to the land owner. The operator expressed that this was not an issue about money, but doing something for the lake and water quality.

The operator told me that when the project was complete, he did not want to have to do maintenance. In other words, if this were going to happen, I had to find someone to maintain the native prairie during establishment. I took the challenge, and developed a maintenance agreement between the Lake Preservation Association and the land owner that states LPA will complete the maintenance on the native prairie during establishment, and the operators were to complete maintenance on the fence and watering facility.

Finally the land owner signed the contract, and to date all work has been completed except seeding. The seeding will be completed this November. Follow up on this contract will be to maintain relationships with the land owner and producers through the contract. I will ensure maintenance is completed as needed for the land owner. One of the major issues we may face on this area is purple loosestrife invasion. The loosestrife has overtaken LSL, and will no doubt be a problem in this wetland. Monitoring and eradication will be necessary to maintain relationships with all involved.

100 acres wellhead protection was to be installed in the watershed. Wellhead Protection as administered by FSA is not a valuable program for land owners. The value of land we are asking them to enter into the program is exponentially higher than soil rental rates. The land owner is asked to seed down an area in the field up to a 2000 foot radius of a well in the wellhead protection plan. In the Storm Lake Watershed, this has left many land owners looking at farming on an arc. There is no option to the land owner to square the CRP acres in the field, except to take available feet off. The program does not offer a sign-up incentive payment, and only has 10% additional incentive. The producers can not see the value vs. loss of acres. I do not feel the producers or land owners in the Storm Lake Watershed will enroll during this farm bill. One land owner expressed interest, but could not square his field to accommodate field work. He used CRP General Sign-up, but well-head was not given priority. Since the land was not determined HEL, his application was declined.

100 acres buffer were to be enrolled into CRP. 2.5 acres were buffered along Powell Creek in Lake Creek Country Club. They planted short native grasses to accommodate golf play. Lake Creek is prone to flooding through out the entire rain season, so planting native grasses will help with hydrology problems. They did not buffer the entire length of the creek, but will look into it for future years. They received cost-share through a program sponsored by DNR, Pheasants Forever, and local seed dealers called Prairie Partners. This offers the land owner 50% cost share on seed. This is a valuable program because it takes the initial cost burden off the land owner.

8.3 acres were buffered through the Marginal Pasture Wetland Buffer contract. 3000 feet at 120 feet wide. One land owner said he was adding to his buffers, did not want any government money, and would not tell me when or how much he did.

An area adjacent to the beach access on the south side of the lake will be planted with native grasses this fall. 200 feet of the field length that was not buffered, will now have 30feet buffer.

Potential 2.24 acres were discussed with an operator. He said the land owner is on the fence, and he would talk to them again about the buffer.



Lake Creek planted 2.5 acres of native grass buffer to improve hydrology, water quality, and aesthetic beauty of Powell Creek.

3000 feet waterways were to be installed this year. 3000 feet of waterways are being constructed this construction season. Another 3000 were surveyed and designed, but not constructed.

Land owner and producer contacts through the year have led to 5 new waterway applications, totaling approximately 9800ft. Many fields look like they need a waterway, but they are only surface drains. I have been focusing on areas that have cuts, gullies, or other visible erosion. Again it takes time to build relationships with the land owners and producers to open up to programs. The talent of the job is to sell the programs for the benefit of water quality, crop production, and reduced soil loss from the field. Credibility in the agricultural field is a must in this job.

1 wetland or basin was to be installed by this year. I have been able to secure two land owners by application for this practice. There is 2 potential CREP sites in the Storm Lake Watershed that need addressed this year.

Installation of 3 urban demonstration sites was not completed this year. Members of the Advisory Committee are working with me on these sites. I have funding potential available from local support, so I will focus on this in the coming year.

2 boulder weirs were to be installed this year. Survey and site location have been completed, but no progress toward construction to date.

Utilizing Conservation Security Program to work with producers was the doorway to some of the contacts this year.

I am working closely with all the applicants to ensure the highest payments, and the maximum level of conservation.

Public Awareness and Perception:

Water monitoring was to be implemented in the Storm Lake Watershed. This activity had a slow acceptance level. The first time I tried to hold training, only one person expressed interest. I actually did less advertising and asking the second time the training was held, and had more interest. Timing of the year plays a role in when you ask for volunteers. In the spring, many of the families are busy with school end, church, sports, and graduations. Currently six volunteers have been trained to monitor water at a training held in the area through DNR IOWATER monitoring program. Eight sites are currently being tested, with the hopes of more being added on. Each site will be tested once a month with exception of freeze out to thaw.

The Lake Preservation Association paid the volunteers training/ equipment fee of \$20.00 each. This local support is valuable for these projects.

In order to raise public awareness of the project, I was to develop a variety of media correspondence.

I wrote a number of press releases on topics of fall tillage, public owned lakes funding, CSP, IOWATER training, field days, and a watershed tour review. When I had a press release, I also gave a public service announcement on KAYL and The Moose to increase my audience.

Three newsletters were sent to land owners, operators, and other interested people in the local area. This is one less than I had planned to send, but there was a shortage of money for postage. I had to rewrite and send a follow up to a few article written by volunteers on one of the newsletters.

I am also keeping a record of current issues and progress in the watershed and surrounding areas. I cut articles from the local newspaper and archive these to CD.

I also developed a website for the project. I an updated the site the first quarter, but decided against continuing updates this often, and have refrained from sending the quarterly report to be publicized online. I was spending too long changing information in order to not disclose names. I will send only press releases and newsletters to be on the website. The web provider I chose offers a statistical page that tallies site visits and what information visitors were looking at. The website is getting a lot of traffic, and I am pleased with the numbers each quarter. The website address is slwaterquality.com This year I want to make sure the City of Storm Lake adds my page as a link.

Field days were to be planned in the watershed to highlight conservation in the area. Though many ideas were generated on potential field days, only two were successfully executed. Last fall, Dick Schultz of Iowa State University, was the guest speaker of our riparian buffer field day. He discussed a need for some tree removal to improve its effective filtering. Too much shade has caused loss of ground cover. Our next field day on this area will be maintenance on buffers and filter strips. The Soil-Tilth Lab came to the area and presented this spring at the no-till field day. I do not know why, but attendance was low. One of our commissioners brought his no-till equipment to the field for display. One of the attendees bought a new piece of equipment, so he will be able to do no-till on his fields.



A large portion of public relations is spent giving presentations to local organizations and education institutions. I was able to visit 17 different organizations to share information on the Storm Lake Watershed. Depending on the age and nature of the group, I chose from urban conservation, water quality and conservation, and hands-on learning activities to present at the meetings. All groups have had a lot of questions on the different projects being done in the watershed. If the meeting includes a tour of the watershed, a local representative of the DNR Environmental Services Div. is always available to share information regarding high profile projects such as dredging and Little Storm Lake restoration. This part of the job is a highlight because I get to talk with residents. I sometimes think I learn more from them when all is done. Since Storm Lake is so progressive and focused on economic development through natural resources, they are very interested in the projects success.



The State Soil Conservation Committee attended a Storm Lake Watershed tour, with special guest State of Iowa Secretary of Agriculture Patti Judge. Getting people out to see practices and needs in the watershed generates support for future funding.

To highlight excellent conservation efforts, I gave three producers recognition of their efforts with conservation signs. These signs were donated by the NRCS, and list the owners name and practice. The Lake Preservation Association also gave watershed awards to conservation minded producers in the Storm Lake Watershed. They were honored at the LPA annual picnic.

In order to get my hat into the urban arena, I brought to the table a new storm drain marker. It is designed to be permanent marker made of plastic that is applied to the curb by a glue adhesion. These will be beneficial because the previous markers would wear off and wash away with seasons and street sweepers. In order to get a start on application, I had a group from the Buena Vista College spend a morning applying these markers on set routes. They were successful at applying 100 storm drain markers along the streets nearest the lake and downtown. I chose these locations to start because of high visibility. The City of Storm Lake purchased the storm drain markers, and gave supplies to ensure the groups safety. The city has chosen to take the rest of the markers and have staff do the application.



Local Partnerships and Funding

The Storm Lake Watershed Project is energized by local support and funding. Originally a team of local leaders saw a need to focus on BMP installation in the Storm Lake Watershed. Current dredging of Storm Lake, restoration of Little Storm Lake with the Army Corp of Engineers, and the economic development behind Project AWAYSIS, has led to many opportunities to work with the local community. I attend the monthly Lake Preservation Association and Lake Improvement Commission meetings to give updates on progress in the watershed. These groups also support the project by donating \$1000.00 each to be used on projects and supplies not covered by the grant. With this money, I can offer incentives or match money to land owners to plant native grasses or buy supplies for a meeting. Every year the LPA holds an annual meeting to update the members and other community members about the dredging progress. I gave a watershed update at this picnic, and helped choose recipients of the conservation awards.

The City of Storm Lake has been working toward goals for the NPDES Phase II permit, which I have contributed to. The money the City will donate to the project will be used to install urban BMP's such as rain gardens. We would both benefit from these practices, cleaner storm water for the city and I would reach a goal set by the advisory committee.

Other local organizations that have become partners through the year are Rotary, Izaak Walton League, Buena Vista County Farm Bureau, Lake Creek Country Club, Buena Vista University, Storm Lake Kiwanis, St. Mary's Catholic School, CommUNITY Education, and the Storm Lake Girl Scouts. I was asked by these groups to come to a meeting and give a workshop or presentation on water quality and what the project means for Storm Lake. With each meeting, I reached a large variety of individuals from producers to bankers who were interested in what was happening in the community and watershed. With two local newspapers and a lot of projects happening in the area, it is vital that I keep up to date on local news. Staying current allows me to be as knowledgeable as I can be while attending these meetings.

A new organization, Water for Iowans, has asked to partner with the Storm Lake Watershed Project. This group has representatives from organizations in both the environmental and agricultural arenas. They offer support through in-kind activities. Each member can take our issues back to the organizations they represent, and ask for their support. It will be interesting to follow this group as they pioneer a new organization for water quality in Iowa.

My biggest supporters are the agencies behind the scenes of the project. These individuals are the glue that holds it all together. The Buena Vista Soil and Water Conservation District is responsible for the project's day to day progress. I give a monthly report at each meeting to keep them informed of the projects and trainings of the coming month. They are also the first group I go to for advice and help with any problems that may arise. One commissioner has taken on the leading role as supervisor, he is always available for signatures, help with projects, or support.

The Department of Natural Resources also provides many services. There is a satellite office for a local Environmental Services staff member, who is the main contact on many projects in the City of Storm Lake. She keeps me up to date as needed on issues of lake dredging and the Little Storm Lake Restoration Project. A Private Lands Biologist comes to the office twice a month, and offers help with training needs and ideas for projects. She helps with the land owner contacts that need native seed, and offers new suggestions that I may not have thought of. She is also helping with the Purple Loosetrife problem in the watershed and county. We are looking at ways of full eradication with land owner partnerships. They are both members of the Advisory Committee and are an important part of the project.

The Natural Resource Conservation Service provides office space, vehicles, and office staff support. Much of my training has been made possible by the Area 1 office for NRCS. They also support the project by offering technical support and personnel. Local staff has a lot of projects in the county to complete, but they have put my watershed as a priority area. Since the project is funded for such a short time, this is important for project progress and to reach goals.

The local Farm Service Agency office has also provided support unseen in a lot of offices. They are easy to work with, and support the project by prioritizing watershed projects. They took a chance on the dredge site and filed a special request for the state committee to review eligibility for CRP.

The project Advisory Committee is comprised of sixteen individuals that belong to these many organizations and agencies, or own/operate land in the watershed. Their input is how the Plan of Operations is developed and priorities are set throughout the year. Many of them also attend additional meetings, field days, and tours I have in the watershed to show support for the project.

Planned Practices 2006

Finally we can look forward to fiscal year 2006. At this time the project has the potential to increase goals set for fiscal year 2006 after the fall construction season. If the weather holds out and we can produce survey, layout, and design in a timely manner, there will be four waterways totaling 7800 feet being installed this fall for three land owners. There will also be one wetland constructed along Powell Creek. The current soil loss at this site is high because there are four man-made ditches that were intended to allow water to exit the field. As run-off water washes through these ditches, they continue to cut deeper into the stream bank taking soil and nutrients from the adjacent field as well. Designing a wetland to slow the water down, giving sediment time to settle, and nutrients to be used by wetland plants, will improve water quality. Eliminating the four ditches will reduce soil loss dramatically from the gully erosion.

I am working with one producer about the possibility of installing filter strips. He said the land owner is on the fence, but he would talk to him again about the practice. I plan to follow up this conversation with both the land owner and the producer. Another land owner has prime farm land for wetland restoration. The crop has not survived the summer rain for two years. The land owners tend to stay away from government programs, so this could prove to be a difficult sell. There is no harm in trying, and I hope to sell them on the value of installing the filter strips.

The second pasture in the watershed will be addressed this year to get the cattle out of the creek. The land owner is interested in constructing a wetland in memorial of his father who homesteaded the site. I will be working with the family this year to set up a contract. By spring, I hope to have this site surveyed, designed, and constructed. I would like to see the family burn the site and wait for a few years before doing any seeding. This will allow us to determine if there are prairie remnants/ native seed bank that are being knocked down by cattle. This will be a very visible site, and beneficial to water quality and Powell Creek.

As the new fiscal year starts and practices are implemented, the time spent building relationships will pay off. It takes time, patience, and persistence, but the goals can be reached. Fiscal year 2006 will bring new BMP's in the watershed, stronger ties with the land owners and operators, and improved water quality in Storm Lake.