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A WATERSHED APPROACH TO LAKE RESTORATION By Louis N. Smith, Waverley Eby Booth and Michael A. Panzer

I. Introduction

Water knows no political boundaries. As public concern grows over the decline in the water quality in our lakes and rivers, one comprehensive approach to restoring water quality lies with an idea adopted by the Minnesota Legislature over four decades ago in 1955: watershed districts. This article reviews how watershed districts can provide critical tools for restoration of water resources, and presents some key considerations in adopting an effective "watershed approach" to lake restoration and management.

II. Watershed Districts: Background and Purpose

The State of Minnesota has been a pioneer in the concept of watershed-based water management, adopting the Minnesota Watershed District Act in 1955. The Minnesota Watershed District Act, now codified in Minnesota Statutes Chapter 103D, provides for the establishment of watershed districts "to conserve the natural resources of the state by land use planning, flood control, and other conservation projects . . . using sound scientific principles for the protection of the public health and welfare and provident use of the natural resources."

The Minnesota Watershed District Act recognizes several fundamental concepts in the effective management of water resources. First, the law recognizes that water does not adhere to political boundaries and, thus, allows for the establishment of watershed districts as local government units bounded by hydrologic divides as opposed to political borders. As a result, waterbodies and the land draining into them are regulated by one local entity with a central comprehensive vision for managing the entire water resource.

Second, the law recognizes that regulation of land use within a watershed is an essential component in protecting and preserving the water resources within the watershed. Watershed districts supplement municipal land use regulation with an exclusive focus on water quality and flood control in a manner designed to avoid the problem of pushing the detrimental effects of development downstream.

Third, watershed districts provide a more workable and rational means of financing improvements for water resources. Typically, local municipal jurisdictions lack the necessary resources to fund critical improvements designed to restore water quality or provide flood control for local lakes and streams. Assessing the costs across the entire watershed that contributes drainage to these lakes and streams provides a more equitable and effective approach.

Finally, watershed districts, as local entities with boards comprised of local citizens, provide an effective means of engaging citizen ownership and management of valued local water resources. As one writer observed recently in the National Geographic, the "watershed approach" is now the national model and new hope for effective management of water resources:

The intimacy of the smallest watersheds may be a key to their restoration: At that level every individual can have an effect. "It's almost impossible to address water quality on the main stem of a river," says James Fisher of the National Watershed Coalition. "*If you do it one small watershed at a time, you still have public support. Small size is the advantage. This replaces Big Brother with Joe down the creek.*"

Michael Parfit, "Restoration: New Ideas, New Understanding, New Hope," <u>Water: The Power,</u> <u>Promise and Turmoil of North America's Fresh Water</u>. National Geographic Special Edition at pp. 113-114 (November 1993).

For decades, Minnesota has utilized the watershed approach, mobilizing citizen boards of managers who are intimately familiar with local land use issues to protect and restore our water resources.

III. The Minnehaha Creek Watershed District and the Chain of Lakes

Improvement Project

The Minnehaha Creek Watershed District ("MCWD") was established in 1967 under the Minnesota Watershed District Act to protect the water resources of the Minnehaha Creek watershed. The Minnehaha Creek Watershed District is approximately 181 square miles and includes all or part of 27 cities, three townships, and two counties. The MCWD seeks to conserve the water resources of the Minnehaha Creek watershed principally through analysis of the causes of harmful impacts on the water resources, public information and education, regulation of land use, regulation of the use of waterbodies and their beds, and capital improvement projects. Through its extensive monitoring and analysis of the watershed, the MCWD identifies the root causes of water quality degradation and flooding, and uses this knowledge to develop and implement solutions that address these causes. The MCWD's approach includes both nonstructural solutions, such as public information and education and regulation of land and water use, and structural solutions, including comprehensive lake restoration projects, various hydraulic improvements addressing flooding, and a headwaters outlet control structure.

One lake restoration project recently undertaken by the MCWD is the Chain of Lakes Improvement Project. The Chain of Lakes is a series of five lakes (Brownie, Cedar, Lake of the Isles, Calhoun, and Harriet) located in the heart of Minneapolis. Water quality in the Chain of Lakes has been steadily deteriorating over the past decades. In an effort to restore water quality in the Chain of Lakes, the MCWD entered into a partnership, the Clean Water Partnership, with the City of St. Louis Park, the City of Minneapolis, the City of Minneapolis Park and Recreation Board, and Hennepin County. The Chain of Lakes Improvement Project involves a multi-faceted approach to lake restoration, including public information and education, implementation of best management practices by municipalities and landowners, and structural improvements, including construction of several wet detention ponds/wetlands and dredging.

IV. Lake Improvement Techniques

There are numerous techniques that can be used to aid in the restoration of lakes. These techniques include structural improvements such as wetland restoration and construction of wet detention basins, nonstructural best management practices such as lawn and garden management, and public information and education. The most effective lake restoration projects will involve using a number of these techniques tailored to the specific needs and circumstances of the lake and its watershed.

A. Structural Improvements: Wetland Restoration/Wet Detention Basins

In the Minnehaha Creek Watershed District, phosphorus is the nutrient which poses the greatest threat to water quality by stimulating the growth of algae and aquatic plants. Phosphorus is carried by stormwater and runoff from lawns, highways, parking lots, and farm fields treated with fertilizer, from animal waste, and from other natural sources. The MCWD has conducted extensive research on how wetlands use physical, chemical, and biological processes to remove nutrients such as phosphorus from stormwater runoff. In 1975, the MCWD conducted some of the first field research on this subject that was later published as a guidance document by the United States Environmental Protection Agency. Partially as a result of this research, water resource managers now commonly utilize the practice of utilizing wetlands for filtration and removal of nutrients from stormwater reached in lakes and other bodies of water.

The greatest lake water quality improvements can be achieved by addressing non-point source phosphorus loading originating upstream and preventing it from draining into a lake. Natural or constructed wetland systems present the most significant opportunity to remove phosphorus before it reaches a lake. Constructed wetland systems take advantage of the filtering and cleansing abilities of natural wetlands, and can be specifically designed to treat urban stormwater. More than 150 of these systems are now in operation throughout the United States, and most of these projects have been built since 1988.

Depending upon their particular design, these stormwater wetlands can vary significantly in their effectiveness in removing phosphorus and other nutrients. Given this wide variation in the effectiveness of constructed wetland systems to treat stormwater, it is imperative to design the wetlands based upon a thorough investigation of the hydrology of the subwatershed involved. Particular design considerations that can greatly increase the efficiency of the wetland treatment system include its physical configuration surface area, depth, storage capacity, detention time, operational methods, and biological and chemical processes.

Wetland treatment systems have a number of advantages over other treatment methods. They are comparatively less expensive to construct, costing as little as one-fifth of the cost of treating a similar amount of waste water with a traditional system. Wetland systems are typically designed for gravity flow, so they are more energy efficient than mechanical or other treatment systems. While constructed wetlands require on-going operation and maintenance expenses not normally associated with natural wetlands, as passive treatment systems they require much less operation and maintenance expenditures than do traditional treatment systems. Typical maintenance tasks involve periodic sediment removal, monitoring, and vegetation management. As an added benefit, constructed wetlands can provide many of the same wildlife habitat and other benefits as natural wetlands. When carefully designed, constructed wetlands can be a highly cost-effective means of removing phosphorus from stormwater.

The Chain of Lakes Improvement Project, undertaken by the MCWD and its partners, involves use of structural improvements, including wetland restoration/wet detention basins. The structural components of the Project focus on water quality improvements to Cedar Lake and its largest contributing subwatershed, called the Twin Lakes Subwatershed. Twin Lakes is a 12 acre waterbody located in St. Louis Park. It receives water from approximately 1500 acres of well-developed residential and commercial areas. The Project specifically targets phosphorus removal from runoff entering Twin Lakes and Cedar Lake and consists of three segments:

1) Excavation of a 1.3 acre wet detention basin upstream of Twin Lakes. The purpose of the wet detention basin is to trap sediment and generally improve storm water quality entering Twin Lakes.

2) Dredging Twin Lakes and increasing the average depth from 2.0 feet to 5.5 feet. This will increase the hydraulic residence time thereby increasing nutrient removal from water discharging to Cedar Lake. The existing Twin Lakes outlet was also lowered by one foot to enable adequate hydraulic gradient for the Twin Lakes Park improvements, to provide additional storage capacity for stormwater, and to increase the flow capacity of the existing outlet to alleviate local flooding problems.

3) Excavation of a 4.6 acre wet detention basin/wetland system at the Cedar Meadows area near the southwest corner of Cedar lake. This segment of the project includes diversion of a portion of the Twin Lakes outflow and local drainage to the Cedar Meadows area to further treat stormwater runoff entering Cedar Lake.

B. Nonstructural Best Management Practices

1. Lawn and Garden Management

Runoff from lawns and gardens is often a source of pollutant loadings. Efforts directed at lawn care practices can be effective in reducing pollutant loadings. In general, such efforts include banning the sale and/or application of phosphorus-containing fertilizers, regulation of the sale and/or application of herbicides and pesticides, licensing and regulation of lawn care companies, encouraging or requiring alternative ground cover, and promoting proper disposal of yard waste. A watershed undertaking a lake restoration project may either undertake these activities itself or partner with municipalities in pursuing these objectives.

As part of the Chain of Lakes Improvement Project, the Clean Water Partnership has focused on public education and outreach to promote voluntary adoption of best management practices. Thousands of color brochures and restaurant placemats have been distributed to residents and businesses in the watershed. The brochures promote watershed awareness of the drainage into the Chain of Lakes, the importance of the proper use of fertilizers and the availability of non-phosphorus lawn fertilizers, and the importance of keeping leaves and grass clippings away from hard surfaces which drain into the storm sewer system.

2. Animal Waste/Livestock Management

Nutrient loading and bacteria from animal waste may be a source of pollutant loadings into waterbodies. The sources of animal wastes may be extremely varied ranging from large scale horse or hog farms and feedlots, to large resident waterfowl populations, to domestic pet wastes. There are also a variety of ways to address the sources of animal wastes. Depending upon the source of the animal waste, the following items may assist in the reduction of pollutant loadings from this source: (1) use of zoning to place animal facilities away from sensitive waterbodies; (2) reduction in resident waterfowl populations through relocation or destruction; (3) frequent removal of animal wastes from parks and open spaces; and (4) public education of the deleterious effects of poor animal waste management.

The Clean Water Partnership has sought to address the deleterious effects of animal waste through public education, emphasizing that pet waste should be kept away from hard surfaces which drain into the storm sewer system.

3. Erosion and Sedimentation Control

Erosion produces sediment, which carries nutrients, lessens how well drainage systems work and can, over time, decrease the depth of a waterbody. Sediment being washed into drainage systems and waterbodies may contain not only soil particles and organic material, but can also carry high levels of heavy metals, nutrients, an agricultural chemicals. As a result, requiring implementation of erosion and sedimentation control measures can greatly reduce nutrient and pollutant loadings. These best management practices may include on-site sediment control during and after construction activities, encouraging property owners to keep areas abutting drainage systems and waterbodies vegetated, and street sweeping to remove accumulated sediment and organic debris.

The Clean Water Partnership, as part of the Chain of Lakes Improvement Project, has undertaken extensive efforts to put best management practices in place. These efforts include intensified municipal and park board street sweeping, and installation of grit chambers to trap sediment in storm sewers prior to discharge into the lakes. Property owners have also been invited to a seminar to promote the use of wetland vegetation for lake shorelines, as an alternative to traditional sod lawns which involve less species diversity, less filtering capabilities, and the prospect of fertilizer runoff in the riparian zone of the lake.

C. Public Education

Public information and education programs can be effective tools for changing long term behaviors that have detrimental effects on water quality and encouraging stewardship of water resources. Public information and education may also reduce the future need for structural improvements to correct the detrimental effects of harmful activities.

The first step in undertaking a public information and education program is to establish contacts in the environmental education community. In many watersheds, organizations devoted to environmental education and information may already exist. A watershed district should commence a dialogue with these existing organizations to determine what types of public education efforts are already underway and perhaps discuss partnering with some of the already existing organizations in development and implementation of new public education programs.

Public education programs can focus on any number of negative impacts on the water resources of a watershed, through a variety of mediums, directed at a variety of audiences. Several examples of public education programs undertaken by the Clean Water Partnership as part of the Chain of Lakes Improvement Project include:

- informing residents and businesses of proper methods for hazardous waste and yard waste disposal and minimum impact automobile maintenance practices;
- encouraging landowners, developers and municipalities to use best management practices to control the detrimental effects of certain land use practices on water quality;
- use of technology such as a Web page on the Internet or an interactive CD-ROM to inform and encourage public participation;
- development of materials to be used in educational programs for students;
- partner with business to provide employee education;
- use of stenciling of curbs and drainage system openings, placemats, neighborhood presentations, public service announcements, and Earth Day events to distribute information.

V. Intergovernmental Cooperation

It is inevitable that any significant lake restoration project will find itself in the midst of potentially complex relationships between federal, state, and local governmental entities and private property owners. Some governmental agencies will provide a permitting and regulatory function, while others will contribute their financial and staff resources to different components

of the project. Each partner to a restoration project has its own unique set of interests and demands, based upon the nature of its jurisdiction, the scope of its participation, and the pressures of its respective constituencies. It is vital that the contributing partners clarify their responsibilities to the project through a pre-implementation cooperative agreement.

These agreements should outline general responsibilities and performance guidelines for the project. The Clean Water Partnership for the Chain of Lakes Improvement Project adopted a detailed cooperative agreement which spells out the specific commitments of resources and responsibilities of each partner. The partners also agreed on a project work plan and timetable to provide a "road map" of responsibilities and progress milestones over the life of the cooperative agreement.

Often, it will be necessary to provide an organizational structure to the project so that each party's participation is assured and communication between the parties is facilitated. Large multi-year projects with a variety of participating agencies should have some form of coordinating board to provide general oversight and policy direction for the project. The Chain of Lakes Improvement Project created through its cooperative agreement a Coordinating Board, comprised of a member of the governing body of each partner to the agreement. The Coordinating Board meets on a quarterly basis to receive progress reports and to address broad policy issues that arise in the course of project implementation.

All of the contributing partners should agree on the selection of one person to serve as the coordinator or manager for the project. The Chain of Lakes Improvement Project named through the Coordinating Board a Project Coordinator charged with coordinating all aspects of implementing the project, facilitating communication between the partners, and preparing progress reports. To assist the Project Coordinator, the project also created an Implementation Team which is comprised of a staff person from each of the participating agencies. The Implementation Team, chaired by the Project Coordinator, meets on a more frequent basis than the Coordinating Board, and focuses on the completion of specific project tasks as outlined in the work plan.

Similarly, a cooperative agreement should provide for a technical committee so that design and permitting issues are thoroughly discussed among the participating agencies. The Chain of Lakes Improvement Project created a Technical Advisory Committee that includes a large number of agencies beyond the partners to the project. The Technical Advisory Committee provides an excellent discussion forum for commenting on project design. The process of obtaining federal, state, and local permits for the project is also greatly facilitated by having representatives of the permitting agencies informed about the project early in the process through participation on the Technical Advisory Committee.

Agreements about how the project will be communicated to the public and clarifying responsibilities for these communications is also helpful. The Chain of Lakes is the subject of extensive ongoing media interest, and the public education and outreach is a critical component for the Clean Water Partnership in promoting best management practices. The Chain of Lakes Improvement Project also created through its cooperative agreement a Public Communications Committee to assure accurate and informative communication about the project. The Committee developed a communications plan and news media policy through the participation of all of the partners.

There is a very fine line between too much and too little structure to these multi-party relationships. The scope and duration of a project, as well as the number of participating parties, will determine in each case how much structure will be useful. Whatever the scope and complexity of the project, the investment of time and effort by participating partners to identify

and resolve potential issues of conflict, as well as to provide a structural organization of relationships, will go a long way to assuring the success of a multi-party collaborative effort.

VI. Citizen Involvement

Citizen involvement and education is an important component in both planning and executing a lake restoration project, regardless of how large or small the project. Citizens can be directly involved in planning a project through creation of a citizens advisory committee. This committee can be made up of any number of individuals representing various organizations, neighborhoods and special interest groups, although small committees are more efficient. The committee can suggest goals for the project and assist in the selection of actions to be taken. Public involvement and input can also be achieved through public hearings, neighborhood meetings, and one-on-one meetings with individual affected residents.

The Clean Water Partnership held numerous meetings with citizens groups throughout the planning and execution of the Chain of Lakes Improvement Project. Meetings were held with neighborhood organizations and special interest organizations such as the local chapter of the Isaac Walton League. Individual residents were invited to meetings to discuss actions being taken within their immediate vicinity by individual notice to their homes. The Minnehaha Creek Watershed District held several different public hearings to solicit public comment on ordering the project, on the design plans for the project, and on the necessity of performing an environmental impact statement. The MCWD also met on an individual basis many times with directly affected property owners. In addition, public notice and comment was solicited for the permits required for construction of the project. The Clean Water Partnership also sent informational brochures on the project to nearby residents, and a second brochure aimed at informing a wider group of residents about how they may individually assist in lake restoration.

VII. Government Permitting and Approval

Almost every restoration project, whether it involves the construction of wet detention basins/wetlands, diversion of storm sewers or dredging, requires some type of governmental permit or approval. Although the types of permits needed depend upon the project, there are certain general permitting principles that should guide the permitting process for any project. Prior to approval of the project, the watershed district should determine exactly what permits and approvals are needed and from which governmental agencies. This determination is critical for several reasons. Determination of the types of permits needed may affect the design of the project. For example, before the U.S. Army Corps of Engineers will issue a permit to drain, fill or excavate in a wetland, the permit applicant must establish that there are no alternatives to impacting the wetlands. It is an expensive mistake for a watershed district to design a project only to find out that the project cannot be permitted. The types of permits needed may also affect the feasibility of the project. Again, the U.S. Army Corps of Engineers will only issue a permit to drain, fill or excavate in a wetland if the impact on the wetland is compensated. This may result in a requirement that the watershed district mitigate impacts on wetlands resulting from the project through either on-site or off-site wetland restoration or creation. Off-site mitigation can be expensive, thus, making the project economically unfeasible for the watershed district.

A second guiding principle in obtaining permits is working with the permitting agencies in advance of submitting permit applications. Agency personnel are a valuable resource in the design of projects. Consulting them in advance may not only lead to a project that can be permitted but also to a more effective project. The two examples of permitting pitfalls with the Corps of Engineers listed above can be easily avoided by consulting with the Corps in advance of actually submitting a permit application. The Corps can help identify alternatives and may

even be able to offer suggestions on how a project can be redesigned to lessen or eliminate the need for off-site mitigation. Working with the permitting agencies in advance will also speed the permitting process once a permit application is submitted because the agency is already familiar with the project.

A third guiding principle in obtaining permits is timing. Permits must be applied for so that they can be obtained in advance of the anticipated start date of the project. While this may seem obvious, agencies receive many requests for a last minute permit that an applicant did not realize was necessary. Almost all permits have public notice requirements that cannot be waived or altered. In addition, agency workload may prohibit agency personnel from acting on a permit application as quickly as the permit applicant desires. Timing is also an issue as it relates to the environmental assessment process. As discussed below, permits cannot be granted for a project until that project has gone through the environmental assessment process. However, this does not preclude a permit applicant from submitting a permit application or meeting with agency personnel about a project prior to completion of the environmental assessment process.

The Chain of Lakes Improvement Project involved ten different permits or approvals from six different agencies. These permits included a Clean Water Act § 404 permit for wetland impacts from the U.S. Army Corps of Engineers; a Clean Water Act § 401 water quality certification, State Disposal System permit, and Stormwater Discharge permit from the Minnesota Pollution Control Agency; a Work in the Beds of Public Waters permit from the Minnesota Department of Natural Resources; a permit for Use of Facilities and permit for an outfall from the Minneapolis Park and Recreation Board; and three different permits from two different municipalities. Each permit had its own set of substantive and procedural criteria.

VIII. Environmental Assessment Process

If a watershed district is to undertake a restoration project, it is crucial for the watershed district to comply with the statutory environmental review process. The purpose of the environmental review process is to build into the decision-making process full disclosure and consideration of a project's environmental impact.

Environmental review under Minnesota Law stems primarily from two statutes - the Minnesota Environmental Policy Act (MEPA), Minn. Stat. § 116D, and the Minnesota Environmental Rights Act (MERA), Minn. Stat. § 116B. These two statutes and the regulations implementing them provide the legislative purpose and policies sought to be achieved through environmental review, the substantive standards for environmental decisions, and the environmental analysis required of governmental decision-makers. The Minnesota Environmental Quality Board (EQB) is responsible for ensuring compliance with MEPA and holding public hearings on matters of major environmental impact.

MEPA contemplates a two-step environmental review process that is implemented by the responsible governmental unit (RGU). Depending upon the circumstances, the watershed district initiating the project may be the RGU. The two-step process contemplated by MEPA involves a determination as to whether an environmental assessment worksheet (EAW) and/or an environmental impact statements (EIS) must be prepared.

An EAW is a short worksheet "designed to rapidly assess the environmental effects which may be associated with a proposed project." It is intended to evaluate the need for an EIS and to serve as a basis for determining the scope of an EIS. An EIS is a much more detailed document designed to determine a project's potential for significant environmental effects.

A. Determining Whether an EAW is Necessary

For certain projects, an EAW is mandatory. Projects for which an EAW are required are those that meet or exceed the threshold of any subpart listed in Minn. R. 4410.4300. Multiple projects and multiple stages of a single project that are connected must be considered in total when comparing the project to the threshold in Minn. R. 4410.4300. The list of mandatory EAW categories should be consulted to determine if a proposed project falls within one of the categories.

In addition to the categories of mandatory EAWs, an EAW must also be prepared in four circumstances. The first circumstance requiring an EAW is where a person requests the preparation of an EAW on a project by filing a petition that contains the signatures and mailing addresses of at least twenty-five individuals and is prepared pursuant to Minn. R. 4410.1100. If the RGU for the project determines that because of the nature and location of the proposed project it may have a potential for significant environmental effects, the RGU shall order the preparation of an EAW. The second circumstances is where a governmental unit with approval authority over a project determines that because of the nature and location of the project, the project "may have the potential for significant environmental effects." The third circumstance requiring an EAW is where the EQB determines that because of the nature and location of the proposed project, the project may have a potential for significant environmental effects. This provision does not apply to a project exempt under Part 4410.4600 or a project for which a governmental unit with approval authority over the project has made a prior negative or positive determination concerning the need for an EAW. Finally, an EAW may be undertaken when the project proposer wishes to determine if the project has the potential for significant environmental effects.

Even if an EAW is not required under the statute, a watershed district should consider whether a voluntary EAW would be beneficial. A voluntary EAW can clarify environmental issues, help develop alternatives, and provide an additional venue for public input.

B. Determining Whether an EIS is Necessary

The purpose of an EIS is to provide enough information on a proposed project, which has the potential for significant environmental effects, to evaluate the project, consider alternatives to the project and explore methods for reducing adverse environmental effects.

Similar to the rules regarding EAWs, there are certain categories of projects for which an EIS must be prepared. These categories all have thresholds that must be exceeded in order to require an EIS. A "discretionary EIS" may be prepared when a RGU determines based on an EAW and comments received on an EAW that the proposed project has the potential for significant environmental effects or the RGU and the proposer agree that an EIS should be prepared. Multiple projects as well as multiple stages of the single project that are connected must be considered in total when comparing the project or projects to the thresholds.

D. Substantive and procedural requirements

The rules governing the environmental assessment process set forth very specific requirements governing preparation and approval of EAWs and EISs. The rules discuss when in the planning process the documents must be prepared, the type of information that must be included, and the process for noticing and approving the documents. It is important that a watershed district undertaking a project comply with these substantive and procedural requirements. Mistakes in the process can delay a project significantly.

One important requirement that a watershed district undertaking a lake restoration project must be aware of is that a final governmental decision to approve or begin a project may not be made until either (1) a petition for an EAW is dismissed; (2) a determination has been made that an EIS is not necessary; (3) an EIS is determined adequate; or (4) the EQB has granted a variance from making an EIS. Minn. Stat. § 116D.04, subd. 2b. In addition, the rules require that if a project is sponsored by a governmental unit, the governmental unit may not take any action with respect to the project, including the acquisition of property, if the action will prejudice the ultimate decision on the project until a negative declaration has been issued. Minn. R. 4410.3100, subd. 2. This requirement illustrates the necessity of reviewing and including all legal requirements affecting a project in the project planning phase. A timeline for a project, including permitting and environmental assessment requirements, should be developed in advance to avoid taking actions, such as approving a project, before other prerequisite actions are taken, such as determination of the need for an EIS.

IX. Conclusion

As non-point source pollution of our lakes and rivers continues to be a compelling public concern, the watershed approach is a comprehensive, effective way to restore water quality. Watershed districts in Minnesota have been involved in the local management of water resources for decades. As a local unit of government defined in hydrological, rather than political, terms, watershed districts are in a position to restore our water resources "one small watershed at a time."

The Chain of Lakes Improvement Project undertaken by the Minnehaha Creek Watershed District and its partners illustrates that major lake restoration within a watershed can be achieved through careful planning and intensive collaboration with other parties. In an era of increased public scrutiny of all levels of government, watershed districts can deliver value to citizens through real improvements to our environment, because improving water quality ultimately means improving the quality of life for families, neighborhoods, and businesses that live and work together within the watershed.