

Lower Sugar River Watershed Citizen Monitoring Program Development-Phase I

Application for Funding for Wisconsin's 2012-13 Citizen-Based Monitoring Partnership Program

Prepared by Patrick J. Cardiff, Board Member
Lower Sugar River Watershed Association (LSRWA)
17921 Smith Road
Brodhead, WI 53520
pat.cardiff@grande.com
info@lsrwa.org

Project Leader

Patrick Cardiff will be the lead, coordinator, and liaison for this project as we begin to build monitoring efforts and expertise in the Lower Sugar River Watershed (LSRW). Current AES/LSRWA WAV trainees are Pat Daniels, Aaron Kubichka, Dave Aslesen, and Susan Lehnhardt. As of this date, the Lower Sugar River Watershed Association (LSRWA) is aware of five new individuals interested in WAV training.

Funding Amount Requested

LSRWA requests \$4,733.12 for equipment out of a total project cost of \$26,453.12. Please see budget details on attached spreadsheet.

Justification and Integration

Three sub-watersheds in the LSRW are on the 303(d) impaired water list: Searles Creek, Spring Creek and the North Fork of the Juda Branch. Searles Creek and Spring Creek are impaired for sediment/TSS. These watersheds have active monitoring and TMDL's in place. The North Fork of the Juda Branch is impaired for phosphorus. Very little data is known about this sub-watershed. The Juda Branch is unique in that it has two industrial point source dischargers (Grande Cheese Company and PGP) and one municipal point discharger (Village of Juda). The majority of the Juda Branch is part of Green County Drainage District One. Grande Cheese and PGP are entering into a new WPDES permit cycle that will require them to reduce their Total Phosphorus to less than 0.075ppm. This project will provide a good baseline to use as improvements to the Juda Branch begin. It will develop a group of citizen-based water monitoring volunteers that will be active monitoring for years to come.

The North Fork of the Juda Branch flows through the Juda Park, which is adjacent to the Juda High School. The grant will also provide equipment and training to Juda HS to allow them to incorporate stream monitoring as part of the curriculum in the Aquaculture/Wildlife Management class and possibly the Introduction to Soils class.

The information collected by citizen stream monitoring programs is an increasingly important resource that local, county, and state natural resource specialists rely upon, as they make

choices on land use, wildlife, and water for the benefit of the public. The following public documents encourage citizen monitoring either directly or indirectly:

- 1) WI DNR Water Division Monitoring Strategy (Web site):
<http://dnr.wi.gov/org/water/monitoring/strategy.htm> or
<http://dnr.wi.gov/org/water/monitoring/MonitoringStrategyV2.pdf>
 - a. "Citizen Volunteers Critical Partners"
- 2) WI DNR "Wisconsin Watersheds: Planning for Tomorrow" (Pub-WT-883-2007):
 - a. "Developing an inventory and assessment involves compiling existing information and collecting new data..." (P.3, first paragraph)
- 3) Trout Unlimited, WI DNR, et al: Driftless Area Restoration Effort Strategic Plan (Updated April 2008):
 - a. Multiple references to existing data, stream temperatures, water clarity, and the need to partner with local watershed groups throughout the document.

Description

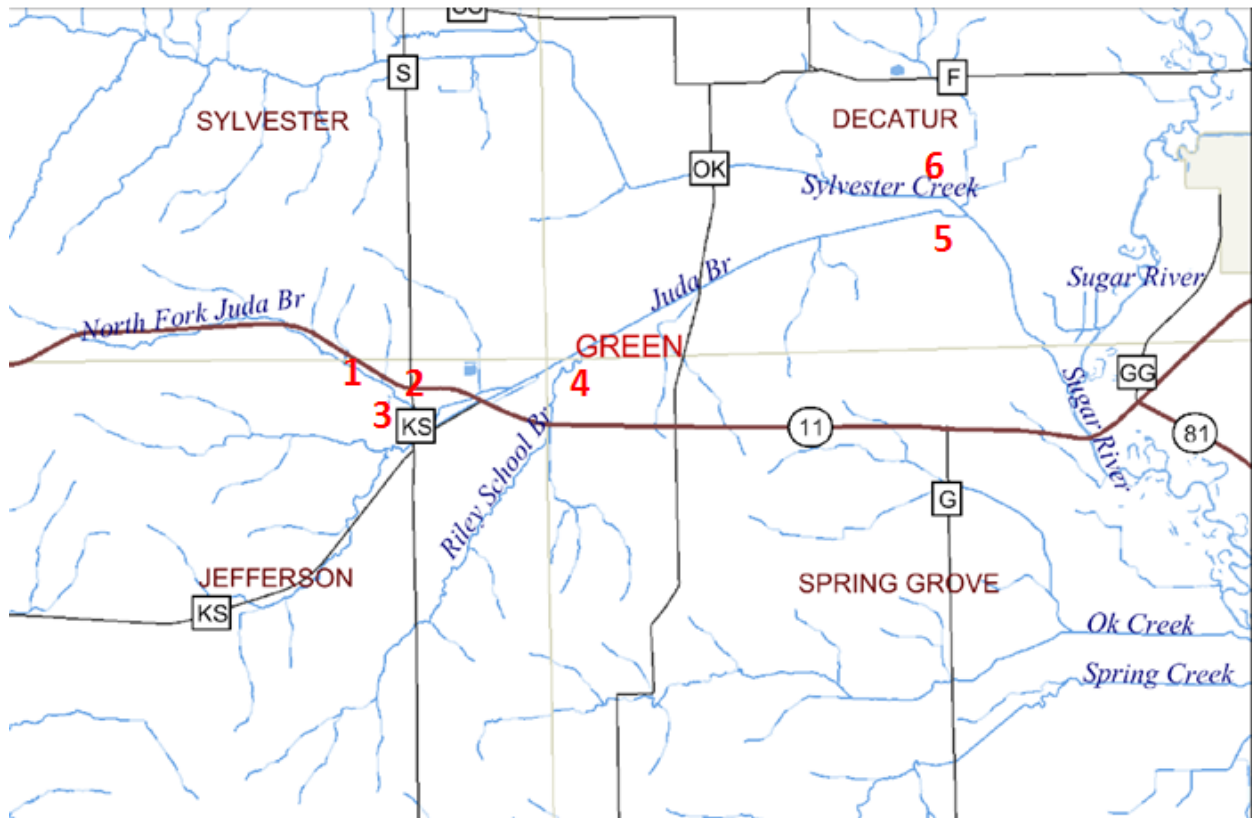
The area of focus will be the Juda Branch. Monitoring methods will be in accordance with WAV and Citizen Based Stream Monitoring (CBSM) protocols and program guidelines. The primary goals for the *Lower Sugar River Watershed Citizen Monitoring Program Development Phase I* include:

- ◆ Encourage at least five new WAV monitoring volunteers on six sites.
- ◆ Obtain all needed Monitoring Equipment for three monitoring teams plus the Juda High School.
- ◆ Conduct Dissolved Oxygen (DO), Temperature, Transparency, Flow, and Habitat Assessments at each site six times per year.
- ◆ Complete a Biotic Index twice per year on each site.
- ◆ Collect samples for Total Phosphorus and send out for testing for each site six times per year.
- ◆ Incorporate stream monitoring into the curriculum at the Juda High School.
- ◆ Provide equipment for future testing in the LSRW.

The six monitoring sites (see map on page 3) include:

1. North Fork, Juda Park, just upstream of the PGP and Grande discharge
2. North Fork, just prior to discharge into the Juda Branch
3. Juda Branch, just upstream of the North Fork discharge
4. Riley School Branch, just upstream of discharge into the Juda Branch
5. Juda Branch, just upstream of discharge into Sylvester Creek
6. Sylvester Creek, just upstream of the Juda Branch discharge

Site one, two and three are within walking distance of the Juda High School.



The project also supports the broader goals of our sister organization, the Upper Sugar River Watershed Association (USRWA). Their strategic plans include:

- Through past, current, and future stream monitoring data sharing, build the interest and capacity of groups and individuals in adjacent and/or "namesake" (Sugar) watersheds to organize local stream conservation efforts.
- Foster "sister organizations" if needed.
- Investigate the unique water features, such as floodplain lakes, throughout the full reaches of the Sugar River system, including Avon Bottoms Wildlife Area (part of the LSRW).
- Establish and/or improve communication with our partners and maintain a level of consistency for our volunteer stream monitoring activities and our related stream conservation work. This may include materials such as Web pages, posters, etc.
- Develop and implement plans for other citizen based monitoring efforts such as game & bird inventories, vegetation and/or habitat inventories (invasives, rare, endangered, etc...) and other wildlife.
- Investigate historical land & water resource uses and habitats/eco-systems and their relationships to current and future uses.

Communication Plan

The Project Leader will target the involvement of dedicated volunteers for the project areas, and will seek out multiple resources to identify possible volunteers. Initial contacts will be from the LSRWA. The LSRWA has been conducting Rapid Watershed Assessments of all road crossings in the watershed and has developed a list of nine volunteers for the watershed. Secondary contacts will include staff/elected officials from local, county, and state

governments/agencies and other conservation groups known to be working in the area. From these, a list of potential volunteers will be generated as well as possible suggestions on how to reach more. This may include appearances at town meetings, telephone contacts, e-mail inquiries, and written communications. Because this is the initial phase, news releases, flyers, and other communications will only be used if these first efforts fail to identify the minimum number of volunteers. The final report and poster of LSRWA's activities will be shared with Wisconsin Citizen-Based Monitoring Partnership Program staff, local libraries, and all other groups and individuals previously identified, as appropriate.

Timeline

Outreach to previously identified audiences, including WAV and CBSM staff, will begin upon notification of the grant award. All equipment will be purchased and calibrated by July 2012 in anticipation for the July through October 2012 and May and June 2013 monitoring. A report of all activities, list of new monitoring teams and/or potential future volunteers, list of corresponding monitoring sites, available monitoring data, photos, Web site links (if applicable), all other developed communication materials and the requested poster will be delivered on or before the September 30, 2013 deadline. Delivery will be via electronic means as is feasible and practical. US Mail or direct delivery via the Project Leader may also be used.

Itemized Budget

Please see spreadsheet attached.

Project Personnel and Contact Information

Patrick Cardiff, LSRWA Board member

Lower Sugar River Watershed Association (LSRWA)

17921 Smith Road

Brodhead, WI 53520

pat.cardiff@grande.com

info@lsrwa.org

Previous CBM Partnership Program Funding

The USRWA applied for and received a grant titled *Middle and Lower Sugar River Citizen Monitoring Program Development - Phase I* in the 2009-2010 Citizen-Based Monitoring Partnership Program. They are applying again this year.

**BUDGET
MONEY (\$)**

	Total Amount Needed for the Project (\$)	Amount to be Paid by the Project Leader's Organization(s) (\$)	Amount to be Paid by Other Sources (\$)	Amount Requested from the CBM Partnership Program (\$)
Wages, salaries, stipends, etc.	\$ 19,280.00	\$ 18,960.00	\$ 320.00	\$ -
Equipment and supplies	\$ 6,593.12	\$ 8.00	\$ 1,852.00	\$ 4,733.12
Travel (mileage, lodging, per diem)	\$ 580.00	\$ 522.00	\$ 58.00	\$ -
Total (\$)	\$ 26,453.12	\$ 19,490.00	\$ 2,230.00	\$ 4,733.12

DONATED TIME (HRS)

	Total Needed or Anticipated for the Project (hrs)	Amount the Project Leader's Organization(s) Can Provide (hrs)	Amount that is Certain Through Other Sources (hrs)	Amount Still Needed (hrs)
Unpaid Staff & Volunteer Time	464	448	16	0

Items	Quantity	Cost/Item	Total Cost	Grant	Other
Hipboots	4	\$ 75.00	\$ 300.00	\$ 300.00	
White Bucket	4	\$ 10.49	\$ 41.96	\$ 41.96	
Tape Measure	4	\$ 16.59	\$ 66.36	\$ 66.36	
Back Pack for equipment	4	\$ 8.00	\$ 32.00	\$ 32.00	
Transparency Tube	4	\$ 52.95	\$ 211.80	\$ 211.80	
Clipboard	4	\$ 2.00	\$ 8.00		\$ 8.00
Calculator	4	\$ 1.00	\$ 4.00	\$ 4.00	
Thermometer	4	\$ 11.95	\$ 47.80	\$ 47.80	
Markers/flags (pack of 100)	4	\$ 5.10	\$ 20.40	\$ 20.40	
Stop Watch	4	\$ 9.95	\$ 39.80	\$ 39.80	
D frame net	4	\$ 58.95	\$ 235.80	\$ 235.80	
DO meter	4	\$ 925.00	\$ 3,700.00	\$ 3,700.00	
Safety Goggles	4	\$ 2.60	\$ 10.40	\$ 10.40	
Dropper bottles	4	\$ 2.00	\$ 8.00		\$ 8.00
Sorting equipment (baster, spoons)	4	\$ 2.00	\$ 8.00	\$ 8.00	
Magnifying Glass	4	\$ 3.70	\$ 14.80	\$ 14.80	
Test for Phosphorus	40	\$ 33.60	\$ 1,344.00		\$ 1,344.00
Total Sampling Supplies			\$ 6,093.12	\$ 4,733.12	\$ 1,360.00

Directors Time	200	\$ 70.00	\$ 14,000.00		\$14,000.00
Miles to check sites	1000	\$ 0.58	\$ 580.00		\$ 580.00
Paper, printing, postage			\$ 500.00		\$ 500.00
3 teams, 2 hrs/month, 6 months	216	\$ 20.00	\$ 4,320.00		\$ 4,320.00
Training (Volunteers & School)	48	\$ 20.00	\$ 960.00		\$ 960.00
Total Project			\$ 26,453.12	\$ 4,733.12	\$21,720.00