

FINAL REPORT

Lake Brewer Watershed Nonpoint Source Pollution Control Project

FY 00, Project 1000

1. Executive Summary

*** Title**

Lake Brewer Watershed Nonpoint Source Pollution Control Project

*** NPS problem**

The NPS problem addressed was sedimentation on:

- farms within the high priority area immediately upstream from the lake,
- farms with confinement animal feeding operation such as dairies, hog farms, and poultry farms, and
- farms with riparian area pastures and/or critically eroding streambank or other critical areas.

*** WQ goals and objectives**

To maintain or restore designated uses of the lake Brewer and Cypress Creek above the lake. The project objective is to implement conservation plans on farms within the watershed and thereby improving the majority of the pastureland to good or excellent condition. Also, a training for proper ways to apply Best management Practices (BMPs) to county unpaved roads.

*** Original timeframe**

The original project period was October 2000 to December 2003.

*** Cooperators involved**

Cooperators involved with the project Conway County District Board and Employees and farmers within the watershed area.

*** Funding (Fed and State)**

| | |
|-------------------|--------------|
| 319 Federal Funds | \$200,000.00 |
| State/Local | \$129,497.00 |
| Total | \$329,497.00 |

*** BMPs implemented**

The Best Management Practices (BMPs) that were offered under the Brewer Lake Watershed Nonpoint Source Pollution Control cost-share program were:

1. Pasture Planting
2. Pasture Renovation

3. Dairy Waste Systems
4. Poultry Waste Systems
5. Fencing Ponds, Ponds
6. Tanks with pipeline
7. Tree Planting

2. Project Chronology

Highlight of the Brewer Lake Watershed Nonpoint Source Pollution Control Project are the establishment of the Brewer Lake Watershed Alliance. The Brewer Lake Watershed Alliance made a business plan and meets each quarter. Also a quarterly newsletter was published and distributed to landowners and officials in and around the Brewer Lake Watershed. Also, a No-Till was purchased by the Conway County Conservation District and was made available to rent to landowners with the Brewer Lake watershed. There was a subsidized rental fee of \$3.00 per acre within the Brewer Lake Watershed area.

Best Management Practices (BMPs) that were implemented with in Brewer Lake Watershed were:

1. Poultry Waste Systems
2. Pasture Planting
3. Pond
4. Tree Planting

These Best Management Practices (BMPs) were all implemented in order to help improve that water quality.

Obstacles for the Brewer Lake Watershed Nonpoint Source Pollution Project were keeping the Project fresh in the public's eye. Pamphlets about the Brewer Lake Watershed Nonpoint Source Pollution Project and the Brewer Lake Watershed Alliance were placed in businesses in and around the Brewer Lake Watershed. Also, articles were placed in the local newspaper. As well as, the quarterly newsletter that was published and distributed thru mailing each quarter to remind the public about the project.

The No-till Drill was used to plant over 300 acres in the Brewer Lake Watershed Nonpoint Source Pollution Control Project. Poultry Wastes Systems were also installed. As well as, tree planting and ponds were also added to the watershed area.

| BMPs Planned | | | |
|---------------------|------------------------|--|--------------------------------------|
| BMP # | BMP Name | Project Total | |
| | | Total number of farms with this BMP | Total Area Impacted (ac / ft) |
| 313 | Waste Storage Facility | 3 | 49 |
| 316 | Waste Storage Facility | 2 | 122.6 |

| | | | |
|-----|-------------------------|---|-------|
| 442 | Irrigation System | 1 | 179.1 |
| 512 | Pasture Planting | 7 | 270.1 |
| 558 | Roof Runoff Structure | 1 | 179.1 |
| 561 | Heavy Use Protection | 1 | 179.1 |
| 587 | Water Control Structure | 1 | 179.1 |
| 614 | Water Facility | 1 | 179.1 |

| BMPs Implemented | | | |
|-------------------------|------------------------|--|--------------------------------------|
| BMP # | BMP Name | Project Total | |
| | | Total number of farms with this BMP | Total Area Impacted (ac / ft) |
| 316 | Waste Storage Facility | 2 | 122.6 |
| 512 | Pasture Planting | 4 | 220 |

| Cost Share | | |
|--------------------|--------------|-------------|
| | Federal | Non-Federal |
| Project Budget | \$159,722.00 | \$0 |
| Project Total Paid | \$12,058.67 | \$18,288.18 |

| Information / Education / Awareness | |
|--|----------------------|
| Activity | Project Total |
| Brewer Lake Watershed Alliance Mtgs | 5 |
| Number of Attendees | 100 |

3. Lessons Learned

The Lake Brewer Watershed Nonpoint Source Pollution Control Project was successful in tree planting, pond construction, poultry waste systems, and pasture planting. Keeping the project in the public's eye helped keep landowner's in the Lake Brewer Watershed aware of the program. The Conway County Conservation District placed pamphlets in and around the Watershed area to remind landowners of the project. Also, articles about the Lake Brewer Watershed Nonpoint Source Pollution Project were placed in the project's quarterly newsletter, the Conway County Conservation District's quarterly newsletter, and the local newspaper. Letters were sent out informing the landowners in the project area about the project, as well as, about the Brewer Lake Watershed Alliance that has been formed. The Brewer Lake Watershed formed a business plan, also.

Attempt to contact instructor for the Unpaved Workshop proved unsuccessful in this time frame. The Conservation District attempted to set up this workshop but had trouble contacting instructors after many attempts. Also, a date was never agreed upon by the County Jude's office.

To keep the project more effective more media exposure could have helped to keep the project fresh in the public's eye. Also, outreach could have been done thru radio public service announcements.

4. Technical Transfer

An active use of all media that is available is key. Many landowners read the local paper and listen to local radio stations during the day while they work. The more the project is in the public's eye the more the project will be used by the public. The more public outreach helps the public to realize the importance and gets the public more actively involved. The Brewer Lake Watershed Alliance help landowners in the county to take an active interest in the Lake Brewer Watershed Nonpoint Source Pollution Control Project.

The Conway County Conservation District currently has no other projects on the drawing board at this time.

5. EPA Feedback Loop

The Conway County Conservation District currently has no suggestions to EPA on how to improve the Nonpoint Source Pollution process in regard to this project.

There are no other Federal partners for the Lake Brewer Watershed Nonpoint Source Pollution Control Project.

**Lake Brewer Watershed
Project 1000 FY00 CWA Section 319(h)
Final Quarterly Report**

Task 1: Steering Committee

Costs: Federal (\$0) Non-federal (\$5,400) Total (\$5,400)

Subtask 1.1: Organize Steering Committee consisting of the NRCS District Conservationist in Conway Co. and the Conway County Conservation District directors and District manager.

CCCD: April 15, 2001: January 9, 2001 - Organized Steering Committee. No need to make further entries.

Subtask 1.2: Steering committee will meet quarterly for 3 years.

CCCD: April 15, 2001: Second Meeting Conducted February 13, 2001, next meeting conducted March 13, 2001

CCCD: July 15, 2001: Meeting conducted with updates on projects: April 10, 2001 - Meeting Conducted with updates on the project. May 14, 2001 - Meeting Conducted with updates on the project.

CCCD: September 15, 2001: Meeting conducted with updates on projects: August 14,2001 – Meeting conducted with updates on the project: July 9,2001: Meeting conducted with project update

CCCD: December 15,2001: Meeting conducted with project update. October 22,2001: Meeting Conducted with updates on the project.

CCCD: March 11, 2002: Meeting conducted with project update. February 11,2002: Meeting Conducted with updates on the project. January 14,2002: Meeting Conducted with updates on the project.

CCCD: June 10, 2002: Meeting conducted with project update. May 13,2002: Meeting conducted with updates on the project. April 8, 2002: Meeting conducted with updates on the project.

CCCD: September 9, 2002: Meeting conducted with project update. August 8,2002: Meeting Conducted with updates on the project. July 15, 2002: Meeting Conducted with updates on the project.

CCCD: October 14, 2002: Meeting conducted with project update. November 11,2002: Meeting Conducted with updates on the project. December 10,2002: Meeting Conducted with updates on the project.

CCCD: January 13, 2003: Meeting conducted with project update. February 10,2003: Meeting Conducted with updates on the project. March 10,2003: Meeting Conducted with updates on the project.

CCCD: April 10, 2003: Meeting conducted with project update. No Meeting is May or June.

CCCD: July 14, 2003: Meeting conducted with project update. August 11, 2003: Meeting conducted with project update. September 8, 2003: Meeting conducted with with project update.

CCCD: October 14, 2003: Meeting conducted with project update. November 10, 2003: Meeting conducted with project update. December 8, 2003: Meeting conducted with project update.

CCCD: January 15, 2004: Meeting conducted with project update. February 15, 2004: Meeting conducted with project update. March 15, 2004: Meeting conducted with project update.

CCCD: April 15, 2004: Meeting conducted with project update. May 15, 2004: Meeting Conducted with project update. June 15, 2004: Meeting conducted with project update

CCCD: July 15, 2004: Meeting conducted with project update. August 15, 2004: Meeting conducted with project update. September 15, 2004: Meeting conducted with project update.

Subtask 1.3: The responsibility of the Committee will be to review all surveys, plans etc ... and outline policy and procedures.

CCCD: April 15, 2001: Completed
CCCD: July 15, 2001: Completed
CCCD: September 15, 2001: Completed
CCCD: December 15, 2001: Completed
CCCD: March 11, 2002: Completed
CCCD: June 10, 2002: Completed
CCCD: September 9, 2002: Completed
CCCD: December 10, 2002: Completed
CCCD: March 10, 2003: Completed
CCCD: April 10, 2003: Completed
CCCD: September 8, 2003: Completed
CCCD: December 8, 2003: Completed
CCCD: March 15, 2004: Completed
CCCD: June 15, 2004: Completed
CCCD: September 15, 2004: Completed

Deliverables: Minutes of meetings.

Task 2: Technical Assistance

Costs: Federal (\$37,578) Non-federal (\$106,897) Total (\$144,475)

Subtask 2.1: The Conway County Conservation District will furnish equipment and personnel to plan 25 farms per year for 3 years.

CCCD: April 15, 2001: 1 poultry plan started
CCCD: July 15, 2001: 2 Plans completed
CCCD: September 15, 2001: 3 plans started, 1 completed
CCCD: December 15, 2001: 9 plans started, 3 completed
CCCD: March 11, 2002: 16 plans started, 3 completed
CCCD: June 10, 2002: 1 plan started, 18 completed
CCCD: September 9, 2002: 13 plans started
CCCD: December 10, 2002: 17 plans started, 1 completed
CCCD: March 10, 2003: 20 plans started, 7 completed
CCCD: June 9, 2003: 5 plans started, 25 completed
CCCD: September 8, 2003: 6 plans started, 1 completed
CCCD: December 8, 2003: 7 plans started
CCCD: March 15, 2004: 7 plans started
CCCD: March 15, 2004: 7 plans started, 1 plan completed
CCCD: March 15, 2004: 6 plans started

Subtask 2.2: The District will provide follow-up visits; a minimum of one per farm planned.

CCCD: April 15, 2001: 1 follow-up visit completed
CCCD: July 15, 2001: 7 follow-up visit completed
CCCD: September 15, 2001: 0 follow up visits completed
CCCD: December 15, 2001: 18 follow up visits completed
CCCD: March 11, 2002: 5 follow up visits completed
CCCD: June 10, 2002: 5 follow up visits completed
CCCD: September 9, 2002: 3 follow up visits completed
CCCD: December 10, 2002: 10 follow up visits completed
CCCD: March 10, 2003: 15 follow up visits completed
CCCD: June 9, 2003: 20 follow up visits completed
CCCD: September 8, 2003: 5 follow up visits completed
CCCD: December 8, 2003: 7 follow up visits completed
CCCD: March 15, 2004: 16 follow up visits completed
CCCD: June 15, 2004: 15 follow up visits completed
CCCD: September 15, 2004: 20 follow up visits completed

Deliverables: Records of farms planned, follow-up visits, and BMPs applied.

Task 3: Newsletter

| | | |
|-----------------------------|-----------------------|-----------------|
| Costs: Federal (\$0) | Non-federal (\$3,000) | Total (\$3,000) |
|-----------------------------|-----------------------|-----------------|

Subtask 3.1: Develop a quarterly newsletter for three years.

CCCD: April 15, 2001: In process of designing.

CCCD: July 15, 2001: 2 quarterly newsletters published and distributed
CCCD: September 15, 2001: 1 quarterly newsletter published and distributed
CCCD: December 15, 2001: 1 quarterly newsletter published and distributed
CCCD: March 15, 2002: 1 quarterly newsletter published and distributed
CCCD: June 10, 2002: 1 quarterly newsletter published and distributed
CCCD: September 9, 2002: 1 quarterly newsletter published and distributed
CCCD: December 10, 2002: 1 quarterly newsletter published and distributed
CCCD: March 10, 2003: 1 quarterly newsletter published and distributed
CCCD: June 9, 2003: 1 quarterly newsletter published and distributed
CCCD: September 8, 2003: 1 quarterly newsletter published and distributed
CCCD: December 8, 2003: 1 quarterly newsletter published and distributed
CCCD: March 15, 2004: Completed
CCCD: June 15, 2004: 1 quarterly newsletter published and distributed
CCCD: September 15, 2004: does not apply to this quarter

Subtask 3.2: Distribute newsletter to cooperators and other interested individuals and organizations.

CCCD: April 15, 2001: Mailing list compiled.
CCCD: July 15, 2001: 2 mailings completed.
CCCD: September 15, 2001: 1 mailing completed
CCCD: December 15, 2001: 1 mailing completed
CCCD: March 15, 2002: 1 mailing completed
CCCD: June 10, 2002: 1 mailing completed
CCCD: September 9, 2002: 1 mailing completed
CCCD: December 10, 2002: 1 mailing completed
CCCD: March 10, 2003: 1 mailing completed
CCCD: June 9, 2003: 1 mailing completed
CCCD: September 8, 2003: 1 mailing completed
CCCD: December 8, 2003: 1 mailing completed
CCCD: March 15, 2004: completed
CCCD: June 15, 2004: 1 mailing completed
CCCD: September 15, 2004: does not apply to this quarter

Deliverables: Copies of newsletters and mailing lists.

Task 4: County Unpaved Road Training Workshop

| | | |
|-----------------------------|---------------------|---------------|
| Costs: Federal (\$0) | Non-federal (\$200) | Total (\$200) |
|-----------------------------|---------------------|---------------|

Subtask 4.1: Make arrangement with AHTD to present one training workshop for all county equipment operators. The training will be an application of road BMPs.

CCCD: April 15, 2001: Does not apply this quarter.
CCCD: July 15, 2001: Does not apply this quarter.

CCCD: September 15, 2001: Does not apply to this quarter.
CCCD: December 15, 2001: Does not apply to this quarter.
CCCD: March 15, 2002: Does not apply to this quarter.
CCCD: June 10, 2002: Does not apply to this quarter.
CCCD: September 9, 2002: Does not apply to this quarter
CCCD: December 10, 2002: Does not apply to this quarter.
CCCD: March 10, 2003: Does not apply to this quarter.
CCCD: June 9, 2003: Does not apply to this quarter.
CCCD: September 8, 2003: Does not apply to this quarter.
CCCD: March 15, 2004: Does not apply to this quarter.
CCCD: June 15, 2004: Does not apply to this quarter.
CCCD: September 15, 2004: Does not apply to this quarter.

Deliverables: Record of attendance

Task 5: Cost Share

Costs: Federal (\$159,722) Non-federal (\$0) Total (\$159,722)

Subtask 5.1: Provide up to 40% cost share for application of Best Management Practices.

CCCD: April 15, 2001: Does not apply this quarter.
CCCD: July 15, 2001: Three applications submitted.
CCCD: September 15, 2001: Two applications submitted.
CCCD: December 15, 2001: Three applications submitted.
CCCD: March 11, 2002: One application submitted.
CCCD: June 10, 2002: One application submitted.
CCCD: September 9, 2002: No application submitted.
CCCD: December 10, 2002: 1 application submitted.
CCCD: March 10, 2003: 1 application submitted.
CCCD: June 9, 2003: 1 application submitted.
CCCD: September 8, 2003: 1 application submitted.
CCCD: December 8, 2003: 1 application submitted.
CCCD: March 15, 2004: 1 application submitted.
CCCD: June 15, 2004: 1 application submitted
CCCD: September 15, 2004: No application submitted.

Subtask 5.2: Cost Share Needs and Cost Estimates.

| Practice | 40% of Cost | Federal | Non-Federal |
|----------------------------|--------------------|----------------|--------------------|
| 1. Pasture Planting 1008A. | \$42,300 | \$42,300 | \$0 |
| 2. Pasture Renovation | \$43,200 | \$43,200 | \$0 |
| 3. Dairy Waste Systems | \$14,000 | \$14,000 | \$0 |

| | | | |
|--------------------------|-----------|-----------|-----|
| 4. Poultry Waste Systems | \$10,000 | \$10,000 | \$0 |
| 5. Fencing Ponds | \$2,000 | \$2,000 | \$0 |
| 6. Ponds 5 | \$3,000 | \$3,000 | \$0 |
| 7. Tanks w/pipeline | \$2,000 | \$2,000 | \$0 |
| 8. Tree Planting | \$43,222 | \$43,222 | \$0 |
| Total | \$159,722 | \$159,722 | \$0 |

CCCD: April 15, 2001: Does not apply this quarter.

CCCD: July 15, 2001: Estimates this quarter: Poultry waste system - \$7,440.00, Pasture planting and pond - \$2,085.28, Pasture Planting - \$1,416.50.

CCCD: September 15, 2001: Estimates this quarter: Pasture Planting, Tank, and Pond - \$3,444.60

CCCD: December 15, 2001: Estimates this quarter: Pasture Planting, Tank, and Pond - \$3,444.60

CCCD: March 15, 2002: Estimates this quarter: Tree Planting - \$2,895.20

CCCD: June 10, 2002: Estimates this quarter: Pond Construction - \$1,100.00

CCCD: September 9, 2002: Does not apply this quarter

CCCD: December 10, 2002: Does not apply this quarter

CCCD: March 10, 2003: Does not apply this quarter

CCCD: June 9, 2003: Does not apply this quarter

CCCD: September 8, 2003: Does not apply this quarter

CCCD: December 8, 2003: Does not apply this quarter

CCCD: March 15, 2004: Pasture Planting - \$533.80

CCCD: June 15, 2004: Does not apply this quarter

CCCD: September 15, 2004: Freezers - \$2,800.00

Deliverables: BMP database of practices installed and record of cost share payments.

Task 6: Equipment (application)

Costs: Federal (\$2,700) Non-federal (\$14,000) Total (\$16,700)

Subtask 6.1: Purchase 1 no-till pasture seeder.

CCCD: April 15, 2001: Completed. No need to make further entries.

Subtask 6.2: Make seeder available to Cooperators within the watershed.

CCCD: April 15, 2001: In process.

CCCD: July 15, 2001: Completed.

Subtask 6.3: Subsidize rental fee @ \$3.00/Acre.

CCCD: April 15, 2001: Does not apply this quarter.
CCCD: July 15, 2001: 40 Acres - \$ 120.00
CCCD: September 15, 2001: 60 Acres - \$180.00
CCCD: December 15, 2001: Does not apply this quarter
CCCD: March 15, 2002: Does not apply this quarter
CCCD: June 10, 2002: Does not apply this quarter
CCCD: September 9, 2002: Does not apply this quarter
CCCD: December 10, 2002: Does not apply this quarter
CCCD: March 10, 2003: Does not apply this quarter
CCCD: June 9, 2003: Does not apply this quarter
CCCD: September 8, 2003: Does not apply this quarter
CCCD: December 8, 2003: Does not apply this quarter
CCCD: March 15, 2004: Does not apply this quarter
CCCD: June 15, 2004: Does not apply this quarter
CCCD: September 15, 2004: 200 acres - \$600.00

Task 7 REPORTS

| | | |
|-----------------------------|-------------------|-------------|
| Costs: Federal (\$0) | Non-federal (\$0) | Total (\$0) |
|-----------------------------|-------------------|-------------|

Subtask 7.1 The Conway County Conservation District will make quarterly reports to ASWCC.

CCCD: April 15, 2001: Completed.
CCCD: July 15, 2001: Completed.
CCCD: September 15, 2001: Completed
CCCD: December 15, 2001: Completed
CCCD: March 15, 2002: Completed
CCCD: June 10, 2002: Completed
CCCD: September 9, 2002: Completed
CCCD: December 10, 2002: Completed
CCCD: March 10, 2003: Completed
CCCD: June 9, 2003: Completed
CCCD: September 8, 2003: Completed
CCCD: December 8, 2003: Completed
CCCD: March 15, 2004: Completed
CCCD: June 15, 2004: Completed
CCCD: September 15, 2004: Completed

Subtask 7.2 The CCCD will make annual project evaluation reports to ASWCC.

CCCD: April 15, 2001: Does not apply to this quarter.
CCCD: July 15, 2001: Does not apply to this quarter.
CCCD: September 15, 2001: Does not apply to this quarter.
CCCD: December 15, 2001: Does not apply to this quarter.

CCCD: March 15, 2002: Does not apply to this quarter.
CCCD: June 10, 2002: Completed
CCCD: September 9, 2002: Does not apply this quarter
CCCD: December 10, 2002: Does not apply this quarter
CCCD: March 10, 2003: Does not apply this quarter
CCCD: June 9, 2003: Completed
CCCD: September 8, 2003: Does not apply this quarter
CCCD: December 8, 2003: Does not apply this quarter
CCCD: March 15, 2004: Does not apply this quarter
CCCD: June 15, 2004: Does not apply this quarter
CCCD: September 15, 2004: Completed

Subtask 7.3 The CCCD will make a final report.

CCCD: April 15, 2001: Does not apply to this quarter.
CCCD: July 15, 2001: Does not apply to this quarter.
CCCD: September 15, 2001: Does not apply to this quarter.
CCCD: December 15, 2001: Does not apply to this quarter.
CCCD: March 15, 2002: Does not apply to this quarter
CCCD: June 10, 2002: Does not apply to this quarter
CCCD: September 9, 2002: Does not apply to this quarter
CCCD: December 10, 2002: Does not apply to this quarter
CCCD: March 10, 2003: Does not apply to this quarter
CCCD: June 9, 2003: Does not apply to this quarter
CCCD: September 8, 2003: Does not apply this quarter
CCCD: December 8, 2003: Does not apply this quarter
CCCD: March 15, 2004: Does not apply this quarter
CCCD: June 15, 2004: Does not apply this quarter
CCCD: September 15, 2004: Does not apply this quarter

Deliverables----Records of purchase, and of rentals.

Task 8 OTHER ACTIVITIES

CCCD: July 15, 2001: Secretarial support was provided for the quarter.
CCCD: September 15, 2001: Secretarial support was provided for the quarter.
CCCD: December 15, 2001: Secretarial support was provided for the quarter.
CCCD: March 15, 2002: Secretarial support was provided for the quarter.
CCCD: June 10, 2002: Secretarial support was provided for the quarter.
CCCD: September 9, 2002: Secretarial support was provided for the quarter.
CCCD: December 10, 2002: Secretarial support was provided for the quarter.
CCCD: March 10, 2003: Secretarial support was provided for the quarter.
CCCD: June 9, 2003: Secretarial support was provided for the quarter.
CCCD: September 8, 2003: Secretarial support was provided for the quarter.

CCCD: December 8, 2003: Secretarial support was provided for the quarter.

CCCD: March 15, 2004: Secretarial support was provided for the quarter.

CCCD: June 15, 2004: Secretarial support was provided for the quarter.

CCCD: September 15, 2004: Secretarial support was provided for the quarter.