

# SECTION I

## Overview of Basin Management Efforts at the Minnesota Pollution Control Agency

### What is basin management?

Basin management is a watershed-based approach for managing Minnesota's water resources that is focused around the state's 10 major river basins (see Map 1). Watershed and basin management efforts are currently underway around the state, and the Minnesota Pollution Control Agency is working with other resource managers and affected parties to implement this approach to better identify water quality problems, create alliances with communities to establish shared goals and priorities, and develop integrated point and nonpoint source pollutant reduction strategies. The following principles are key to basin management.

***Focus on Water Resource Priorities*** — Basin management starts with a focus on the water resources themselves and the extent to which they are threatened or impaired by multiple pollution sources of all types. Basins and watersheds are used to define areas, which facilitates the analysis of water quality impacts from multiple pollution sources as water moves downstream. Priorities are often identified in terms of specific rivers, streams, lakes, wetlands and aquifers. These priorities are then used to guide decision making.

***Emphasis on environmental outcomes*** — Monitoring and assessment of lakes and streams is the first step in each basin planning cycle. These assessments provide a yardstick that can be used to measure success in basin efforts. Basin management success is measured by the progress made in protecting or restoring specific waters from threats to human and aquatic life.

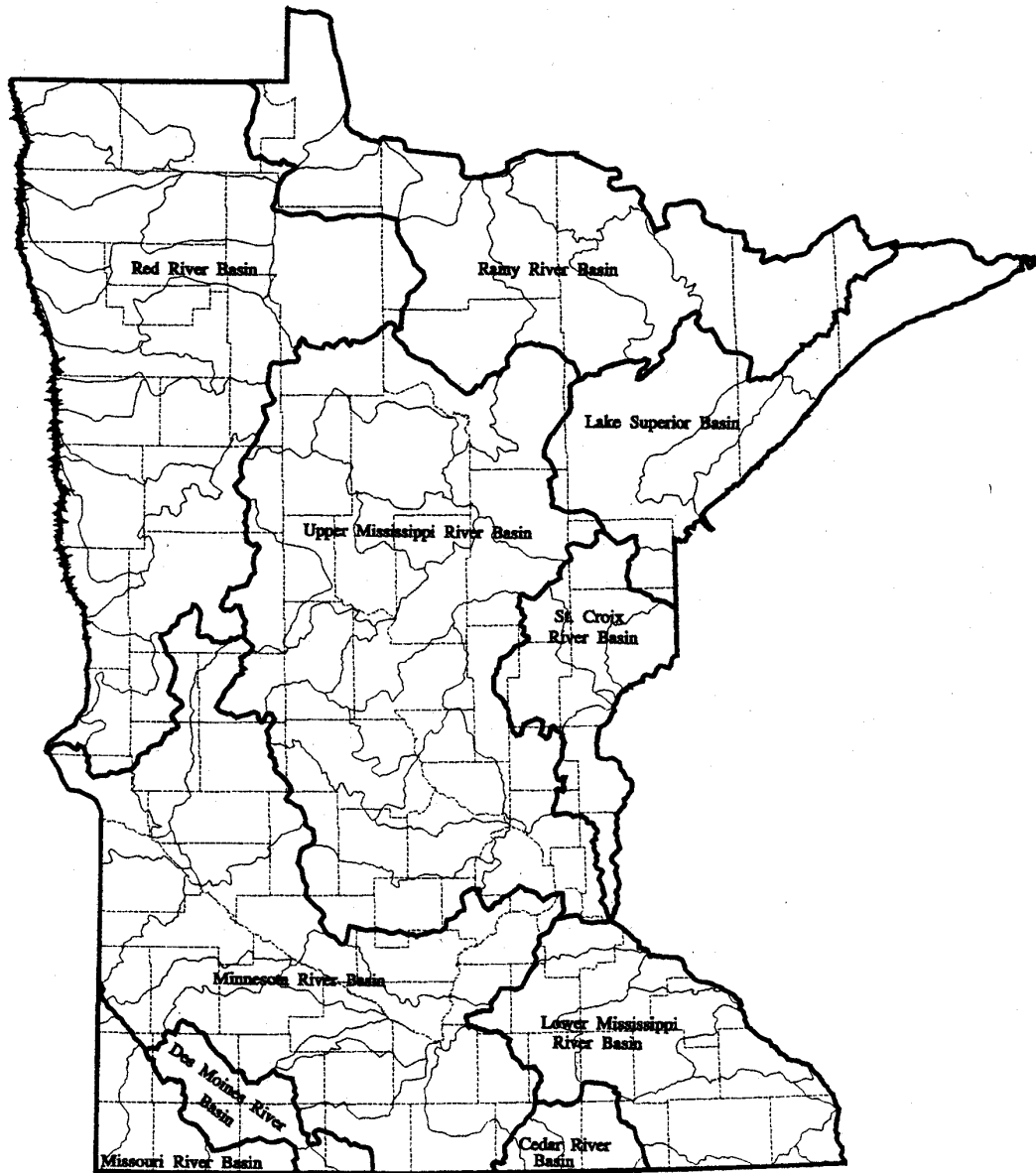
***Customer involvement*** — Customers include regulatory agencies, local and tribal governments, organizations and individuals that are involved in or affected by water resource management decisions. Basin management will provide a framework for linking local, state and federal water resource management efforts, and to work with others to develop shared environmental goals. The basin management process will recognize and build on water-quality related plans and activities already underway by various organizations, such as the comprehensive local water plans developed by local governments.

***Integrated point/nonpoint source pollutant management strategies*** — Basin management integrates and targets point and nonpoint source programs to directly address the particular causes and source of specific water quality problems.

Basin management plans (also known as basin plans) will be prepared for each of the state's 10 major river basins and will be completed in phases. The first basin group will include the Lake Superior, Minnesota River and Red River of the North basins. The Upper Mississippi River, Lower Mississippi River and St. Croix River basins make up the second group. The third group of basins includes the Rainy River, Missouri River, Cedar River and Des Moines River basins. Initial plans will be completed starting in the year 2000. Subsequent updates of the plans are to be prepared every five years, and will include new information, assessment tools, and management strategies, as they become available.

# Map 1

## Minnesota's Major River Basins



After completion, the goals, priorities and strategies in the plans will be implemented. These plans will drive the Minnesota Pollution Control Agency's water quality activities such as permitting, standards setting, monitoring, etc., over the next five years.

The process for developing the initial set of basin plans will be different from subsequent rounds in that for each of the initial plans, the basin information document will be developed. The basin information documents, which will be a compilation of existing information on physical characteristics, water quality conditions and pollutant sources in the basin, will be produced only once. Water quality assessments of the lakes and streams in the basins will also be included. This information will come from many sources including point source programs, nonpoint source programs and other state, federal and local agencies water quality efforts. The basin information document will identify local water planning priorities and implementation activities in the basin, and current water-quality related efforts by the MPCA and other agencies. These documents are *not* basin plans, which will include goals, strategies and priorities developed with partners in communities throughout the basin. The main purpose of the basin information document is to serve as a starting point for discussions with partners on shared goals and pollutant reduction strategies.

Subsequent rounds of basin planning will not include development of the basin information documents. The beginning of each new round of basin planning will include a review of the progress made in achieving basin goals and priorities. Completion of each basin plan is a five-year process, which is divided into the following nine steps.

#### Five-Year Basin Management Process

1. Outreach--Organize Partnership Teams
2. Develop Basin Information Document or Review Progress on Goals and Strategies from Previous Basin Plan
3. Analyze Data and Identify Water Quality Problems or Reassess Water Quality of Basin Lakes and Streams
4. Work with local partners to:
  - identify priority issues
  - target priority waters/watersheds
5. Develop Integrated Management Strategies with Partnership Teams
6. Develop Basin-Specific Monitoring Plans
7. Prepare Draft Basin Plan
8. Review--Finalize Basin Plan
9. Implementation of Recommended Strategies

The strategies outlined in the basin plan will be followed to implement pollutant source controls, best management practices, monitoring programs, enforcement methods, etc. Implementation activities may include public notice and issuance of water quality permits, distribution of loans to prioritized entities, and allocation of federal grant funds to prioritized nonpoint source problem areas. Implementation will also include an information and education component to communicate goals and selected management strategies of the final plan and to educate stakeholders on implementation schedules, milestones, and regulatory and voluntary efforts required to meet environmental objectives.

#### Why is it being implemented?

Traditional water-protection efforts since the passage of the 1972 Clean Water Act have focused on controlling specific types of pollutants and pollution sources, primarily

wastewater from municipal sewage plants and industrial facilities. These point source pollution issues still remain; however, the water quality problems at the forefront today are more complex, and include nonpoint source pollution, toxic contamination, bio-accumulative substances, airborne pollutants, and habitat alteration. As the agency's focus on protecting and improving water quality changes, the MPCA is moving toward a more integrated, resource-based approach.

The benefits of the basin management approach include improved efficiency, increased coordination, greater consistency, improved public awareness and local involvement in management of the state's water quality resources.

One of the goals of basin planning, and the staggered planning process is to focus state resources on individual basins during their planning cycle. This focus will increase efficiencies, in planning, water quality monitoring, modeling and permitting efforts. As a result, more can be achieved for a given level of funding and resource allocation. Focusing on goals to be achieved over several cycles encourages consistency and continuity. Customers can expect improved continuity in decisions because management actions throughout the basin are fixed for at least the length of the cycle.

### **How will it help improve water quality in the Upper Mississippi River Basin?**

At the start of each cycle, the water quality of lakes and streams in each basin are assessed. These assessments are made using water quality monitoring and data from many sources, including the MPCA, United States Geological Survey and local efforts. This will help provide a picture of the health of water quality resources,

which can be used to measure progress as basin plans are updated on five-year cycles.

By involving citizens, local governments, industries and other agencies in developing shared goals for the water resources in the Upper Mississippi River Basin and determining how and where program resources should be directed, basin management will help improve communication and coordination between the MPCA and other organizations. This approach will help us build cooperative long-term alliances with others in agencies, local governments, the regulated community, environmental groups and the public, who will work together with the MPCA to develop strategies to improve and protect the water quality in the Upper Mississippi River Basin.

Basin management will also help the MPCA target its efforts based on clearly defined water quality priorities within the Upper Mississippi River Basin.