Invasive Species Threatening Wisconsin's Flowing Water &

The Role of the River Alliance of Wisconsin and Local Citizen Groups

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I. Project Summary

Since 2008, the River Alliance of Wisconsin (River Alliance) with the support from the Wisconsin Department of Natural Resources (WDNR) continues to assess the threats to Wisconsin's flowing waters by invasive species and identify practical recommendations for education, prevention, planning and management using citizen volunteers and river friends groups. Through discussions with agency staff, researchers, and local organizations we have learned that citizen volunteers' and river friend groups' roles may vary dramatically by species of concern. Yet, there is much that they can do and should be doing.

Thanks to the support of the WDNR, the River Alliance has continued to introduce multiple local organizations to the issues of invasive species throughout riparian and riverine ecosystem in Wisconsin, the means in which they can get involved in prevention and control of invasive species, the resources necessary and how they can through these efforts benefit as a small organization.

Local groups have been engaged in prevent the spread campaigns. For example, Southern Wisconsin Trout Unlimited is partnering with the River Alliance and Dane County to educate anglers in wadable streams to prevent the spread of invasive species by cleaning wading boots before and after entering streams. The Friends of Badfish Creek, Madcity Paddlers, and others are distributing bilge sponges to member paddlers with the prevent the spread message to encourage them to dry and clean equipment before moving to a new waterbody. In addition, the River Alliance has been invited to give presentations at 4 local group meetings to raise awareness about the threat and encourage prevention.

The most immediate need in addressing the issue of invasive species in our river corridors continues to be monitoring. The River Alliance has established Project RED (riverine early detectors) as a tool to identify where invasive species are and to engage local organizations and citizens throughout the state. With continued support from the Department, over 150 individuals have been trained to be riverine early detectors during nine Project RED trainings held throughout the state. Participants were provided the tools to monitor their local rivers and streams for 15 invasive species of concern, including early detection species not yet found in Wisconsin.

Project RED participants monitored over 170 miles of riverbank and reported over 100 new findings of invasive species including 27 Japanese knotweed, 26 curly-leaf pondweed, and 17 purple loosestrife infestations in 2009. As a result, several participant local groups have begun control efforts to prevent the spread of the found invasive species. The Friends of the Platte are controlling Japanese hops on the Little Platte River and the Friends of Badfish Creek are controlling Japanese knotweed. In addition, riparian property owners have been engaged as a result of being contacted by Project RED monitors. Two such owners are controlling Japanese knotweed in the Milwaukee River watershed.

II. Findings and Accomplishments

A. Invasive Species Threatening Wisconsin's Flowing Waters

The following species have the potential to become established in riverine ecosystems and cause economic or environmental damage in Wisconsin. The River Alliance continues to stay abreast of emerging threats by invasive species. In partnership with Department staff, it has been determined that citizen groups may play some role in the detection or control of the first 15 species.

Project RED Findings:

Common Name	Scientific Name	Finding by Volunteers
purple loosestrife*	Lythrum salicaria	18
Japanese knotweed*	Polygonum cuspidatum	28
Japanese hops*	Humulus japonicus	55
Phragmites*	Phragmites australis	7
flowering rush*	Butomus umbellatus	1
Hydrilla	Hydrilla verticillata	
curly-leaf pondweed*	Potamogeton crispus	28
Eurasian water milfoil *	Myriophyllum spicatum	4
Brazilian waterweed	Egeria densa	
Didymo ^	Didymosphenia geminata	
zebra mussel*	Dreissena polymorpha	
quagga mussel ^	Dreissena rostriformis bugensis	
New Zealand mudsnail ^	Potamopyrgus antipodarum	
Chinese mystery snail*	Cipangopaludina chinensis	1
banded mystery snail *	Viviparus georgianus	

Other Species of Concern:

Rusty crayfish*	Orconectes rusticus	
Round goby*	Neogobius melanostomus	
Asian Carp ^	Aristhythys nobilis, Hypothalmichthys molitrix, Mylopharyngodon piceus and Ctenopharyngodon idella	
Western mosquitofish*	Gambusia affinis	
Japanese stilt grass	Microstegium vimineum	
Water chestnut	Trapa natans	
Chinese Yam	Dioscorea oppositifolia	
Parrot Feather	Myriophyllum aquaticum	

^{*} species present in Wisconsin's inland rivers

[^] species present in Wisconsin's bordering waterbodies (i.e. Great Lakes or Mississippi River)

B. The Role of the River Alliance of Wisconsin and Citizens Groups: education and prevention, planning, and control activities

Education & Prevention

Through the Clean Boats Clean Waters and the Clean Lakes Monitoring Network, the Lake Partnership has been instrumental in educating the general public about the threats of invasive species in Wisconsin's lakes. Through partnering with the WDNR, the River Alliance and local river enthusiasts groups are reaching new audiences to protect headwater ecosystems, including streams, rivers and wetlands, through new and existing education programs.

The River Alliance has been working with Trout Unlimited chapters throughout the state to raise awareness within the angling community about their potential to spread harmful invasive species, such as New Zealand mudsnails and Didymo. The River Alliance was awarded a Dane County Environmental Council grant to purchase signage to be installed at fishing easement access points on coldwater streams throughout Dane County. 100 signs will be distributed with the help from Trout Unlimited members and the Dane County parks department in the summer of 2010. This project is meant to serve as a pilot. The River Alliance is working with other partners to implement similar signage statewide. Information about the signage and the spread of invasive species specifically written for the angling community will be on the River Alliance of Wisconsin's



website. The River Alliance will continue to work with local Trout Unlimited chapters statewide to discourage the use of felt soled wading boots and the encourage the disinfection of equipment before and after wading.



The River Alliance is also partnering with paddling organizations. The River Alliance was awarded an Alliant Energy Foundation grant to launch a new education campaign to teach paddlers how to inspect, clean and dry their equipment. The prevent the spread message has been printed on 350 high quality, machine washable bilge sponges and distributed to paddlers within the Alliant Energy service area. To date over 200 of these sponges have been distributed during Dane County's take a stake in the lake events, River Alliance of Wisconsin events, and Friends of Badfish Creek events. They will also be distributed to members of Madcity Paddlers and other local groups through 2010. At the end of the paddling season, each person who received a sponge will be surveyed to determine if the campaign changed their behavior. This too may serve as a pilot for a statewide effort.

The River Alliance of Wisconsin will continue to reach out to our more than 3000 members statewide through Flow (our quarterly printed newsletter), Word on the Stream (our biweekly electronic newsletter), the River Rat (our blog) and our website. In our newsletter we have encouraged the prevention of spread in our articles such as "Slow the Spread by Sole and Tread" and "It's Now the Law: Don't Spread Even a Harmless Weed to a Waterbody." We keep our membership up to date with the ongoing Asian Carp saga in our punchy blog, The River Rat. In WOTS we encourage



participation in Project RED and Clean Boats, Clean Waters events. The archives of these publications may be found at our website, www.wisconsinrivers.org. See Appendix A for complete listing.

There are several other educational campaigns that the River Alliance could assist local groups within the future. For example, according to local groups and WDNR staff, the need to educate bait fishermen about the new bait laws is great on our larger riverine systems (ex. the Lower Wisconsin River at the Prairie du Sac dam). There is also still great need to educate riparian landowners. Some local groups have reached out to these individuals to provide technical assistance and labor for control of riparian species (i.e. Japanese knotweed, purple loosestrife) to prevent spread downstream. However, we continue to find invasive species planted on privately owned riverbanks. The River Alliance will continue to work statewide to raise awareness.

Monitoring

Prior to the implementation of Project RED, minimal monitoring had been conducted statewide on riverine invasive species. Citizen based monitoring is a great opportunity to engage paddlers and anglers in the issue and to assist us in better understanding the

impacts invasives are having in Wisconsin to prioritize our prevention and control efforts.



A Project RED volunteer monitors the Ahnapee River in Door County

Project RED (riverine early detectors) is an opportunistic citizen based monitoring program that was initiated in summer of 2009. The purposes of Project RED is the early detection of invasive species threatening Wisconsin's rivers to enable containment or eradication, to raise awareness about invasive species within river corridors, and to engage local citizens in the fight against invasive species. Project RED trainings have been held in Ashland, Price, Florence, Door,

Menominee, Waupaca, Ozaukee, Milwaukee, Trempealeau, Jefferson, Dane, and Grant (see Appendix A). There are over 150 trained monitors who have monitored over 170 miles of riverbank and reported over 100 new findings of invasive species including 27 incidences of Japanese knotweed and 17 purple loosestrife infestations. See *Page 4* for complete findings.

At this time, Project RED data may be viewed at www.CitSci.org, an online database that is managed by NIISS, National Institute for Invasive Species Science. This data is incorporated in to GISIN, the Global Invasive Species Information Network. To view the Project RED training materials visit the Project RED Google Group:
http://groups.google.com/group/project-red-group. At the conclusion of each training participants are asked to pledge to monitor at least one river or stream (see Appendix B). In October 2010, participants will receive a survey monkey similar to the one conducted in 2009 to try to determine how many hours volunteers spent monitoring (see Appendix C).

The demand for Project RED trainings continue to grow as we have received requests for more trainings then we currently have the resources to conduct. We are trying to meet these demands by instituting local trainers through Train the Trainer programs. The first train the trainer program was held in Green Bay in April 2010. It was attended by 6 county and WDNR staff. The WDNR recently was awarded Great Lakes Restoration Initiative funding for their Partnerships for Prevention: Expanding partnerships to stop the movement of invasive species to and from Wisconsin's Great Lakes. With these funds 3 Volunteer Monitoring

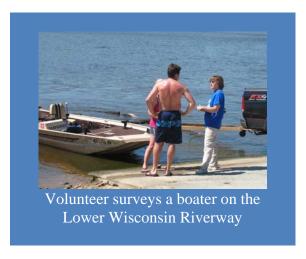


Specialist will be hired to assist in recruiting volunteer monitors in the Great Lakes basin, training local volunteers through a "Train the Trainer" model, assisting with training workshops, providing ongoing support to volunteers, assisting with equipment distribution, preservation of discovered specimen, and volunteer data management.

Local groups who are interested in hosting a single monitoring event once a year rather than implementing an entire new citizen based monitoring program are more drawn towards the River Alliance's Project RED Snapshot Day model. In August, the River Alliance will assist the Valley Stewardship Network in hosting a Japanese Knotweed Snapshot Day in the Kickapoo River watershed. Volunteers will gather at La Farge to receive an abbreviated training in identifying Japanese knotweed. Participants will be given a GPS unit and data sheets. They will then disperse throughout the watershed to paddle a short portion of the Kickapoo River or a tributary in search for Japanese knotweed. Afterwards, they will return to the park to report their findings and gather for a BBQ. Other groups have expressed interest in hosting this "scavenger hunt" with a purpose. A statewide AIS snapshot day could be hosted by the River Alliance and

partners. With assistance from AIS coordinators and local groups, rivers statewide could be monitored for one or two species of concern.

The River Alliance of Wisconsin is partnering with FLOW (Friends of the Lower Wisconsin Riverway) to implement Clean Boats, Clean Waters on the Lower Wisconsin River. Six volunteers and two staff of the River Alliance have been trained to conduct watercraft inspections and to attain user data to assist the River Alliance and the WDNR in the compilation of an Aquatic Invasive Species Strategic Plan for the Lower Wisconsin River. Volunteers and staff will be at boat landing throughout the 2010 and 2011 field season. The Lower Wisconsin CBCW training was the first CBCW training that the River Alliance has hosted. There are many other



opportunities for us to work with local groups statewide whose waterbodies are frequented by boaters, both motorized and non-motorized.

Each year hundreds of citizen monitors visit streams and rivers to monitor water quality. Over 400 postcards (see Appendix B) were mailed to stream water quality monitoring volunteers in Spring 2010. These postcards (seen on the left) featured the Project RED 15 species of concern and told volunteers how to report them if they found them on the waterbodies they monitor.

As local groups become aware of invasive species within their watershed, there may be a growing demand to perform more rigorous monitoring. This is the case for the Friends of the St. Croix Headwaters, who recently were awarded a River Planning Grant from the WDNR to conduct a survey of macrophytes, including invasives in the St. Croix River. There currently are not standardized protocols for monitoring for invasive species in rivers. Level III citizen monitoring efforts could partner with the WDNR to establish and refine such protocols.

Planning

The River Alliance continues to provide assistance to local groups to develop a plan to manage invasive species within their river corridors once they are detected. We have provided technical assistance to the Friends of the Badfish and Friends of the Platte's while they determined how best to contain their infestations and sought financial support to implement the resulting plan.

As mentioned previously, the River Alliance is facilitating the development of the Lower Wisconsin River Aquatic Invasive Species Strategic Plan. This plan will identify research and management needs within the Lower Wisconsin Riverway to prevent and contain aquatic invasive species. In summer 2011, the River Alliance and the Friends o

of the Lower Wisconsin Riverway (FLOW) will host a community based planning session to gather information from the general public and user groups.

Together lake, wetland and river enthusiasts may partner to take a more watershed wide approach to invasive species management plans. Determining if rivers within watersheds acting as corridors for spread of species of concern and a greater understanding of the distribution of invasive species and their impacts should be a priority in planning. In addition, river and wetland invasive species (i.e. Japanese knotweed) should be addressed in county wide AIS management plans and the concerns of local groups addressed.

Control

Project RED participants who discover an invasive species in their river corridors are encouraged to take the appropriate next step towards eradication or containment. To the River Alliance, a statewide organization, their local knowledge is invaluable when it comes to contacting riparian landowners about an infestation or recruiting volunteers. Their strength is in their numbers and partnerships, providing coordination of volunteers. Control measures include hand-pulling small patches of invasive macrophytes and wetland plants, mechanical and chemical control of Japanese knotweed, and biocontrol of purple loosestrife. Below are three examples of control or containment activities that result from Project RED participants taking ownership and seeking solutions.

Friends of Badfish Creek

In the 2008, the Friends of Badfish Creek participated in the pilot study for Project RED to determine if it was practical to attempt to monitor streambanks for invasive species by canoe or kayak. Sure enough, they were effective in finding a stand of Japanese knotweed adjacent to a bridge abutment.

Friends of Badfish Creek board member, Lynne Diebel, teaches volunteers about the threat of Japanese knotweed.



International students assist the Friends of the Platte control Japanese hops along the banks of the Little Platte River.

In 2009, the Friends of Badfish Creek in partnership with their parent organization, the Rock River Coalition, were awarded an early detection, rapid response aquatic invasive species grant to eradicate the knotweed. Over the course of the next three years volunteers will be visiting this site frequently to cut and spray the knotweed persistently until native vegetation can be established.

Friends of the Platte River

In 2009, the Wisconsin DNR and the DOT was well aware that there was a population of Japanese hops (*Humulus japonicus*) thriving on the banks of Blockhouse Creek, a tributary to the Little Platte River in Grant County. They had treated this infestation in years past. What they didn't know was just how widespread the problem was, it was spreading throughout the Platte and Grant River watersheds.

The Friends of the Platte River and the River Alliance through Project RED surveyed both the rivers. The aim being to enable their organizations in partnership with the DNR to prioritize where containment practices, the pulling or spraying of outliers, should take place. Eradication in these watersheds is unlikely, but containment might help to prevent the spread of hops into the Upper Mississippi River Wildlife and Fish Refuge.

In 2010, the Friends of the Platter received an Aquatic Invasive Species grant to control the hops. They have hosted several events including a pulling event in coordination with the Rivers as Bridges program and a paddling/pulling event with the River Alliance. They will be continuing their control efforts in 2011.

Project RED Monitors and Local Landowners

Control on private lands is a challenge along riparian corridors as there is little organization amongst these landowners as opposed to a lake association or district. Local groups can assist in organizing landowners for invasive specie management. There have been a couple of incidences where Project RED monitors and the River Alliance has notified private landowners of an infestation on their property and action was taken. In fall of 2009, Project RED monitors found a sizable patch of Japanese knotweed on Cedar Creek, a tributary to the Milwaukee River. The volunteers were concerned; however, were uncomfortable in making the first point of contact with the landowner. The River Alliance sent a Japanese knotweed brochure and a letter outlining the concerns of the volunteers and the River Alliance. The landowner was very receptive to control. With the help of the River Alliance the landowner contacted the Southeastern Wisconsin Invasive Species Consortium for assistance in the spring of 2010.

III. Recommendations

The River Alliance looks forward to continuing to partner with the WDNR. The following are recommendations to the WDNR that would facilitate the monitoring and management of invasive species in Wisconsin's rivers and streams. It is our hope that together we can work towards these goals.

There is still a need for the development of department accepted monitoring protocols for invasive species within rivers that go beyond the opportunistic early detection protocols used by Project RED participants similar to that of the point-intercept approach applied in lake ecosystems. Pilot projects in cooperation with local groups with financial support from the Department could assist in accomplishing this goal without too much demand on Department science services staff. The immediate opportunity for such a partnership is with Friends of St. Croix Headwaters.

There is still a need for the integration of Riverine AIS into SWIMS Database or another WDNR database to enable field staff and volunteers to record riverine AIS locations. Currently there are a limited number of species that are being documented in SWIMS in rivers. This is an improvement. However, there is a need to include riparian species such as purple loosestrife, flowering rush, Japanese knotweed, and Japanese hops. In the past it was clear that the Department did not have the resources to do this following discussion with Department staff. The River Alliance's partners are temporarily using the National Institute for Invasive Species Science's database to manage data. Although anyone can view this data, it is not as readily available to county and state AIS staff as SWIMS would be thus creating a barrier.

Finally, the WDNR should consider dedicating funding to River Management Organizations for AIS management allowing separate ranking criteria to be established for flowing waters and wetlands. The disparity between the current level of understanding of invasive species management on lakes and rivers/wetlands makes it very difficult to successfully establish ranking criteria that identify priorities within each ecosystem.

IV. The Future

The River Alliance with the support of the Wisconsin Department of Natural Resources (Grant AEPP-247-10) will continue to assess the threats to Wisconsin's flowing waters by invasive species and identify practical recommendations for education, prevention, planning and management using citizen volunteers and river friends groups.

The River Alliance will host more Project RED trainings in 2010 and 2011. The River Alliance continues to receive requests for Project RED trainings throughout the state as interest continues to grow. Training will likely be held in Richland, Oneida, Washington counties and elsewhere.

Project RED volunteers will continue to enter their data into a citizen scientist's website (www.citsci.org), an online tool created by NIISS. The website allows volunteer organizations to tailor online data reporting sheets and maps to meet their specific needs. Through the site, data may be shared with other project members, resource management agencies, funding sources, landowners, and the general public.

Throughout the field season and winter 2010/2011 the River Alliance will be working to improve Project RED training materials, quality assurance of data and volunteer monitoring protocols with the hope that we may identify additional funding to support Project RED beyond the spring of 2010.

The River Alliance is partnering with the Friends of the Lower Wisconsin Riverway (FLOW) and the Wisconsin Department of Natural Resources (DN R) to compose an Aquatic Invasive Species Strategic Plan for the Lower Wisconsin Riverway. A technical advisory committee has been formed consisting of 13 researchers and managers from the

Department of Natural Resources and the University of Wisconsin. This team will meet five times between June 2010 and October 2011. FLOW and River Alliance of Wisconsin hosted a Clean Boats, Clean Waters training in June 2010. Volunteers will be conducting boat inspections/boater surveys in 2010 and 2011 to assist us in better understanding the use patterns of boaters on the Lower Wisconsin River and to educate boaters about the new AIS laws.

In addition, the River Alliance of Wisconsin will continue to provide planning and technical support to local groups as they become engaged in the issue of invasive species whether or not they are committed to participating in Project RED. We will continue to follow emerging threats to rivers as they arise, educate the public and our membership base about preventative measures to be taken in the meantime, and serve as the voice of rivers in the state to ensure that the necessary resources are allocated to protect them from the impacts of invasive species.

Appendix A: Outreach (Presentations, Posters, and Publications)

Project RED Trainings

- Florence County. June 6, 2009. Florence County and Florence County Lakes and Rivers Association.
- Ashland County. July 18, 2009. Bad River Watershed Association, Wild Rivers Trout Unlimited Chapter, Friends of the White River and University Extension.
- Milwaukee County. August 15, 2009. Southeast Trout Unlimited Chapter and Milwaukee Riverkeeper.
- Jefferson County. August 29, 2009. Rock River Coalition.
- Grant County. August 30, 2009. Friends of the Platte River.
- Ozaukee County. September 27, 2009. Milwaukee River Advisory Committee.
- Menominee County. October 5, 2009. University Extension.
- Price County. April 17, 2010. Friends of the South Fork Flambeau River Watershed and University Extension.
- Dane County. April 24, 2010. Rock River Coalition, Friends of Badfish Creek, Friends of Camrock Park, Dane County and Jefferson County.

Presentations

- "Invasive Species Threatening Wisconsin's Rivers." Shabazz High School West Fork Kickapoo Event. May 12-13, 2009. Madison, WI.
- "Project RED: Helping detect invasives species in our rivers and streams." Friends of the Platte River Annual Meeting. May 18, 2009. Dickeyville, WI.
- "Project RED: Citizens monitor for early detection species along rivers." Friends of Badfish Creek Community Japanese Knotweed Program. November 4, 2009. Stoughton, WI.
- "Project RED: Citizens Patrol River Corridors for Invasive Species." Wetlands in Service: Wisconsin Wetlands Association 15th Annual Conference. February 12, 2010 Eau Claire, WI

- "Project RED: Citizens Patrol River Corridors for Invasive Species." Midwest Invasive Plants Network and Stewardship Network Conference. January 23, 2010 East Lansing, MI
- "A New Scavenger Hunt: Invasive Species in Wisconsin's Rivers and Streams." Canoecopia. March 12, 2010. Madison, WI.
- "A New Scavenger Hunt: Invasive Species in Wisconsin's Rivers and Streams." Rock River Confluence. April 10, 2010. Lake Mills, WI.

Table

- "Project RED: Citizens Patrol River Corridors for Invasive Species." Orvis Days. May 2, 2009. Madison, WI.
- "Project RED: Citizens Patrol River Corridors for Invasive Species." Natural Landscapes Conference Hosted by the Milwaukee Audubon Society. February 13, 2010 Mequon, WI
- "Project RED: Citizens Patrol River Corridors for Invasive Species." Citizen Based Stream Monitoring 2010 Symposium. January 23, 2010 Stevens Point, WI.
- "Project RED Registration." River Alliance's Wild and Scenic Film Festival. March 9, 2010. Madison, WI
- "Stop Aquatic Hitchhikers & Project RED." Canoecipoa. March 12 -14, 2010. Madison, WI

Publications

River Alliance of Wisconsin and Wisconsin DNR. Didymo WT-910-2009

- "Volunteers Needed to Detect Invasives in the Basin: Project RED Workshop Training." Rock River Reflections July 2009.
- "Volunteers Can Monitor for Invasive Species." River Voices: A River Network Publication. Vol 19 No 2. 2009.
- "Japanese Hops on Our Riverbanks." Plants out of Place: The newsletter of the

Invasive Plants Association of Wisconsin (Issue 26) November 2009

"Project RED and Japanese Hops." Friends of the Platte River, Inc. Newsletter. Winter 2010.

"From Big Carp to Tiny Spiny Waterflea, Invasives Demand Action," The Flow. Winter 2010

Posters

"Project RED: Citizens Patrol River Corridors for Invasive Species." Wisconsin Association for Environmental Education Fall Conference. October 21, 2009.

Radio

"River Volunteers Needed to Detect Invasives in the Rock River Basin" WFAW

"River Alliance of Wisconsin Project RED Training and Online Auction" WFAW. August 27, 2009.

Newspaper

"Project RED Helps Detect Invasive Species" Milwaukee Journal Sentinel. August 26, 2009.

River Alliance of Wisconsin Blog

- "The Darkside of Beer's Best Ingredient (Japanese Hops and the Grant Project RED Training)." The River Rat. August 25, 2009
- "Don't know Didymo from diddly-squat? Read On..." The River Rat. August 27, 2009.
- "The Taste of Louisiana Too Close to Home." The River Rat. September 9, 2009.
- "Uh-Oh, Madison's Got Fleas!" The River Rat. September 17, 2009.
- "Asian Carp: The stuff of River Rat nightmares." The River Rat. October 20, 2009.
- "Great Great Lakes Reporting." The River Rat. November 4, 2009 http://wiriverrat.blogspot.com/2009_11_01_archive.html
- "A lot to Carp About...." The River Rat. November 23, 2009 http://wiriverrat.blogspot.com/2009_11_01_archive.html

"Creepy Carp Story Gets Ever Creepier." The River Rat. January 12, 2010 http://wiriverrat.blogspot.com/2010_01_01_archive.html

River Alliance of Wisconsin E-Newsletter (WOTS)

"Take the Project RED Training." WOTS, April 22, 2010

"Mud Snails, Rock Snot, Knotweed, Look Out: We're Fighting Back." WOTS, April 21, 2010

"Say "Yes" and Help Fight Invasive Species." WOTS April 1, 2010

River Alliance of Wisconsin Newsletter (FLOW, previously titled Wisconsin Rivers)

"Slow the Spread by Sole and Tread." Wisconsin Rivers, Spring 2009.

"It's Now the Law: Don't Spread Even A Harmless Weed To A Waterbody." FLOW, Spring 2010

"River Alliance's New Invasives Front: The Lower Wisconsin River." FLOW, Spring 2010

Appendix B: Example Riverine Early Detector's Pledge

Project RED
Riverine Early Detector's Pledge
I,
I pledge to monitor for invasives on the above river two / three (circle one) times a year by canoe or at areas of potential introduction, bridge abutments, boat launches, and areas of disturbance.
I pledge to have any suspect plants or animals I find verified by a professional.
I pledge to report any invasive species found within the river corridor on www.CitSci.org as soon as possible.
I pledge to be a steward of Wisconsin's rivers and streams. 7/8/2010 Signature Date
RIVER ALLIANCE of Wisconsin