

Inspiring volunteers, improving Iowa's natural resources, and changing lives—what a fantastic way to get involved! Thanks for sponsoring project AWARE!

2010 Project AWARE Sponsorship Series

Platinum Paddle Sponsors (\$3,000+): Cass County Conservation Board, IHR Hydroscience and Engineering, Iowa Flood Center, Iowa State University Recreation Services, Iowa West Foundation, Montgomery County Conservation Board, Pottawattamie County Conservation Board, Schildberg Construction Company, Inc., State Hygienic Laboratory at The University of Iowa, Iowa DNR – Financial & Business Assistance, Iowa Water Trails, IOWATER

Silver Stern Sponsors (\$1,000–\$1,999): Alliant Energy Foundation, Cass County Landfill and Recycling Center, Eaton Corporation, Hy-Vee, Inc., Integrated DNA Technologies, Iowa Outdoors Magazine, Omaha World-Herald, Porter's Lake Lutheran Center, Pottawattamie Conservation Foundation, Shelby County Conservation Board, Townsend Vision, Inc., Iowa DNR – Law Enforcement, Boating Safety, and Geological & Water Survey

River Rescue Sponsors (\$100–\$999): Aero Rental and Party Shoppe, B4 Brands, Barker Lemar Engineering Consultants, Boone County Landfill, Boy Scout Troop 242, Casey's General Stores, Inc., Cass County Mormon Trails Association, Cedar Valley Paddlers, Central Iowa Paddlers, Connie Struve, CrawDaddy Outdoors, Des Moines Area Community College, The Dental Practice, Des Moines Chapter Izaak Walton League, Environmental Advocates, Inc., Golden Hills RC&D, Hawkeye Fly Fishing Association, Hitchcock House Advisory Board, Howard & Phyllis Ciha, Humanities Iowa, Iowa Conservation Education Coalition, Iowa Natural Heritage Foundation, Iowa Rivers Revival, Iowa Waste Systems, Inc., Iowa Whitewater Coalition, Mark Bohner, Marne & Elk Horn Telephone Co., Metro Waste Authority, MidAmerican Energy Company, Montgomery County Family YMCA, Muscatine Chapter – Izaak Walton League of America, The Nature Conservancy, Nishnabotna Yacht Club, Page County Landfill & Recycling, Prairie Winds RC&D, Rubber Duck Outfitters, Seatasea Watersports Center, Shenandoah Community School District, Snyder & Associates, Inc., Springbrook Conservation Education Center, Stine Seed Company, Sue Caley, Touch the Earth – University of Iowa Recreational Services, UNI Outdoors, Wilton Steel Processing, Inc.

Life Jacket Sponsors (up to \$99): Clipper Windpower, Fareway Stores, Inc., Great Western Bank, Iowa Soil and Water Conservation Society, Janet Rahmani, Marvin J. Rops, Nishnabotna Valley Rural Electric Cooperative, Stanley Consultants, Inc., Tom Stamets

Water monitoring activities of the Iowa Department of Natural Resources are funded by Iowa Infrastructure – Environment First Fund appropriations, as well as grants provided by the U.S. Environmental Protection Agency from Sections 106 and 319 of the Clean Water Act.

Photos by Colin Gordon (volunteer in mud, p. 3), Melissa Jacobsen (volunteers in canoe, p. 4), John Pearson (prairie skink, p. 3, thank-you sign, p. 4), Lora Schwendinger (volunteer in water, p. 2, volunteers in canoes, p. 3), and Iowa DNR staff

Iowa Watershed Monitoring and Assessment Program Web Site:
www.igsb.uiowa.edu/wqm/

Water Fact Sheet 2011-1
January 2011

 Prepared by
Iowa Department of Natural Resources, Geological and Water Survey
109 Trowbridge Hall, Iowa City, IA 52242-1319

Printed on Recycled Paper



There is no syllabus, no textbooks, and no grades...and nothing about this “class” is easy. To be honest, it can be exhausting, dirty, and downright disgusting.

Ask any one of the 1,700-plus Iowans who have volunteered to clean up Iowa's rivers on Project AWARE and you'll surely hear about the sweltering summer heat, driving rainstorms, endless mud, sauna-like port-a-pots, and just about any other seemingly miserable vacation experience you can imagine. Whatever the malady, however, you're also guaranteed to hear one thing—Project AWARE is fun!

Project AWARE is an opportunity to clean up a river, play in the water, treasure hunt, listen to the birds, meet lots of people who care about Iowa's water and challenge every muscle in your body. It's a license to be a kid again with an adventure around every bend in the river.

—Carol Sweeting, 2-year Project AWARE veteran

Describing Project AWARE, which stands for A Watershed Awareness River Expedition, as a weeklong volunteer river cleanup event is like describing Goodwill as an organization that sells used clothes. It's certainly true, but it's only one element of a much larger effort to change lives and improve the environment.

Total strangers, some volunteering individually and others with families, converge on Project AWARE each year. Together, from the seats of their canoes, they embark on a mission to clean up garbage. This mission brings them together—strangers become friends, friends become family—and along the way they learn about watersheds.

They don't look at an illustration or read a definition from a textbook. There's nothing scholarly about the process. They learn to read the landscape simply by traveling where the water flows.

The landscape is the school, the river the classroom, and the experience the teacher. The volunteers, of course, are the pupils...and the muscle.



It doesn't take a PhD in hydrogeomorphology to see there's a problem with dirt. From the land, evidence of soil erosion can be easily missed by passersby, but for those who follow the dirt down the watershed, they very quickly discover the dirty truth.

Five Centimeters

For volunteers looking for garbage on the Nishnabotna River in southwest Iowa in 2010, our rivers' problem with dirt was clear. With a median transparency measured during the week at five centimeters, volunteers could see it whenever they reached into the water and their fingertips disappeared into the murky depths. This condition, of course, made it awfully hard for them to find submerged trash...and makes it even harder for aquatic life to find food. In addition to visibility challenges, heavy sediment loads bury habitat in a suffocating soup of muck, literally rendering aquatic species homeless.



The Nishnabotna River is not alone in its fight against dirt. Statewide, changes to the landscape and ever-increasing drainage infrastructure bring more dirt to our streams. Additionally, the geology of southwest Iowa consists of highly erodible soils. In 2010, heavy precipitation compounded the erosion problem by causing river levels across Iowa to be above normal for most of the summer, with June being the wettest June on record.



While dirty water and higher-than-normal flows may have impeded trash collection efforts, they also helped teach valuable lessons. For example, slogging through waist-deep mud to save a pop can or remove a refrigerator doesn't simply improve riverine aesthetics; it also has a discernible impact on the volunteer garbage collectors who take on the challenge.

In 2010, the West Nishnabotna River Water Trail was created in Pottawattamie County, a designation that helps highlight this lazy meandering aquatic jewel in southwest Iowa. Whether it be on the West Nish or off the beaten path on the East Nishnabotna, both rivers offer miles of adventure...and opportunities to play in the mud. Sometimes we all need to get a little dirty before we can come clean.



I was amazed at the amount of sediment in the river and deposited along the riverbanks. As a water quality professional, I know that sediment is an issue for the waters of Iowa, but seeing the condition of the river brought the issue home for me in a new and profound way.

—Rick Cruse, Director of the Iowa Water Center

Project AWARE Accomplishments • Nishnabotna River • July 10–17, 2010

- 100 river miles covered
- 223 participants:
 - youngest participant, 2 years old
 - oldest participant, 75 years young
 - average number of participants per day, 104
- 79 sponsors
- 18,600 lb. (9.3 tons) of total trash removed
- 54% of trash recycled

- 29 sites monitored:
- median pH, 8
 - median transparency, 5 centimeters
 - median phosphate, 2 milligrams per liter (mg/L)
 - median nitrite-nitrogen, 0 mg/L
 - median nitrate-nitrogen, 2 mg/L
 - median chloride, less than 25 mg/L
 - median dissolved oxygen, 6 mg/L
 - median water temperature, 71°F
 - median air temperature, 81°F



JOIN US THIS SUMMER • Little Turkey, Turkey, and Volga Rivers • July 9–16, 2011

For volunteers with a sense of adventure, the clear water, lively rivers, and spectacular scenery of northeast Iowa beckon. This summer, scores of volunteers from across Iowa will spend their vacations working as aquatic garbage collectors—cleaning up, learning about, and exploring nearly 90 miles of the Little Turkey, Turkey, and Volga rivers.

For more information about Iowa's national award-winning river cleanup project and to register for the 2011 Project AWARE, visit our Web site: www.iowaprojectaware.com.

