

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 Norwegian Bay Lake Adjacent Wetland Project	Grant Number TRC-WR03-70000-05 A
Governmental Unit Name Winnebago County Land & Water Conservation Department	Governmental Unit Type (city, village, town, etc.) County
Watershed Name Walla Walla and Alder Creeks	Watershed Code WR03-112
DNR Water Management Unit (River System) Name Wolf River (WR) 24	Water Body Identification Code (WBIC) (if applicable)

s. 303(d) Waterbody? Yes No

What pollutant(s) were addressed by the project?

Sediment & Phosphorus

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

Location:		A	B	C	D	E
Minor Civil Division Name		Wolf River				
PLSS	Town	20N				
	Range	14E				
	Section	27 & 28				
	Quarter					
	Quarter-Quarter					
Latitude		44 deg. 10' 11"				
Longitude		88 deg. 49' 18"				
Property Owner(s)	Name	Barbara J. Lenz	Norwegian Bay Properties LLC – Dennis Lamers			
	Mailing address	7461 Richter Lane Larsen, WI 54957	1445 McMahan Dr. Neenah, WI 54956			
Site address (if different than mailing address)		N/A	N/A			

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	1,553	Winnebago County Shoreline/Streambank Erosion Model
	Feet of bank protected	4,600	GPS Survey
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		
	Feet of bank protected		
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

Project Accomplishments:

The Norwegian Bay Lake Adjacent Wetland was experiencing erosion at an alarming rate of over 1acre of wetland loss per year. In order to protect this fragile wetland complex an offshore rock structure design was engineered to accomplish this. The bid packages were sent out to a number of qualified contractors in the local area. We had the bids come in lower than expected, which will result in us being under budget for the total grant amount. The ice conditions were favorable and construction of the rock structure began in February of 2005. The ice conditions were favorable for approximately two weeks. The weather then began to warm up causing the ice conditions to deteriorate. This caused the Norwegian Bay Lake Adjacent Wetland Project off-shore structure to be only partially completed in March of 2005. After two more additional winters passing we finally had a winter with the colder temperatures needed to establish adequate ice conditions. Construction of the the project started again in February of 2008. In approximately one week the contractor completed the job. This was a huge accomplishment for the contractor, Winnebago County LWCD, and the environment.

By installing the Norwegian Bay project we are reducing the sediment delivery by 1,553 tons and the phosphorus loading by 2,330 lbs. annually (Winnebago County Shoreline erosion Model). In summer of 2008 an evaluation of the project was done by boat. You could already see the quiet water behind the structure and new emergent and submergent wetland plants. The water was remarkably clear on the inside of the structure compared to the turbid water on the outside. The project is being monitored for the rock structure integrity and settlement along with the wetland vegetation response. The once eroding shoreline is now becoming vegetated and is no longer eroding. There will also be monitoring of the improvement of the presence of fish and wildlife in the future.

Information and education:

To date there have been several presentations given on the installation and benefits of these types of projects. There also have been group visits to the site showing first hand the positive results.

Implementation and enforcement activities:

Stormwater and Erosion Control Ordinance – Effective in 2003

Livestock Waste Management Ordinance – Revised in 2000



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 Information				Notice Satisfaction Information		
Notice Type	Issue Date	From (Name)	To (Name)	Satisfied?		Date Letter Sent
				Yes	No	
				<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

Even though the project was a huge success, we did have some obstacles along the way. The first obstacle was securing the permits for the project. Because of the size and complexity of the job it took longer than expected to secure the needed permits. Fortunately, the permits were issued to allow the project to begin. We typically have a two-week window with adequate ice thickness, so for future jobs I will start the permit process well in advance to ensure permits are secured ahead of time.

The other challenges we always face with these types of projects are the ice conditions. This project was even more challenging than others because we had several springs present at the site. Along with that, the climate seems to be changing, which has resulted in warmer winters. These reasons made it very difficult to get the proper ice thickness required to support the trucks. This is why it took several winters to finally complete the project. The hired contractor went above and beyond to get the job done. They had several pieces of equipment break through which slowed the job down. In the end, the project was installed according to design specifications and all parties involved were happy to finally finish it.

The Runoff Management Program has been a great financial tool for us to accomplish our goals of protecting the resource. Without the financial assistance from the Targeted Runoff Management (TRM) Grants, the Norwegian Bay Wetland would be continuing to disappear and erode annually. Because of the recent changes in the scoring of the TRM Grants these types of projects may not be funded. There are still many areas of wetlands that need protection, so I hope the DNR reconsiders how these types of projects will be ranked on future TRM applications.



6. Additional Information about the Project (optional)

These large lake adjacent wetlands are some of the most important remaining marshes in the Winnebago System. They provide a haven for rich wetland flora and fauna. These wetlands are also very important for flood storage and they also provide filtering for the large watersheds draining to them. The erosion rates of these wetlands are astonishing and can be acres and acres of wetlands lost annually. This contributes large amount of sediment and phosphorus to the lakes, which causes pollution and creates algae blooms. The Winnebago System is also a drinking supply for over 200,000 people. By protecting these wetlands we are helping address all of the above concerns.

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
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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.

Chad M. Casper

Signature of Authorized Representative

Date
