# SECTION 319 NONPOINT POLLUTION CONTROL PROGRAM WATERSHED PROJECT FINAL REPORT

#### LAKE CAMPBELL/BATTLE CREEK WATERSHED PROJECT

By

## **BROOKINGS CONSERVATION DISTRICT**

January, 2002

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

Grant # N9998185-95

recreation waters, wildlife propagation, and livestock watering. The project goal was met by ensuring realization of the assigned beneficial uses.

Lake Campbell is located in Brookings county with the watershed encompassing three counties of Brookings, Lake, and Moody. The Lake Campbell/Battle Creek watershed encompasses 112,560 acres, of which 91% is agriculture involved in crop and livestock production. The lake itself is about 800 acres and has an average depth of 5 feet with a maximum depth of 10 to 11 feet. Located along the shoreline of the lake are over 85 year-round homes and cabins.

The project has received funding from the SD Conservation Commission (\$89,500); SD Consolidated Water Facilities Construction Program (\$40,000, shoreline stabilization and animal waste management system); and EPA 319 (\$247,365).

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## Project Goals & Accomplishments

Objective 1: Reduce the average nitrogen, phosphorous and sediment inflows from the watershed.

Task 1: Create multiple use wetlands on tributaries to trap sediments and benefit wildlife.

Accomplishments: Created 1 wetland

Task 2: Install Best Management Practices in the watershed to reduce nutrients and sediment loading from identified critical areas.

Accomplishments: Constructed 1 animal waste storage unit, and 1 animal waste innovative design (diversion).

3,800 acres of no-till enrolled

1,500 acres of conservation tillage

5 acres of trees planted

3 grazing systems installed w/ dugouts

480 acres of integrated crop management

520 acres of critical area seeding

19,450 linear feet of grass waterways constructed

1 streambank stabilization project (8,000 linear feet of riparian buffer, including 250 linear feet of streambank stabilization using rock riprap).

Objective 2: Reduce sediment loading from the shoreline.

Task 3: Protect and stabilize the shoreline of Lake Campbell.

Accomplishment: 2,400 linear feet of shoreline stabilized

Objective 3: Implement an Information and Education (I & E) Program for the watershed residents.

Task 4: Initiate a pollution prevention program to ensure nutrients and pesticides used near the shoreline do not enter the lake.

Accomplishments: Mailed brochures and newsletters and held training sessions for residents.

Approximately 455 postcards, 600 newsletters, and 300 brochures were mailed to lakeshore owners (100 lakeshore residents). Producers were mailed a 1-page fact sheet on the project, and 500 postcards were mailed out during a four-year period. Newspaper articles were done periodically, and public meetings for watershed residents were held throughout the project duration.

Task 5: Landowner Contact

Accomplishments: Watershed fact bulletins and information postcards were mailed to producers in the watershed.

Task 6: Public Information Campaign

Accomplishments: Published news articles in local papers about the project and available programs.

## **Project Sponsors & Supporting Agencies**

**Brookings Conservation District** Moody Conservation District Lake Conservation District Medary Township (Brookings Co.) **Brookings County Commission** East Dakota Water Development District Nunda Fire Department Cooperative Extension Service Lake Campbell Improvement Association South Dakota Conservation Commission South Dakota Department of Environment and Natural Resources South Dakota Water Resources Institute United States Fish and Wildlife Service South Dakota Game, Fish and Parks Natural Resource Conservation Service Watershed residents and producers

## Final Line Item Expense for Lake Campbell/Battle Creek Watershed Project

YEAR		94	95	96	97	98	99	94-99	Budget	Actual
Wages	\$	3,553.77	\$ 18,937.15	\$ 12,624.68	\$ 8,854.99	\$ 7,976.13	\$ 1,417.75		\$ 75,990.00	\$ 53,364.47
Payroll Expenses	\$	62.70	\$ 1,279.82	\$ 324.62	\$ 565.22	\$ 498.75	\$ 3,324.32		\$ 11,399.00	\$ 6,055.43
Un-emp			\$ 1,502.73	\$ 311.83	\$ 547.41	\$ 479.27			(Payroll)	\$ 2,841.24
Administration			\$ 76.00	\$ 21.46					(Wages)	\$ 97.46
Office Supplies	\$	9.85	\$ 798.26	\$ 262.40	\$ 234.31				\$ 5,500.00	\$ 1,304.82
1 & E	\$	17.48	\$ 734.33	\$ 314.07	\$ 270.63	\$ 491.92	\$ 4,557.42		\$ 2,840.00	\$ 6,385.85
Travel			\$ 282.40	\$ 90.00	\$ 224.21	\$ 223.27	\$ 153.88		\$ 1,000.00	\$ 973.76
Advertising	\$	212.50	\$ 108.70	\$ 25.14					(I&E)	\$ 346.34
Ag Wastesystems			\$ 4,000.00	\$ 5,817.50	\$ 12,706.55	\$ 1,001.57			\$ 114,900.00	\$ 23,525.62
ICM			\$ 771.00	\$ 3,162.00	\$ 3,238.06				\$ 12,000.00	\$ 7,171.06
Conservation Tillage				\$ 8,065.40	\$ 2,140.00	\$ 612.00			\$ 15,000.00	\$ 10,817.40
No-Till			\$ 2,425.00	\$ 47,798.60	\$ 2,289.38				\$ 5,000.00	\$ 52,512.98
Streambank Stabilization (R	iparia	an)			\$ 7,775.54				\$ -	\$ 7,775.54
Shoreline Stabilization			\$ 43,638.30	\$ 138,351.38	\$ 58,830.90	\$ 11,552.83			\$ 137,000.00	\$ 252,373.41
Grass waterways			\$ 997.25	\$ 4,255.81	\$ 3,062.18	\$ 7,098.46			\$ 7,500.00	\$ 15,413.70
Critical Area seeding				\$ 486.56	\$ 946.43	\$ 97.13	1		\$ 22,500.00	\$ 1,530.12
Grazing expense				\$ 8,060.32					\$ 5,300.00	\$ 8,060.32
Sanitary Sewer				\$ 10,000.00					\$ -	\$ 10,000.00
Alternative Water/Dugout				\$ 1,350.00	\$ 9,967.20				\$ 11,100.00	\$ 11,317.20
Tree planting				\$ 2,729.48	\$ 951.58				\$ -	\$ 3,681.06
Water Sampling					\$ 300.39				\$ 3,686.00	\$ 300.39
Wetland Restoration									\$ 36,360.00	
Audit									\$ 1,000.00	\$ -
In-Kind Match								\$ 128,721.78		\$ 128,721.78
TOTAL	\$	3,856.30	\$ 75,550.94	\$ 244,051.25	\$ 112,904.98	\$ 30,031.33	\$ 9,453.37	\$ 128,721.78	\$ 468,075.00	\$ 604,569.95