

STAFF & BEAVER WATER QUALITY PROJECT

Project Location:

The Staff and Beaver Creeks are 2 tributaries of the Upper Iowa River (UIR) located in northwestern Howard County Iowa. The UIR watershed is a State of Iowa and EPA Priority Watershed and this water quality project will seek to improve the water quality of Staff and Beaver Creeks over a period of 3 to 5 years. The project area also includes Upper Iowa River Corridor.

Howard SWCD Receives WPF & WSPF Funding in March 2005

The Howard County Soil and Water Conservation District, DSC/IDALS and the USDA/NRCS Office were pleased to recently receive funding for the **Staff & Beaver Water Quality Project**. Over a period of three to five years, the project will seek to improve the water quality of these two Upper Iowa River (UIR) tributaries located in northern Howard County. The Water Protection Fund (WPF) dollars stem from annual REAP allocations approved by State Legislators. The Division of Soil Conservation (DSC) administers funding for projects. The Watershed Protection Fund (WSPF) dollars stem from a portion the gaming revenue collected in Iowa and is also administered by DSC to water quality projects and educational campaigns gnes across the state.

Project Coordinator: Staff & Beaver Creek Water Quality

Neil Shaffer was hired as the Project Coordinator in January 06. Neil has been a technician for the Howard Soil & Waters Conservation District since September 2001. He will work one on one with landowners and operators while conducting an extensive information and educational campaign to increase public awareness of water quality issues. Neil works out of the USDA/NRCS Howard SWCD Field Office located in Cresco, Iowa. Neil can be contacted at 563-547-3040 with questions and/or concerns.

A Great Opportunity to Make a Difference

Water quality projects like this one, offer cooperating producers incentive payments and high cost share rates to adopt practices that improve water quality. An informational and educational campaign supported by incentive payments and high cost share rates (75%) for Best Management Practices (BMP's), will be the tools available to make the necessary nutrient and sediment reductions, ultimately improving the water quality of these two streams. Water quality projects often result in operators making long term cultural changes in their operations. We live in an age of increasing regulation and environmental awareness. New government programs like the Conservation Security Program (CSP) focus on financially rewarding landowners and operators for adopting high standards of conservation in their operations.

Contact us at:

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The Staff/Beaver Water Quality Project is supported in part or in total by the Iowa Department of Agriculture and Land Stewardship, Division of Soil Conservation, through Water Protection Fund (WPF), Watershed Protection Fund (WSPF) and by the Iowa Department of Natural Resources through a grant from the U.S. Environmental Protection Agency under the Federal Non-Point Source Management Program (Section 319 of the Clean Water Act). Technical assistance is provided by the U.S. Department of Agriculture, Natural Resources Conservation Service. All programs and services are offered on a nondiscriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status, or handicap. Project sponsors and Cooperators include: DSC / IDALS, IADNR, USDA / NRCS, Howard SWCD, UIRWA, RC&D Postville, FSA, Agri Drain Corp., UIR Pheasants Forever, Lime Springs Fish & Game Club, IOWATER, and Riceville FFA.

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Project Background Information

The project area consists of approximately 41,328 acres from Staff and Beaver Creeks and the Upper Iowa River corridor. The featured public use area in the watershed is Hayden Prairie. Hayden Prairie was acquired by the state in 1945 and is a world-renowned 120 acre remnant of Iowa's historic tall grass prairie. Hayden Prairie has numerous threatened and endangered species and is often toured by local high school and elementary students.

Water quality monitoring of the UIR tributaries has been ongoing since 1999. Water quality data indicates that Staff and Beaver Creeks are contributing excessive amounts of nutrients specifically nitrates to the UIR. Excessive sediment delivery is also a concern in the watersheds. 89% of the acres in the watershed are intensively row cropped in a corn / soybean rotation.

A variety of factors are likely to be contributing to the water quality problems on Staff and Beaver Creeks including:

- **Loss of wetlands over time?** Historically wetlands absorbed nutrients and surface water in these watersheds. 25% of the soils are hydria in the project area.
- **Extensive pattern tiling?** Timing of nutrient applications and recent heavy rains. Nutrients leached from the soil are efficiently delivered by tile systems.
- **An increase in swine facilities / livestock production.**
- **Excessive tillage.**
- **Livestock access to stream corridors.**

In summary: There are many factors that are contributing to the problem.

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The Conservation Security Program (CSP) : “Reward the Best and Motivate the Rest”

CSP is offered to select watersheds across the nation and designed to financially reward landowners and operators that have incorporated soil conservation, water quality, nutrient management and wildlife habitat practices in their operations. The Conservation Security Program has not yet arrived in the Upper Iowa River Watershed and this is a prime opportunity for producers to evaluate their operations and adopt the necessary measures and practices that will allow you to participate in the CSP program while maximizing your potential payments.

CSP Interest Peaks in Howard County: The Wapsipinicon and Turkey River Sign Up

CSP, the Conservation Security Program has drawn an incredible amount of interest as many producers offer their operations for program enrollment. The responses from producers having completed the interview process have been very positive. As results and numbers for Howard County are released in the near future, they will be reported in newsletters and articles. The Project Coordinator in cooperation with NRCS and Howard SWCD staff will hold a public meeting this summer to show you how to maximize your contract payments when CSP arrives in the Upper Iowa Watershed in the near future.

Some Key CSP Considerations

- Diligent record keeping. Receipts of nutrient and chemical applications on a field by field basis separated by tract. Soil testing in 10 acre plots. An 80 acre field needs a minimum of 8 samples mapped.
- Minimize tillage especially on bean stubble. To be eligible for Tier 3 enrollment you must have at least 50% residue cover on crop fields over the winter months.
- Adopt a nutrient management plan even if you do not have livestock. Be sure you are not over-applying N-P-K or you will not be eligible. Take credit for nutrients in livestock manure applications no matter how small or large your operation may be. You will be required to list actual pounds of N-P-K and chemicals applied per acre.
- Construct and seed waterways where they are needed. The scarring caused by gully erosion is clearly visible on 2005 and 2006 infrared aerial imagery used in evaluating each tract offered for CSP.
- Buffer streams, drainages and wetland areas. Wildlife habitat is the key to Tier 3 enrollment. Large non-crop areas greater than 10 acres are not eligible as of right now. Although CRP acres are not eligible, the acres of habitat will make the difference. A minimum of 3% of the total acres in a field must have wildlife habitat to be eligible for Tier 3 enrollment. Cover could be in the form of waterways, filter strips, field borders, headlands or food plots. The EQIP (Environmental Quality Incentive Program) and the Continuous CRP Programs can help with habitat establishment.

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State of Iowa Fiscal Year 2007 Water Quality Practices Available (July 1, 2006 – June 31, 2007)

Waterway Establishment

This was the most requested practice by survey responses. Project dollars will be used to reshape or rebuild non-functional waterways that are not eligible for CRP. This practice will be offered at 75% cost share utilizing project dollars. Waterways must be constructed to NRCS specifications and a 20 year maintenance agreement follows.

Late Spring Nitrogen Testing (LSNT)

Late spring nitrogen testing is conducted when corn reaches a height of 6-12" tall. \$15 per soil test. Soil is sampled at a depth of 12". The LSNT is a component of most nutrient management plans and with today's fertilizer prices you may increase your profitability while benefiting the environment. This is for producers not currently enrolled in nutrient management.

No-till & Strip Till

\$30 / acre. A one-time payment with a five year commitment for non-compliance and new no-till acres. There is a 500 acre cap per producer with this practice.

Nutrient Management

\$6 / acre for NRCS (590) nutrient management plans. Producers must meet 3 additional Howard County NMP / EQIP component criteria. This practice is for producers not currently practicing nutrient management. 500 acre cap per producer.

Terracing

Terrace projects will utilize EQIP funding for 50% of the cost if the producer receives an EQIP contract. The producer can receive an additional 25% project cost share for a total of 75%, when terrace tile water can be surfaced into a non-crop area, wetland, filter strip or waterway where sediment and nutrient reductions will occur on site as opposed to instant tile system delivery.

Wetland Development

75% cost share for constructing non CRP wetlands in critical areas to intercept surface and tile water and serve as measurable water sampling and de-nitrification sites in the watershed. A great way to increase wildlife habitat and diversity.

Fall Stalk Testing

Project incentive payments of \$15 per test will be available to increase awareness of the amount of nitrogen utilized by corn during the growing season. The fall stalk test is often a component of today's nutrient management planning. This is for producers not currently enrolled in nutrient management.