

## ***Wisconsin 2006 Water Quality Report - Executive Summary***

Wisconsin's 2006 Water Quality Report to Congress describes the condition of our state's wealth of aquatic resources – 84,000 miles of streams, 1.2 million acres of freshwater inland lakes, abundant, diverse wetland communities, complex groundwater aquifers, nationally acclaimed Great Lakes shorelines and tributary rivers, and our historically and culturally rich Mississippi River. Wisconsin's wide variety and sheer number of aquatic resources require strong leadership and strategic direction. Wisconsin's citizens recognize the value of our resources and continue to support quality management and protection of our many aquatic resources owned in trust for and by the "public" – each of us who live, work and play in Wisconsin.



In 2006, years of strategic planning culminated in a new direction for improving customer service and protecting and maintaining Wisconsin's water. During the January 2005 through December 2006 Clean Water Act reporting period, the Water Division realigned its management structure, which set into motion improved communication, heightened information sharing, stronger technical support structures, and improved resource-based management approaches. This strategic realignment refocused technical expertise in fisheries, groundwater, and watershed back to the primary business of monitoring, evaluating, and managing resources through science-based data gathering and decision making.

The Water Program's work is guided by four overarching objectives, corresponding goals, and work-specific performance measures. The Program's vision is to link activities conducted by each employee, external contractors, and joint projects with partners and the public to the four strategic objectives below.

### ***Four Objectives of the Water Division***

- [Protect the waters of the state that are held in trust for all the people of the state through enforcement of the Public Trust Doctrine.](#)
- [Fully implement the Clean Water Act in order to achieve the goal of fishable and swimmable waters throughout Wisconsin.](#)
- [Protect drinking water and groundwater resources for both human and ecosystem health.](#)
- [Enhance and restore outstanding fisheries in Wisconsin's waters.](#)

### **Use Designations, Assessments and Monitoring**

Wisconsin has been given the privilege and the responsibility to implement the Clean Water Act. A primary component of this work involves designing a system for "classifying" water into meaningful categories necessary for protecting the quality of those waters. Water quality classifications or "use designations" are the fundamental basis of most all other Clean Water Act management actions. Use designations, along with water quality criteria and anti-degradation measures, form the three "legs" of the state's water quality standards program. During this reporting period, the state began the process of researching and designing updates to its water quality standards and assessment program to reflect new science and information.

Monitoring is the necessary companion to the use designation effort, for it is through the scientific analysis of water quality condition that resource managers make sound regulatory or other decisions. The state's monitoring strategy and assessment strategy are interlinked -- as we are able to generate more scientifically valid monitoring data, more options are available to the state for using that data in an improved assessment approach.

Conversely, national experts in USEPA and their partner agencies are advocating for increased use of biological data in the methodologies that states use to evaluate and target resources. This leadership at the federal level is influencing the way our state is planning for and executing monitoring and assessments. There

is awareness and an increased emphasis on paired biological and chemical monitoring, as well as more emphasis on analyzing fisheries, aquatic macroinvertebrate, and habitat data to determine waterbody potential and status.

The state's strategic monitoring plan, forged over years of hard work to find common ground and mutual activities, embraces efficiency and resource sharing. The strategy identifies three data sources for understanding our water: citizen based monitoring, agency based monitoring, and partner agency based efforts. Wisconsin relies heavily on the efforts of partner agencies (county health departments, USGS) and citizens to gather all the data necessary to understand our water resources. WDNR is uplifted and inspired by the valuable contributions of the state's citizen based stream and lakes monitors. In 2005-06 the Citizen Based Stream Monitoring Program joined our ever-growing group of 1200 Self-Help Lakes Volunteers. Throughout the state, water quality biologists forged new ground by regularly participating with citizens to better understand our waters through joint field efforts.

### **Water Condition**

About one-third of Wisconsin's rivers, streams, lakes, and flowages have been assessed to determine if the quality of the water and aquatic life meet the Clean Water Act goal of "swimmable, fishable waters". Most waters in the state – ones that have been assessed – have fared moderately well. However, the vast majority of waters are affected to some extent by human activities including: agriculture and urban related polluted runoff, manure spills, loss of impervious surface areas, saturation of soil with excess phosphorus, hydrologic modifications and loss of in-stream and riparian habitat. The most affected of these waters are listed on Wisconsin's impaired waters list. Impaired waters are streams and lakes that are not meeting minimum level of quality and which require further analysis and management actions.

### **Water Management**

Wisconsin's progressive underpinnings remain vibrant and strong in the state's ever-evolving search for providing higher quality, more accessible and scientifically sound, and more efficient ways to understand and manage water. As sources of water pollution have evolved, so has the state's approach to managing waters. During the reporting period, the state initiated a strategic analysis of level of effort expended for different types of regulatory work. While over time, the state's pool of point source discharges has grown due to the increases in population, businesses, and urban /suburban residences, the emphasis of DNR staff and resources with regard to point versus non-point issues has been shifted toward the non-point source issues.

The state is purposefully emphasizing innovative programs such as "Green Tier", where the state's 'clean players' receive regulatory relief in exchange for 'going that extra mile' to protect and manage resources – before damage is done. Alternatively, more emphasis is placed on regulating and preventing problems associated with large farms, manure spreading, and land spreading activities which may result in excess nutrients and other pollutants to our surface waters. Greater emphasis statewide is now also placed on recognizing and protecting surface water and groundwater interactions, as the state's Water Quantity legislation is fully implemented.

And finally, the entire water program – fisheries, watershed, and groundwater – continues to work together to provide stewardship of the state's valuable waters, aquatic life, recreational opportunities, and public health protection.

Combined, these actions help keep Wisconsin's waters healthy and vibrant, providing high quality resources for our next generation of... rafters, swimmers, anglers, congressional representatives, farmers, shopkeepers, parents, grandparents, children and others...

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For more information: <http://dnr.wi.gov/environmentprotect/water.html>

