



15 Ways To Help Your River and Watershed

When starting a new organization to protect a river that isn't facing a "looming crisis," knowing how to begin implementing the goals of your organization can be difficult. Similarly, watershed groups with long histories sometimes forget about the many ways they can protect their river. This tool offers a list of actions that your group can take to discover, promote, and advocate healthy rivers and watersheds. While not all of these activities may be applicable to your own organization, we hope the list will stir up some creative ways to accomplish your goals and provide a stepping off point from which your group can begin its work.

This tool is designed to help you take action using a community-based approach. In order to best help your river or watershed, you should first understand your local resource and landscape, the threats facing the resource, and the steps that you can take to minimize those threats. River Alliance of Wisconsin staff can provide you technical assistance with any of the following types of projects - contact us for help!

The 15 Ways...

#1: Monitor Who is Polluting your River

The Clean Water Act requires that anyone planning to discharge pollution into a water body through "any discernible, confined, and discrete conveyance" (e.g. a pipe) receive a permit. This includes municipalities, industrial facilities and significant animal waste operations (known as CAFOs). All new and renewed "discharge permits" are subject to public comment.



What Can You Do?

- Learn who is seeking or renewing discharge permits in your watershed, what they want to discharge into the water, and when existing permits are up for renewal.
- Review and comment on all permit applications impacting your local waterbody.

#2: Reduce Polluted Runoff

Polluted runoff comes from rainwater and snowmelt that picks up contaminants and sediments from the land and deposits them in water bodies. This type of pollution is regulated under Wisconsin's Runoff Management rules. To help curb polluted runoff, the state offers some cost-share funds to encourage the implementation of "best management practices" and the development of "targeted runoff management plans." There are also model ordinances to help municipalities control runoff from construction sites and new development.

What Can You Do?

- Become familiar with the major sources of polluted runoff affecting your watershed.
- Learn about Wisconsin's cost-share programs and encourage eligible entities to apply.
- Encourage your county, town, city or village to adopt strict stormwater ordinances.
- Examine, comment on and monitor enforcement of relevant planning documents.

#3: Enforce and Strengthen Shoreline/ Floodplain Development Regulations

A floodplain is the land adjacent to a waterway which may be covered with water during the most extreme flood event. Floodplains provide many important ecosystem functions. Although every county in Wisconsin must adopt zoning ordinances to regulate shoreland and floodplain development, these ordinances are often not strong enough to adequately protect water quality. Furthermore, frequent zoning variances can dilute the effectiveness of existing regulations.

What Can You Do?

- Become familiar with Wisconsin's standards for floodplain and shoreland zoning and with your own local ordinances.
- Speak up at zoning committee meetings if you feel proposed developments are not in compliance with existing ordinances.
- Monitor and comment on zoning variance applications that threaten to degrade water quality.

#4: Encourage Small Dam Removal

Dams damage river ecosystems. They can degrade water quality, devastate fisheries, flood and silt-in natural stream areas, deplete oxygen levels, and block and kill migrating fish. Of the approximately 3,700 dams altering the flow of Wisconsin's rivers and streams, only 200 provide electrical power while 200 provide flood control.



What Can You Do?

- Evaluate your local dams for their impact on local fisheries and aquatic communities and educate your community on these impacts.
- Contact the dam's owner regarding their interest in dam removal.
- If the costs of maintaining the dam outweigh the benefits of removing it, campaign to build local support for dam removal.

#5: Support Groundwater Protection Efforts

97% of Wisconsin municipalities and 750,000 private wells rely on groundwater, and more than 340,000 acres of Wisconsin farmland are irrigated with groundwater. Wisconsin has laws to protect drinking water quality, but has been too understaffed to ensure all wells are safe. The Groundwater Protection Act, passed in 2002, is the first attempt by the state to address groundwater quantity, and at this time, only regulates high capacity wells near sensitive waterways and two areas. An advisory committee is working to recommend improvements to the act.

What Can You Do?

- Track the activities of the Groundwater Advisory Committee.
- Encourage your elected officials to support proposals for a comprehensive, statewide groundwater management program.
- Talk to local scientists and land managers to identify critical recharge areas.
- Monitor applications for high capacity wells.
- Promote water conservation to minimize groundwater withdrawals.

#6: Identify Degraded Waters and Push for Restoration

By law, the Wisconsin DNR must keep and regularly update a list of all degraded waterways in the state (known as the “303(d) list”). In turn, listed waterways get priority for cleanup and restoration. In reality, many degraded waters have never been listed because they have not been monitored, and plans to cleanup degraded waters (known as “TMDLs”) are often inadequate or nonexistent.

What Can You Do?

- Review the 303(d) list to learn which local waterways are included, and which waters known to be impaired have not been listed.
- Oppose any activities that would further impact listed waters.
- Use volunteers to monitor impaired waters that are not listed to identify causes of impairment and possible solutions, and campaign for the DNR to list them.
- Campaign the agency to include local listed waters on its priority list for TMDL development.

#7: Increase Protection for High Quality Waters

The water quality standards a river or stream must meet vary depending on a waterbody’s official “designated uses.” By law, all water quality standards and official designated uses must be reviewed at least once every three years. Furthermore, antidegradation rules exist that prohibit the discharge of additional permitted pollution if it results in a significant lowering of a waterway’s quality. The problem is that antidegradation rules apply only to officially designated uses. Bodies of water that are “underdesignated” are therefore underprotected.



What Can You Do?

- Protect high quality waters by assessing local rivers to determine if actual uses (e.g. swimming, fishing, etc.) exceed officially designated uses.
- Petition the DNR to upgrade the designated uses for “underprotected” waters, including upgrades to the highest designations of “outstanding” or “exceptional.”
- Review pollution permit applications to ensure antidegradation rules are upheld.

#8: Protect Wetlands

Wetlands provide important ecosystem functions, and yet only 5.3 million acres of wetlands remain of Wisconsin’s original 10 million acres. Wetlands are protected under federal and state laws. Despite strong wetland protection laws, wetland loss and degradation is still widespread throughout the state.

What Can You Do?

- Comment on wetland development permit applications.
- If development appears inevitable, argue for strict mitigation requirements.
- Encourage local officials and landowners to apply for federal wetland restoration funds.
- Enroll in programs to convert drained farmland back to wetland.

#9: Get Involved in Statewide Campaigns that Impact Your Community

Strong statewide river/water protection laws and programs make it easier for your group to protect and improve your local waters. Your group's voice is needed to demonstrate that there is a cohesive river protection movement across the state. And yet, far too many critical initiatives fail each year because not enough people speak up to ensure state laws reflect their values and priorities.

What Can You Do?

- Respond to the River Alliance's action alerts regarding threats to water quality.
- Keep water issues in the local press.
- Partner with other local and regional organizations to ensure your message is heard.

#10: Conduct Targeted Education Campaigns

A successful education program is one that influences decisions or changes behaviors. While educational efforts can be valuable and make a difference, too many education programs fail to have a positive impact on the quality of the waterway. In planning educational activities, set clear goals and determine who needs to be influenced in order to reach those goals

A targeted education program must:

- ✓ *identify clear end goals*
- ✓ *understand who you're trying to influence*
- ✓ *include a plan to persuade your intended audience to support your goals*
- ✓ *evaluate your efforts*
- ✓ *recognize all who helped you achieve your goal*
- ✓ *learn from your successes and setbacks*

#11: Plan Water Trails to Promote the River

The more familiar your community is with its natural resources, the more support you will be able to garner for future river protection. A fun and interesting way to educate your community about their river or watershed is by creating a water trail. Water trails are informational paths for paddlers and recreationists to learn about the waterways and their ecosystems. A water trail is a great way to get to know your watershed and to educate others.

What Can You Do?

- Develop a water trail by promoting a theme through a brochure (e.g. natural history, edible landscapes or impacts of development), or by posting signs along the shore or at public access points.
- Involve your members in researching information about the river and watershed, or in helping maintain the public access points.

#12: Purchase Conservation Easements Along Rivers

A conservation easement is a legal agreement between a landowner and a second party that places restrictions on the present and future uses of the property in an effort to protect its conservation values. Once the terms of an easement are negotiated, the easement is recorded along with the property deed and the landowner retains property



ownership subject to its terms. Easements along river buffers can protect water quality by providing permanent vegetation to help trap sediments, fertilizers, pesticides, bacteria, pathogens, and heavy metals.

What Can You Do?

- If a land trust is active in your area, coordinate landowner outreach and fundraising activities to pursue easements along local streams.
- Prioritize land parcels for easement purchase by identifying areas facing future development or contributing large amounts of pollutants into the river.
- Contact landowners about their interest in land protection along their rivers and creeks.
- Learn about the public and private funding programs available for purchasing conservation easements.

#13: Restore River Buffers and Improve Habitat

Well planned restoration projects can improve your river's water quality, aquatic habitat, recreational potential and aesthetics. River restoration projects can focus on the buffer area, the streambank or the river channel itself. Buffers can be restored by controlling invasive plants and planting trees. Streambank projects may include shaping banks and protecting them with some type of cover until they are vegetated. In-stream projects include managing aquatic plants, restoring woody debris and other structures for fish habitat, and deflecting flows to create scour pools for spawning fish.



What Can You Do?

- Assess your river and watershed by researching all available information, by identifying and filling existing data gaps, and by exploring the river's channel and banks.
- With the help of a consultant or natural resource agency staff, identify and prioritize potential restoration projects.
- Create a restoration plan that identifies clear goals, monitoring and evaluation protocols, project partners and funding sources.

#14: Monitor the Quality of Your River

When it is part of a well thought-out plan with clear goals, water quality monitoring can be a powerful river protection tool. Monitoring can help define the problems facing a river, pinpoint the sources of those problems, or help you measure the impact of particular river protection or restoration activities. Water quality monitoring can support many of the actions included in this Top 15 list, but because it can be an expensive and time-consuming, it should be well planned to ensure it provides you with data and information that you can use.

What Can You Do?

- Identify why you want to monitor, how you intend to use the information, and who is your intended audience.

- Contact the DNR to identify existing data gaps for your river and suggested protocols for citizen monitoring.
- Contact the River Alliance of Wisconsin to learn about current efforts to increase the agency's use of citizen-collected data.



#15: Celebrate Your River

You and the members of your organization know about the benefits of protecting rivers, ... what about the rest of your community? Celebrate your river to raise public awareness of your local natural resources. *Race, ride, and row your river.* If members of the community enjoy the river, they will be more inclined to protect it in the future.

What Can You Do?

- Throw a party, have a festival, or plan a group paddle.
- Plan events that encourage community participation, such as an ecology walk, a hike along the river banks, a bike ride that follows the river, or a community clean up of an urban river.

Additional Resources by Activity

#1: Monitor Who is Polluting your River

- *Being Heard: A Citizen's Guide to DNR Hearings*, published by Midwest Environmental Advocates, describes how to request a hearing, what to expect, and how to prepare for it. Visit www.midwest-e-advocates.org.
- *The Clean Water Act: An Owner's Manual*, produced by River Network, provides information on conducting reviews of proposed permits. Visit www.rivernetwork.org.
- *Permitting an End to Pollution: How to Scrutinize and Strengthen Water Pollution Permits in Your Watershed* by Robert Moore, Gayle Killam and Merritt Frey is a handbook that explains common problems to watch for in discharge permits. It is available from River Network by visiting www.rivernetwork.org.
- *Using the Clean Water Act to Protect Wisconsin's Waters*, published by the River Alliance of Wisconsin, can help you locate information on proposed and existing pollution permits in your watershed. Visit www.wisconsinrivers.org.

#2: Reduce Polluted Runoff

- *Model ordinances on managing runoff from construction activities* are available at <http://www.dnr.state.wi.us/> by searching for "runoff management outreach activities".
- For information on the DNR's *Runoff Management Program*, including a link to a summary of all Administrative Rules addressing polluted runoff, visit <http://www.dnr.state.wi.us/> and search for "nonpoint source program administrative rules".
- For information on the DNR's *Targeted Runoff Management Grants* to help fund activities that decrease polluted runoff, visit: <http://www.dnr.state.wi.us/> and search for "targeted management runoff grants".

#3: Enforce and Strengthen Shoreline/Floodplain Development Regulations

- For information on Wisconsin's *Floodplain Management Program*, <http://www.dnr.state.wi.us/> and search for "floodplain management program".
- For information on Wisconsin's *Shoreland Management Program*, <http://www.dnr.state.wi.us/> and search for "shoreland management program".

#4: Encourage Small Dam Removal

- For information on the *benefits of dam removal*, including a list of past removals in Wisconsin, visit the DNR's dam safety page at <http://www.dnr.state.wi.us/>.
- *Dam Removal - A Citizen's Guide to Restoring Rivers*, published by the River Alliance of Wisconsin, provides a step-by-step process for pursuing dam removal. To order the guide and an accompanying video or for additional information on dam removal, visit www.wisconsinrivers.org.

#5: Support Groundwater Protection Efforts

- For information on Wisconsin's *groundwater protection efforts*, including the Wellhead Protection Program, visit the DNR webpage at www.dnr.wi.gov/org/water/dwg.
- *Saving Water Partnership* provides information on strategies for water conservation at home, at the office, and outdoors. Visit www.savingwater.org.

#6: Identify Degraded Waters and Push for Restoration

- *The Clean Water Act: An Owner's Manual*, produced by River Network, provides action checklists on influencing 303(d) listings and TMDL development. Visit www.rivernetwork.org.
- *Identifying Polluted Waters Toolkit*, published by Clean Water Network, includes a checklist for reviewing a 303(d) list and sample letters for nominating waterbodies to the list. Find it at www.cwn.org/cwn/issues/impairedwaters/pwtk/index.cfm
- *TMDL Development and Implementation Toolkit*, produced by River Network, is available at www.rivernetwork.org.
- *Using the Clean Water Act to Protect Wisconsin's Waters*, published by the River Alliance of Wisconsin, provides information on Wisconsin's implementation of the law, including its impaired waters provisions. Visit www.wisconsinrivers.org.
- For *Wisconsin's most up-to-date 303(d) list*, visit the DNR webpage at www.dnr.wi.gov/org/water/wm/wqs/303d/303d.html.

#7: Increase Protection for High Quality Waters

- *The Clean Water Act: An Owner's Manual*, produced by River Network, provides action checklists on evaluating waterbody designations. Visit www.rivernetwork.org.
- For a *list of Wisconsin's Outstanding and Exceptional Resource Waters*, visit the DNR webpage at www.dnr.wi.gov/org/water/wm/wqs.
- *Using the Clean Water Act to Protect Wisconsin's Waters*, published by the River Alliance of Wisconsin, provides information on Wisconsin's waterbody designations. Visit www.wisconsinrivers.org.
- To review NR102, which defines Wisconsin's *water quality standards*, go to the Natural Resources section (NR) of Wisconsin's administrative code, at www.legis.state.wi.us/rsb/code/codtoc.html.

#8: Protect Wetlands

- For information and contacts on *wetland protection programs* in Wisconsin, including wetland protection, mitigation and restoration, visit www.dnr.wi.gov/org/water/fhp/wetlands/index.shtml.
- *Using the Clean Water Act to Protect Wisconsin's Waters*, published by the River Alliance of Wisconsin, provides information on Wisconsin's wetland fill permits. Visit www.wisconsinrivers.org.

#9: Get Involved in Statewide Campaigns that Impact Your Community

- *C.A.N.O.E. - Citizen Action Network for Our Environment* is an online action alert of the River Alliance of Wisconsin to keep the public informed on issues concerning the rivers of Wisconsin. To register, see "Newsletters" at www.wisconsinrivers.org.
- The *Online Directory of Wisconsin's Watershed Organizations*, by the River Alliance of Wisconsin, is a networking tool for watershed organizations around the state. To register your organization or to learn about other groups, see "Local Group Assistance" at www.wisconsinrivers.org.

#10: Conduct Targeted Education Campaigns

- *Organizing for Social Change - A Manual for Activists*, published by the Midwest Academy, is a useful guide to help you use meetings, workshops and media outlets as tools to effect change. To order, visit www.midwestacademy.com.

#11: Plan Water Trails to Promote the River

- *Water Trails Toolbox: How to Plan, Build and Manage a Water Trail*, a webpage of the Chesapeake Bay Gateways Network, is a comprehensive how-to for water trails. Visit www.baygateways.net/watertrailtools.cfm
- For *Wisconsin-specific information on water trails*, including technical resources, funding opportunities and on-the-ground examples, visit the River Alliance of Wisconsin's watertrails webpage under "Local Group Assistance" on www.wisconsinrivers.org.

#12: Purchase Conservation Easements Along Rivers

- The Land Trust Alliance has created a comprehensive *tool on conservation easements*. Visit www.lta.org/conserve/options.htm
- For a list of *Wisconsin local land trusts*, visit Gathering Waters Conservancy at www.gatheringwaters.org.

#13: Restore River Buffers and Improve Habitat

- *Stream Corridor Restoration - Principles, Processes and Practices*, a common reference on stream restoration published by various federal agencies and partners, includes guides for planning and carrying out river restoration projects. Visit www.nrcs.usda.gov/technical/stream_restoration/newgra.html.

#14: Monitor the Quality of Your River

- *Program Organizing Guide*, by Sharon Behar and Geoff Dates. This manual guides you through steps to set up an effective and sustainable monitoring program. Call (503) 241-3506 or visit www.rivernetwork.org/marketplace.
- *River Monitoring Study Design Workbook*, by Geoff Dates. This manual guides you through the decision-making process of determining your project's purpose, appropriate indicators, methods, and more. Call (503) 241-3506 or visit www.rivernetwork.org/marketplace.
- *Water Action Volunteers (WAV)* is a program for citizens interested in monitoring water quality in Wisconsin rivers and streams. For information on WAV programs, visit <http://clean-water.uwex.edu/wav>.