

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 LBR Conservation Project	Grant Number TRC-BT07-06000-04E
Governmental Unit Name Buffalo County	Governmental Unit Type (city, village, town, etc.) County
Watershed Name Lower Buffalo River	Watershed Code BT07-250
DNR Water Management Unit (River System) Name Buffalo River	Water Body Identification Code (WBIC) (if applicable) n/a

s. 303(d) Waterbody? ☐ Yes ☒ No

What pollutant(s) were addressed by the project?

unspecified nonpoint sources of pollution

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

Location:		A	B	C	D	E
Minor Civil Division Name		Canton - Site #1	Canton - Site #2	Canton - Site #3	Mondovi - Site #4	Mondovi - Site #5
PLSS	Town	24 N	24 N	24 N	24 N	24 N
	Range	12W	12W	12 W	11 W	11 W
	Section	36	36	36	18	32
	Quarter	SW	SE	SW	SW	NW SW
	Quarter-Quarter	NW	SE	NW & SW	SW	NW & SE NE
Latitude		44-31'-4.5" N	44-31'.5" N	44-30'-40.0" N	44-33'-11.8" N	44-31'-20.1" N
Longitude		91-47'-27.1" W	91-47'-22.6" W	91-46-24.8W	91-46'-7.0" W	91-44'-44.3" W
Property Owner(s)	Name	Stuart Hagen	Stuart Hagen	Stuart Hagen	Mark Denk	John Rud
	Mailing address	S751 German Valley Road, Mondovi, WI 54755	S751 German Valley Road, Mondovi, WI 54755	S751 German Valley Road, Mondovi, WI 54755	S298 Steele Valley Road, Mondovi, WI 54755	W938 County Road B, Mondovi, WI 54755
Site address (if different than mailing address)		same	same	same	same	same

Location		Site #6	Site #7	Site #8	Site #9	Site #10
Minor Civil Division Name		Modena	Modena	Modena	Modena	Gilmanton
PLSS	Town	23 N	23 N	23 N	23 N	23 N
	Range	12 W	12 W	12 W	12 W	11 W
	Section	15	1	1	25	5
	Quarter	NE	NW of SE and SW of SW	SE	SW	SW
	Quarter - Quarter	SE	see above	SE	NW	SE
Latitude		44o - 28' 31" N	44o - 29' 43" N		44o - 26' 31" N	44o - 29' 47.6" N
Longitude		91o - 48' 45" W	91o - 46' 45" W		91o - 47' 24" W	91o - 44' 27.4" W
Property Owner(s)	Name	Shirley Evans	Modena Farms	Modena Farms	Lee Gehrke	Jim Marsolek
	Mailing Address	S841 County Road J, Nelson, WI 54756	N303 Highway 54, Pittsville, WI 54466	N303 Highway 54, Pittsville, WI 54467	S108 Rockwell Road, Alma, WI 54610	471 W. Riverside, Mondovi, WI 54755
Site address (if different than mailing address)		same	acreage only, no address	acreage only, no address	same	acreage, no address

Location		Site #11	Site #12	Site #13	Site #14	Site #15
Minor Civil Division Name		Gilmanton	Gilmanton	Gilmanton	Gilmanton	Dover
PLSS	Town	23 N	23 N	23 N	23 N	23 N
	Range	11 W	11 W	11 W	11 W	10 W
	Section	4	18	20	29	15
	Quarter	NE	NW	SE	NW	SE
	Quarter - Quarter	SW	SW	SE	NW	NE
Latitude		44o - 30' 16.1" N	44o - 28' 23" N	44o - 27' 7.8" N	44o - 27' .7" N	44o - 28' 12" N
Longitude		91o - 43' 9.5" W	91o - 46' 10" W	91o - 43' 58.5" W	91o - 45' 58.9" W	91o - 34' 28" W
Property Owner(s)	Name	Steve Stamm	Gene Fedie	Steiner Bros. LLC	Fred Davie	Loren Julson
	Mailing Address	S39 Deer Run Road, Mondovi, WI 54755	W1186 County Road D, Mondovi, WI 54755	W1010 County Road NN, Mondovi, WI 54755	8 Paget Road, Madison, WI 53703	214 N. Harrison Street, Mondovi, WI 54755
Site address (if different than mailing address)		unknown	same	same	acreage only, no address	S879 Julson Road, Mondovi, WI 54755

Location		Site #16	Site #17			
Minor Civil Division Name		Dover	Naples			
PLSS	Town	23 N	24 N			
	Range	10 W	10 W			
	Section	34	33			
	Quarter	SE	SW			
	Quarter - Quarter	SE	SE			
Latitude		44o - 25' 25.4" N	44o - 30' 41.5" N			
Longitude		91o - 34' 13.6" W	91o - 36' 1.4" W			
Property Owner(s)	Name	David Fredrickson	John Hovey			
	Mailing Address	S1194 Cooke Valley Road, Independence, WI	S590 Hovey Valley Road, Mondovi, WI 54755			
Site address (if different than mailing address)		same	same			

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	10	RUSLE 2
Manure Storage Facilities: New Construction/Alterations	Number of facilities	2	count
	Number of animal units	253	AU Calculation Worksheet
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	47	BARNY
	Number of facilities	2	Count
	Number of animal units	136	AU Calculation Worksheet
Prohibition: Unlimited Livestock Access	Feet of bank protected	61	(in rods) count
	Number of farms	1	count
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	240	LF - count
Other (specify) (Peak Flow Discharge)	change in cubic feet per second {CFS (reduction)}	136	Wisconsin Engineering
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.e., storm water plan, I & E plan, etc.)	Municipalities planned for		
	Acres planned for		
Document/track progress made in implementing the planning product (i.e., ordinance, utility district evaluation/formation, storm water management plan information & education, etc.)	Municipalities planned for		
	Acres planned for		
Other (specify)			

B. Project Results Narrative

This project was very successful. We completed a variety of conservation practices, some which reduced upland erosion, streambank erosion, phosphorus discharge from feedlot and eliminated winter spreading on two sites by installing manure storage facilities. The purpose of the grant was to provide cost share funds to 10 landowners to resolve nonpoint sources of pollution through the construction of a variety of conservation practices. Continued construction of practices such as these and proper maintenance of the current practices installed will continue to improve water quality in the Buffalo River.

The grant provided cost share funds to complete 10 acres of waterway systems {NR 154.04(39)}, 6 grade stabilization structures {NR 154.04(14)}, 244 LF of streambank and shoreline protection {NR 154.04(31)}, 2 barnyard runoff control systems {NR 154.04(%)}, 2 manure storage facilities {NR 154.04(3)}, 100 LF of field diversion {NR 154.04(11)}, 175 LF of cattle crossing {NR 154.04(6)} and 3 acres of wetland development or restoration {NR154.04(41)}.

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

Designing a system to fit the site, meet the needs of the landowner and stay within the funding provided with the grant have been and always will be the challenges for barnyard runoff control system and manure storage construction. Our Land Conservation Department staff work closely with the landowner and generally there are several modifications during the design phase to be sure that the completed system will meet the needs of the landowner and stay within the guidelines of the technical standards and funding available.

Photos from Site #17, barnyard runoff control system are included on page 6 of this report.

When landowners wish to construct a manure storage facility in Buffalo County, they need to hire a private engineer to complete the construction plan, oversee construction and provide documentation that the facility was designed to meet the standards of the Field Office Technical Guide. Our LCD staff work closely with the private engineer during all phases of the project.

6. Additional Information about the Project (optional)

This is a very unique project, because we were able to construct a variety of conservation practices to meet the needs of landowners and continue to improve water quality in the Buffalo River. We were creative in seeking sources of cost share funding in addition to the funds provided in this grant, to provide as much cost share funds to each landowner up to the maximum allowed. Another source of cost share funds was provided by the US Fish & Wildlife Service. These funds were targeted to fish & wildlife enhancement. Part of our streambank protection practice was a streambank riprap practice (site #6), which included the installation of lunkers (see page 7 of this report) to improve trout habitat while reducing streambank erosion. We used the US Fish & Wildlife funds to help cover some of the cost of construction and installation of the lunkers and part of the wetland restoration practice. One manure storage facility also included a barnyard runoff control system upgrade, with cost share funding from DATCP.

The second manure storage facility was constructed in response to a DNR citation for violation of state statute 29.601(3).

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:

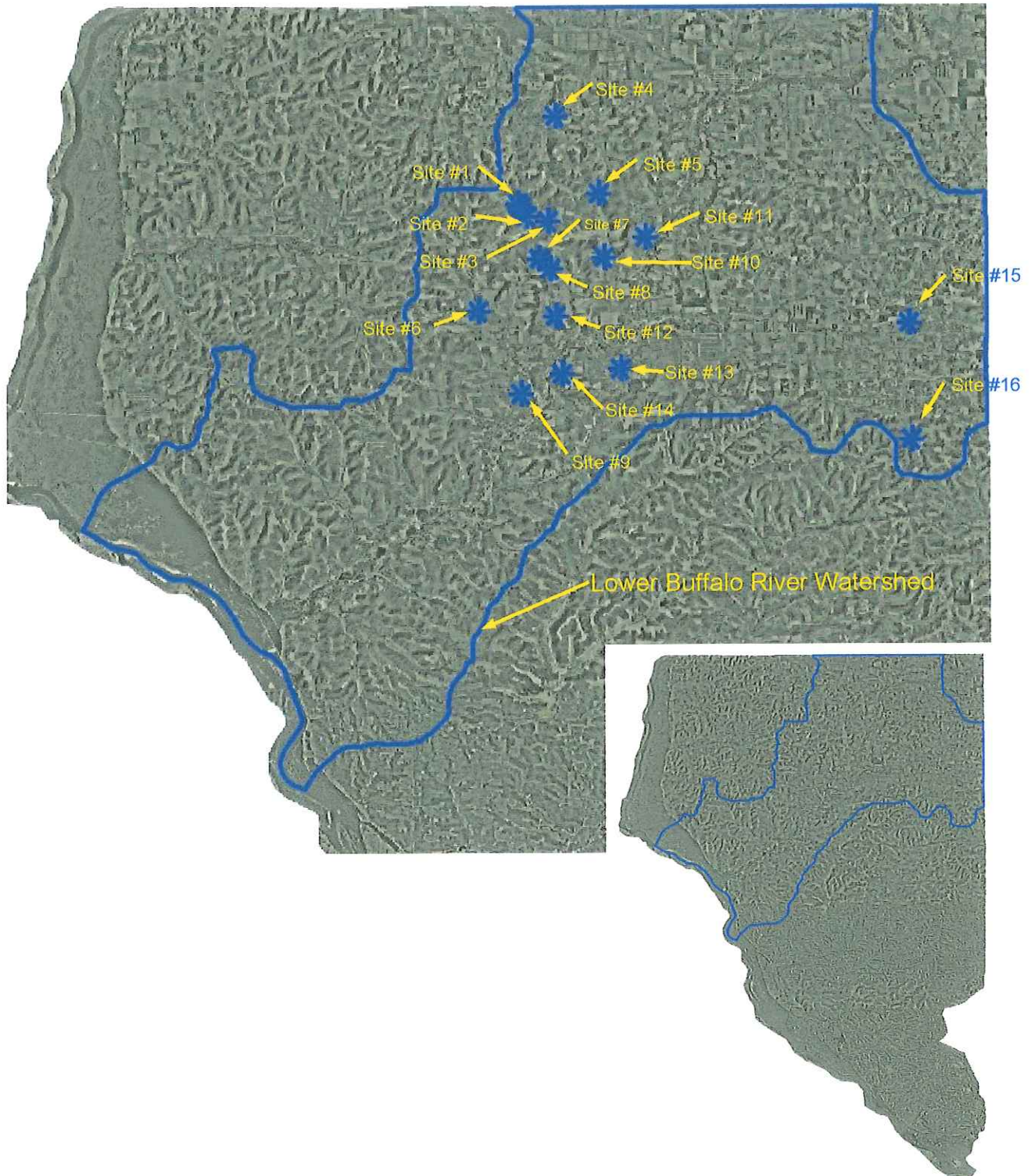
☒ Check here to certify that, to the best of your knowledge, the information contained in this report is correct and true.

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

Julie Lindstrom, County Conservationist

Signature of Authorized Representative	Date
	3-17-2008

LBR Conservation Project Site Map



These photos are taken from Site #17.



Site prior to construction.



Completing site preparation



Sand ready to be placed.



Getting ready for concrete grade.



Concrete flat work completed, concrete walls under construction, nearly complete.



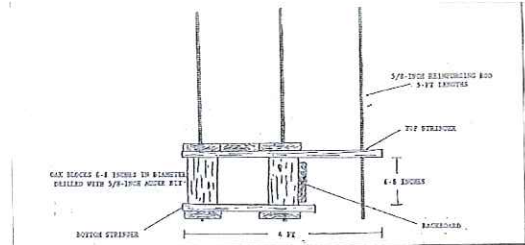
Site after construction was completed.

These photos are taken from Site #6.

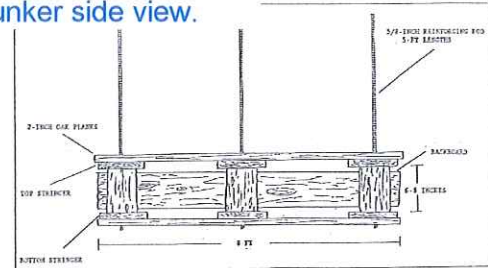
Lunkers—is an acronym for “Little Underwater Neighborhood Keepers Encompassing Rheotactic Salmoinds”. The new unit design and the exceptional water quality of the receiving streams called for a unique name that would reflect trout response. A trip through Webster's Dictionary and an active imagination resulted in the LUNKERS name.

Many changes have occurred in the trout habitat improvement program in the Wisconsin DNR LaCrosse Area since 1982. A new structure design, the LUNKERS unit, when combined with increased rock riprapping for bank stabilization and more extensive landscaping, has reduced the cost of the habitat improvement program by over 30%. In addition to the longevity of improvements is increased with these structures, while maintenance needs are reduced.

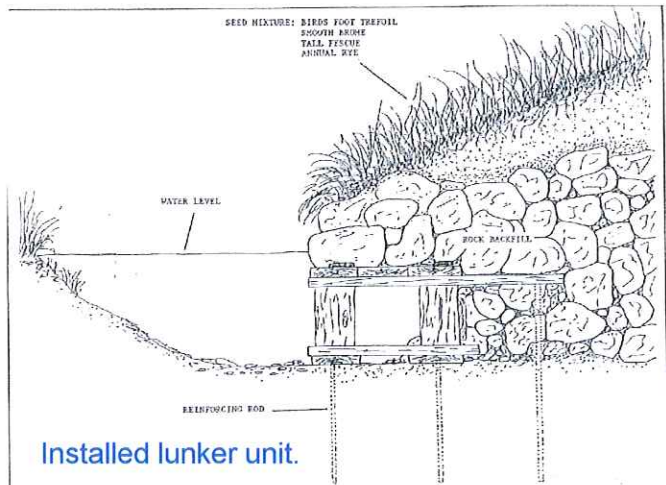
Construction is completed using oak planks, oak blocks, and reinforcing rods. Oak blocks, made from short sections of tree trunks, are used as spacers. Oak planks are nailed to the tops and bottoms of the blocks, forming stringers which tie into the stream bank at right angles. Oak planks are then nailed to the top and bottom of the stringer boards. These boards parallel the stream bank. The whole structure forms a crib, which can be constructed on shore and moved by a crawler-loader to the installation site in the stream. The structure is anchored by driving lengths of reinforcing rod through predrilled holes in the structures and then into the streambed.



Lunker side view.



Lunker front view.



Installed lunker unit.

The above information is taken from “Administrative Report No. 27”, Bureau of Fisheries Management Department of Natural Resource, Madison, Wisconsin, August 1988



Lunkers in place at Site #6, prior to seeding.