

Notice: This final report is authorized by ss. 281.65 and 281.66, Wis. Stats., and chs. NR 153 and NR 155, Wis. Adm. Code. Personally identifiable information collected will be used for program administration and may be made available to requesters as required under Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

Instructions: The grant agreement requires grantees to submit a Final Report 60 days after the end date listed in the grant agreement. This Final Report form must be used in conjunction with the "FINAL REPORT INSTRUCTIONS." The instructions detail how to complete and submit the report to DNR.

1. Grant Type

- Agricultural - Targeted Runoff Management Grant
 Urban - Targeted Runoff Management Grant
 Construction - Urban Nonpoint Source & Storm Water Management Grant
 Planning - Urban Nonpoint Source & Storm Water Management Grant

2. Grantee & Project Information

| | |
|---|---|
| Project Name Wehr Nature Center Drainage Channel-North | Grant Number USC-SE03-41000-04B |
| Governmental Unit Name Milwaukee County | Governmental Unit Type (city, village, town, etc.) County |
| Watershed Name Root River | Watershed Code SE03 |
| DNR Water Management Unit (River System) Name Southeast | Water Body Identification Code (WBIC) (if applicable) - |

s. 303(d) Waterbody? Yes No

What pollutant(s) were addressed by the project?

sediment

For **each** project site location provide the following: (attach additional sheets if necessary)

| Location: | | A | B | C | D | E |
|--|-----------------|---|---|---|---|---|
| Minor Civil Division Name | | Franklin | | | | |
| PLSS | Town | 5 | | | | |
| | Range | 21 | | | | |
| | Section | 5 | | | | |
| | Quarter | NE | | | | |
| | Quarter-Quarter | SW | | | | |
| Latitude | | 42°55'27" | | | | |
| Longitude | | 88°2'16" | | | | |
| Property Owner(s) | Name | Milwaukee County | | | | |
| | Mailing address | 2711 W. Wells St. #213 Milwaukee, WI 53208 | | | | |
| Site address <i>(if different than mailing address)</i> | | 9701 W. College Ave., Franklin, WI 53132 | | | | |

3. Summary of Results

A. Performance Standards and Prohibitions and Other Water Resources Management Priorities

For grants issued in calendar year 2006 or later, complete Tables A and B (following) consistent with the entries on your grant application. For grants issued prior to calendar year 2006, complete Tables A and B, *to the best of your knowledge*, consistent with the entries on your grant application.

Table A. Performance Standards and Prohibitions (per ch. NR 151, Wis. Adm. Code, effective October 1, 2002)

| Performance Standard or Prohibition | Units of Measure | Quantity | Measurement Method Used |
|---|---------------------------------|----------|-------------------------|
| Sheet, rill and wind erosion | Acres meeting T | | |
| Manure Storage Facilities: New Construction/Alterations | Number of facilities | | |
| | Number of animal units | | |
| Manure Storage Facilities: Closure | Number of facilities | | |
| Manure Storage Facilities: Failing/Leaking Facilities | Number of facilities | | |
| | Number of animal units | | |
| Clean Water Diversions in WQMA | Pollutant load reduction | | |
| | Number of farms with diversions | | |
| | Number animal units | | |
| Nutrient Management on Agricultural Land | Acres planned | | |
| Prohibition: Manure Storage Overflow | Number of facilities | | |
| | Number of animal units | | |
| Prohibition: Unconfined Manure Pile in WQMA | Number of farms | | |
| Prohibition: Direct Runoff From Feedlot/Stored Manure | Pollutant load reduction | | |
| | Number of facilities | | |
| | Number of animal units | | |
| Prohibition: Unlimited Livestock Access | Feet of bank protected | | |
| | Number of farms | | |
| Urban: 20-40% Reduction in Total Suspended Solids (TSS) | Pounds TSS reduced | | |
| | % TSS reduction | | |

Table B. Other Water Resources Management Priorities

| I. Agricultural Areas | Units of Measure | Quantity | Measurement Method Used |
|--|----------------------------------|--------------|--------------------------------|
| Buffers | Feet of bank protected | | |
| | Number of farms | | |
| Streambank | Tons of bank erosion reduced | | |
| | Feet of bank protected | | |
| Other (specify) | | | |
| II. Developed Urban Areas | Units of Measure | Quantity | Measurement Method Used |
| Urban: 20-40% Reduction in TSS | Pounds TSS reduced | | |
| | % TSS reduction | | |
| Infiltration | % Pre-development stay-on volume | | |
| | Cubic feet stay-on volume | | |
| Peak flow discharge | Change in cubic feet per second | | |
| Protective areas | Feet of bank protected | | |
| Fueling & maintenance areas | Oily sheen presence | | |
| Streambank | Tons of bank erosion reduced | 1,200 | Visual Inspection |
| | Feet of bank protected | 750 | Visual Inspection/Count |
| Other (specify) | | | |
| III. Planning | Units of Measure | Quantity | Measurement Method Used |
| Quantify how implementation of the planning project decreased storm water impacts on state waters (<i>i.e.</i> , storm water plan, I & E plan, <i>etc.</i>) | Municipalities planned for | | |
| | Acres planned for | | |
| Document/track progress made in implementing the planning product (<i>i.e.</i> , ordinance, utility district evaluation/formation, storm water management plan information & education, <i>etc.</i>) | Municipalities planned for | | |
| | Acres planned for | | |
| Other (specify) | | | |

B. Project Results Narrative

1a. The north drainage ditch at the Wehr Nature Center was improperly sized for the amount of stormwater it actually received. As a result, bank erosion was creating a lot of sediment loss downstream. Gabion control structures reduced the peak flow discharge and lining the channels with rip rap reduced the streambank erosion.

1b. Success of the project was measured by post construction visual inspection per our grant application. The streambanks are no longer eroding and are no longer delivering excess sediment downstream. An additional benefit is that the health of aquatic and terrestrial plant and animal communities impacted by displaced soil is being restored. In addition, the Center received a Root Pike WIN grant to plant native trees and shrubs along the banks of the channels. This work is complete. The channel is visually inspected periodically by Wehr Nature Center personnel for signs of erosion and is monitored by volunteers biweekly for invasive species.

2. During the project signage was placed at the construction site to describe each stage of the project. Signage was changed as the work progressed. In addition, at the Center itself was an exhibit with pictures and information on the project. The project was also featured in the Wehr Nature Center newsletters.

3. Milwaukee County does not have an erosion control ordinance. Because Milwaukee County is completely incorporated, Milwaukee County follows Stormwater and Erosion Control Ordinances of the applicable municipality. This is stated in Milwaukee County's Stormwater Permit effective December 15, 2006.

Milwaukee County is also committed through its Land & Water Resource Management Plan to improve water quality through the reduction of sediment and nutrient delivery to surface waters within Milwaukee County.

Milwaukee County is currently developing a public education and participation effort as required by the County's stormwater permit.

4. Satisfaction of Notice Requirements (if applicable)

If cost sharing for this project was offered under a formal notice to achieve compliance with performance standards or prohibitions, provide information for each notice in the table below.

| Notice Type | Issue Date | Notice Information | | Notice Satisfaction Information | | |
|-------------|------------|--------------------|-----------|---------------------------------|--------------------------|------------------|
| | | From (Name) | To (Name) | Satisfied? | | Date Letter Sent |
| | | | | Yes | No | |
| NA | | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| | | | | <input type="checkbox"/> | <input type="checkbox"/> | |

5. Summary of Project Challenges

Areas of surrounding development discharge storm runoff to the Wehr Nature Center ditches. These ditches were not sized properly for the amount of water they were receiving during heavy rainfalls. Designing a channel that could slow the water velocity and handle the peak runoff without overflowing the banks was the biggest challenge.

6. Additional Information about the Project (optional)

7. Planning Product (UNPS&SW - Planning Projects only)

Check here if a printed copy of the planning product (e.g., plans, ordinances, analyses) was sent to your DNR Regional Nonpoint Source Coordinator.

| | | |
|------------------|-------------------|-----------------------------------|
| Name of Document | Date(s) effective | Date Submitted to NPS Coordinator |
|------------------|-------------------|-----------------------------------|

8. Grantee Certification:

Check here to certify that, to the best of your knowledge, the information contained in this report is correct and true.

Type or print Name and Title of Authorized Representative certifying here.

Greg High, P.E., Director, DTPW-A&E&ES

Signature of Authorized Representative



Date

9/25/07