

Taking steps for cleaner water

WATER QUALITY IMPROVEMENT FRAMEWORK FOR LAKES



clean water
starts with you.

START YOUR CLEAN WATER JOURNEY

Water quality in Iowa's lakes results from a variety of factors in the watershed and within the lake itself. The complexity and interactions among these factors make restoration and water quality protection a challenge. But success relies on communities committed to making changes on the land and in the home to improve their local lakes.

Improving water quality in a measurable and observable manner takes a targeted, system-wide, locally-led approach that relies on community support and involvement. There are three major components that need to be addressed to achieve better water quality: the watershed, the lake basin and the social/cultural climate.

Much like a road map directs you from the beginning of a journey to the end, this document provides a framework or pathway for water quality improvement in lakes built on past successes with Iowa communities.

Questions?

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IDENTIFY

IDENTIFY CONCERNS, BUILD SUPPORT

Community involvement is crucial to implementing and sustaining water quality improvement efforts in public waters. Involving stakeholders, including citizens, in the initial stages of project development by listening to their concerns and ideas helps ensure long-term success (see Appendix A).

- Contact local organizations and agencies with an interest in improving water quality in the lake. This includes elected officials, natural resource agencies, local community groups and others that have an impact on the resource.
- Identify other local leaders that might support the water quality effort. Who in your community “gets things done?” They may not be an elected official or work for a resource agency, but people respect them and their ideas.
- Meet with resource agencies and local leaders to create a technical advisory team (TAT). Discuss the water quality improvement process, timelines and responsibilities. The TAT includes key natural resource experts from agencies who have an interest and/or can provide information about the resource, including water quality issues and improvement options. This group also includes representatives from agencies and organizations who have technical and financial resources to help implement solutions.
 - Potential TAT representatives: SWCD, NRCS, DNR, IDALS, RC&D, CCBs, County Board of Supervisors, city officials, local leaders, lake associations, etc. (Appendix B).
- Determine local project sponsor(s) – for example, city and county governments, SWCDs, CCBs, solid waste agencies, DNR, etc. –and a lead coordinator for your effort.

INITIALS AND ACRONYMS USED

DNR:

Department of Natural Resources

NRCS:

USDA Natural Resources Conservation Service

SWCD:

Soil and Water Conservation District

IDALS:

Iowa Department of Agriculture and Land Stewardship

RC&D:

USDA Resource Conservation and Development

CCB:

County Conservation Board

TAT:

Technical Advisory Team



IDENTIFY

- Begin planning your public outreach efforts, focusing on attracting stakeholders and landowners to meetings, and building community support in the improvement effort. Develop a list of contacts for future communications (Appendix A and C). To begin, select dates for two public meetings.
- Hold public meetings to get your neighbors involved and identify their concerns.
 - Public meeting # 1
Present information to help your community understand how the resource affects them: water quality problems, what often causes them, local benefits of water quality improvement, restoration needs and possible solutions. Explain, in simple terms, the water quality improvement process and community based planning concept.

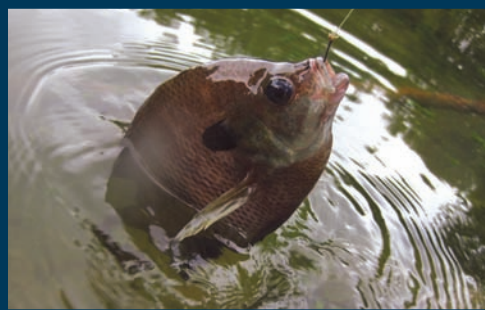
Solicit attendees' and stakeholders' participation in a local watershed steering committee. Provide a sign-in sheet near the entrance to the meeting place to count attendance and collect follow-up contacts. Provide a space for them to indicate if they are interested in serving on the steering committee (Appendix D). Announce date for the next public meeting. *Note:* If key stakeholder groups are not represented at the meeting, seek them out and share information with them. Invite them to the next meeting.

WHO'S THAT?

STAKEHOLDER: Anyone with an interest in your effort. This can include individuals, organizations, businesses, schools, colleges and government agencies, for example.

TECHNICAL ADVISORY TEAM: A group of natural resource experts with representatives from organizations with technical, scientific and financial resources to help the effort.

STEERING COMMITTEE: A group that works in the community to move the effort forward and can provide input on the community's use and value of the water.



- Public meeting # 2

Large turnout at first public meeting (more than 20 attending) or urban watersheds:

Within two to three weeks, conduct a facilitated public meeting to gather stakeholder resource concerns, create a vision statement of how the resource should look in 50 years and solicit participation in a local watershed steering committee. Again explain, simply, the water quality improvement process and community based planning concept. Provide a sign-in sheet near the entrance to the meeting place to count attendance and collect follow-up contacts. Provide a space for them to indicate if they are interested in serving on the steering committee (Appendix D).

Small turnout at first public meeting (less than 20 attending) or rural watersheds:

If participation in the first public meeting was low, then consider holding a meeting only with landowners and other stakeholders or one-on-one meetings with landowners and stakeholders. If you have a small number of landowners to work with, in most cases you'll be much farther ahead scheduling one-on-one meetings to discuss the issues and causes, review the needed improvements, identify critical areas, discuss conservation practice options and available financing. It is also important to note that the water quality problem and cause of the problem you're trying to address will have various levels of acceptance by the landowners.

Create a vision statement of how the resource should look in 50 years and solicit participation in a local watershed steering committee. Again explain, simply, the water quality improvement process and community based planning concept. Provide a sign-in sheet near the entrance to the meeting place to count attendance and collect follow-up contacts. Provide a space for them to indicate if they are interested in serving on the steering committee (Appendix D).

- Following the public and/or one-on-one contact meetings the TAT should meet to select and organize a local steering committee of willing participants and key local leaders.
- If there is a large list of participants - identify and select a representative from specific user groups (e.g. anglers, boaters, campers, bird watchers, landowners, etc.).



IDENTIFY

- Initiate and schedule a joint steering committee and TAT meeting to elect a chairperson, other officers as needed, and discuss the water quality improvement process, next steps (goals and objectives) and funding opportunities, etc.

CREATE GOALS

- First or second steering committee/TAT joint meeting – develop a vision statement and set reasonable goals for improving water quality.
 - Develop objectives (e.g. remove from the impaired waters list, improve water clarity to 5 feet, create habitat to support healthy fish populations, increase local economic activity, improve quality of life, etc.).
- Determine frequency of future steering committee/TAT meetings (e.g. monthly, bi-monthly or quarterly). Frequency may depend on project status (e.g. waiting for results of watershed analysis or diagnostic/feasibility study).
- Develop a communication/outreach plan to keep other stakeholders and the community up to date and provide opportunities for input and involvement throughout the process. Key partners in communicating to a broader constituency include community development organizations and agencies, like Iowa State University Extension community development staff, RC&D, local community improvement/visioning groups, etc.).



INVENTORY

SECURE LOCAL SUPPORT, FUNDING FOR PROJECT DEVELOPMENT

- Seek local community leaders as project champions (e.g. lake association, mayor, county boards of supervisors, CCB, SWCD, etc.)
- Secure funding from local stakeholders and apply for grants to provide resources for the planning process (e.g. DNR Watershed Planning Grant; IDALS Watershed Development and Planning Assistance Grant (Appendix E).

GATHER DATA, ANALYZE PROBLEMS

- Contact a watershed assessment professional or consulting firm, as needed, to gather data, re-search and analyze existing data, and to help pinpoint problems (Appendix A)
- Review water quality improvement plan(s) (e.g. TMDL or Diagnostic Feasibility Study) if available.
- Identify causes and sources of pollution within the watershed and lake basin
 - Watershed analysis (NRCS, SWCD, DNR, and private consulting firms can help with these tasks).
 - Conduct a watershed assessment – identify land use, soils, land slope, etc.
 - Run the Sediment Delivery Calculator, SWAT, or other appropriate model.
 - Examine stream using RASCAL or other tools.
 - Evaluate topography using DEM or LiDAR data.
 - Determine overland, gully, and stream bank/bed erosion and sediment delivery potential.
 - Identify livestock operations, feedlots, and manure application methods, timing and locations.
 - Identify organized drainage district “watersheds” and outlets, if present.
 - Identify other potential point and nonpoint sources of pollution.

NOT SURE ABOUT THESE STEPS?

What do they mean? How do you do them? A consultant or local resource agency can help you gather the data you need. DNR Watershed Planning Grants can also help you put together the technical elements of your plan. www.iowadnr.gov/water/watershed/planning.html

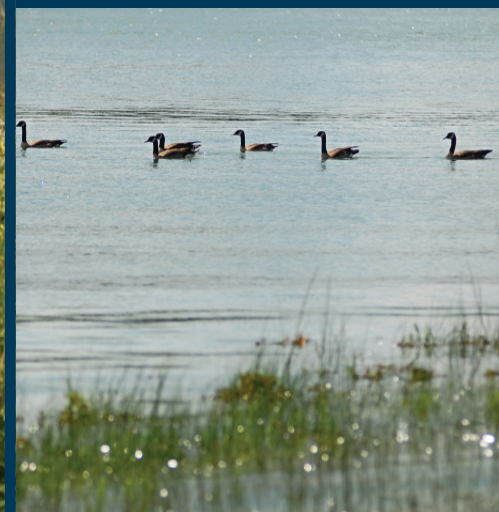


INVENTORY

- Assess any potential urban contributions, such as impervious cover, storm drain outlets, construction sites, unsewered communities, etc.
- Identify potential wildlife influences.
- Lake basin analysis; physical, chemical and biological (Iowa DNR, and private consulting firms can help with these tasks)
 - Physical – Inventory
 - Gather and evaluate all historical and current physical assessment information (e.g. lake maps, bathymetry maps, volume, surface area, mean depth, basin slope, shoreline length).
 - Determine water level history (e.g. ordinary high water mark, sovereign authority, gauging station information, water level history).
 - Determine outlet and inlets (e.g. stormwater outfalls, drainage tiles, outlet history and capacity).
 - Gather current and historic water transparency and total suspended sediment data.
 - Physical – Analyze
 - Determine wind mixing potential (e.g. GIS modeling using current bathymetry).
 - Determine stratification potential, history and implications (e.g. oxygen depletion, temperature profiles).
 - Determine sedimentation rate (e.g. comparison of bathymetric measurements over time, sediment coring and analysis, shoreline recession/erosion).
 - Analyze water level history (e.g. sustained high and low water levels are detrimental to aquatic vegetation and can exasperate shoreline/bank erosion).
 - Determine water budget (i.e. water coming into and out of the system).



- Chemical – Inventory
 - Gather and assess all information on phosphorous, nitrogen, total dissolved solids, dissolved oxygen levels, pH and other water chemistry parameters.
- Chemical – Analyze
 - Analyze water chemistry data for trends and relationships to other physical or biological parameters.
- Biological – Inventory
 - Gather and assess all existing information regarding chlorophyll a, phytoplankton, zooplankton and bacteria (E. coli).
 - Identify studies or information regarding aquatic vegetation (e.g. assessments, historic aerial photos, studies).
 - Assess the lake fishery and macro invertebrate populations (e.g. species present, population characteristics and historic changes).
 - Identify critical habitat areas (e.g. carp reproduction areas, game fish spawning areas, important aquatic vegetation beds, etc.).
- Biological – Analyze
 - Analyze and document trends in biological characteristics of the lake. Trends may be associated or correlated with physical, chemical or other biological parameters (e.g. zooplankton size structure; intensities and duration of blue-green algae blooms; relationships between algal biomass and water clarity, etc.).
 - Determine critical densities and population health characteristics of key macro invertebrate and fish species (e.g. carp densities, carp population size structure, panfish population health indices, predator population health indices, overall species diversity, prey densities, and presence of aquatic nuisance species).
 - Natural lake systems may benefit from historic productivity and ecosystem shift analysis (e.g. sediment coring and analysis).



INVENTORY

- Explore causes affecting changes in aquatic vegetation beds – both emergent and submergent vegetation densities, current and historic extents (e.g. grass carp introductions, historic droughts, water level changes or fluctuations, major watershed perturbations, aquatic pesticide application).
- Social/cultural context analysis
 - As part of your overall outreach plan, determine target audiences: Who has an interest or stake in improving water quality? Who do you depend on to make changes (in policy, on the land, in the water, in the home)? Who do you rely on to keep your effort afloat? Who do you need to spread your message to these people?
 - Research these audiences to gauge their knowledge of and opinions on local water quality, their barriers to participating in or supporting the effort, what would motivate them to participate, media use or how they prefer to receive information on the water quality effort, etc.
- Other considerations
 - Socioeconomic – document changes in lake use (e.g. creel surveys, park visitor surveys, and historical aerial photographs) and talk with local residents and leaders about the lake and their connection to it).
 - Historical lake management activities (e.g. lake drawdown, fish renovation, habitat work, lake aeration, dredging, vegetation management).
- Create a central database of information (GIS maps, water quality and watershed information, audience research findings, etc.).
- Identify and fill any critical gaps in data.
 - Use modeling methods to analyze watershed and water quality data and diagnose water quality problems and evaluate restoration alternatives.
 - Collect additional water quality monitoring data, if needed.
 - Track land use changes over time, as appropriate.



INVESTIGATE

EXPLORE POTENTIAL SOLUTIONS

- Use the help of technical staff, such as DNR, IDALS or NRCS staff, and/or a private consultant. It is important to involve these professionals early on in the process of technically evaluating potential solutions to avoid unintended consequences of any proposed solutions.
- Identify critical areas for improvement – target strategies towards the most significant causes and sources of pollution.
- Watershed - discuss restoration activities and ways to better manage the land to decrease pollutant runoff and improve water quality (Appendix A). For more information on specific conservation practices, please visit the NRCS website at: www.ia.nrcs.usda.gov/technical/ia_standards.html.

Potential watershed conservation practices

Rural

- Grass waterways
- Sediment basins
- Ponds
- Terraces
- Streambank stabilization
- Perennial cover

- Stream buffers
- Stream meanders
- Lakeshore stabilization and/or re-vegetation
- No-till
- Manure storage and runoff control structures

Urban

- Rain gardens
- Pervious surfaces
- Wet detention basins
- Storm water inlet stenciling
- Storm water treatment/filtration

- For examples of current and former watershed improvement efforts, please visit the DNR website at www.iowadnr.gov/water/watershed/project_list.html and www.iowadnr.gov/water/watershed/success.html.
- Lake basin – discuss restoration activities and ways to better manage the water body to improve water quality. Use conservation practices from technical guidance documents to address causes and sources of pollution. In-lake practices should not be scheduled before watershed improvements have been completed.



INVESTIGATE

- Physical conservation practices
 - Shoreline protection measures (e.g. rock armoring, re-shaping, vegetating, break water structures, water craft restrictions, etc.).
 - Sedimentation control (e.g. dredging, shoreline deepening, sediment dikes, sediment basins, wetlands, etc.).
 - Reduce lake stratification (e.g. lake aeration and circulation).
 - Water level management (e.g. structural changes to outflow, basin sealant, supplemental water source, drawdowns, etc.).
- Chemical conservation practices
 - Reduced internal loading of excessive nutrients (e.g. alum application, mechanical mixing of the water column, herbicide vegetation control, stormwater treatment, etc.).
- Biological conservation practices
 - Vegetation management (e.g. establishment of desirable aquatic vegetation, controlling nuisance algae).
 - Fishery management (e.g. fish renovation to remove/reduce rough fish species, stocking programs, aquatic nuisance species management, improve fish habitat, regulation changes, winterkill prevention, etc.)
 - Wildlife management (goose and duck management/access to lake, etc.).
- Other practices
 - Socioeconomic - improve access (e.g. fishing jetties, walkways, water trails, riparian recreational corridors, boat ramps, parking, etc.) .
 - Develop amenities (e.g. concessionaire, boat rental, bike trails, signage, etc.)
- Develop a cost benefit analysis of potential solutions (including the social context – what will stakeholders support?). Continue working on your public outreach plan, using results from audience research to develop strategies.



EVALUATE SOLUTIONS

- Create a summary report of problems and solutions, including a cost benefit analysis, which will help you draft a watershed management plan in the next step.
- Hold a public meeting to gather feedback on proposed alternatives and solutions.
 - Public meeting # 3 – Present draft summary report focusing on selected alternatives.
 - This could be in the form of formal presentations or an open house with specific stations depicting alternatives.
 - Gather and document feedback from participants and other stakeholders following the meeting (e.g. in writing, e-mail, verbal, etc).

CREATE A WATERSHED MANAGEMENT PLAN

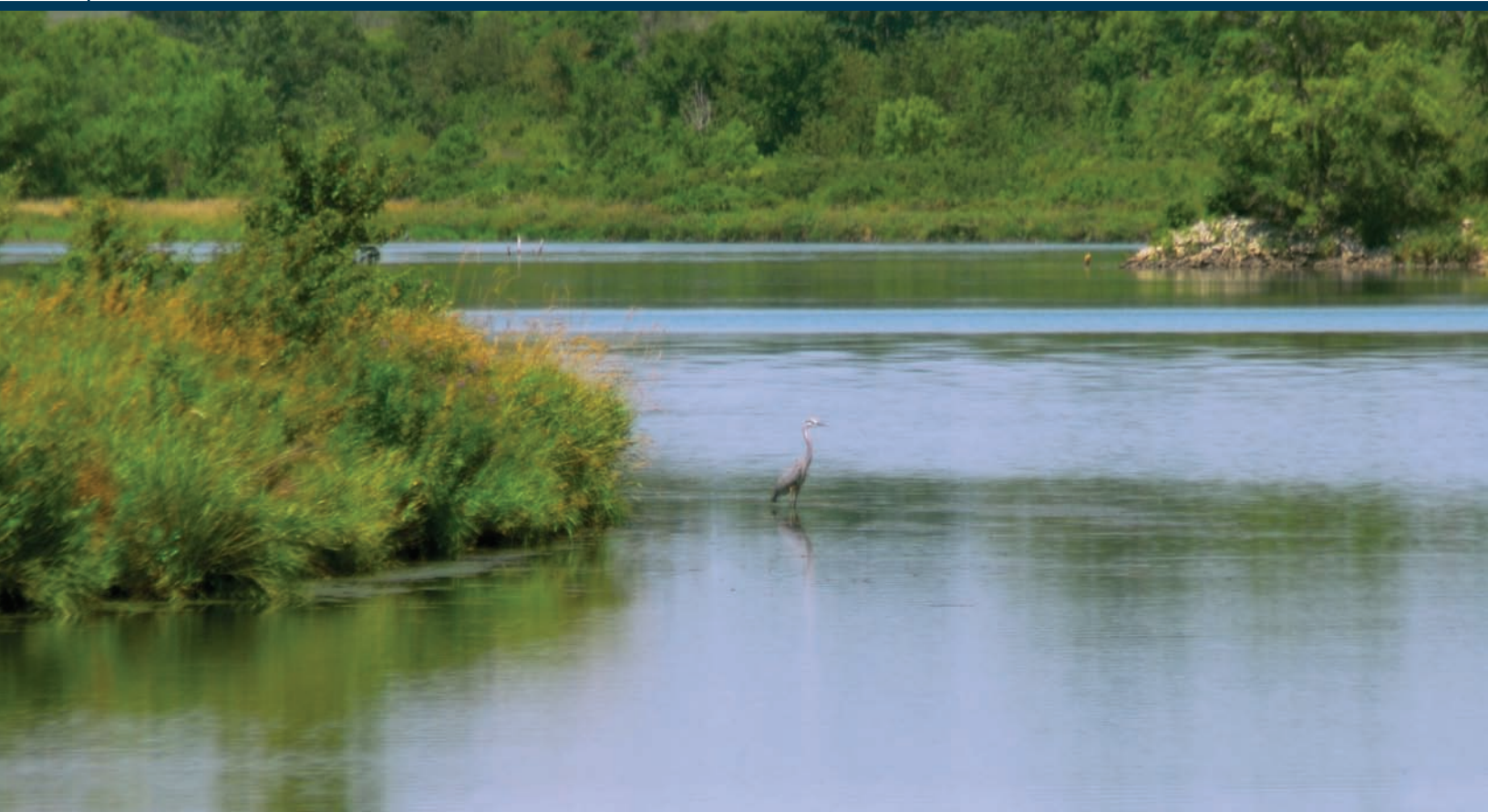
- Use the research and findings gathered in the previous steps, along with community input from the public meeting and through ongoing local dialogue (i.e., presentations to stakeholder groups, updates and invitations to comment in local media), to develop a watershed management plan. Select preferred alternatives and solutions to protect and restore your lake.
- Develop a phased plan with goals, schedule, budget, monitoring and milestones, with assigned responsibilities and/or authorities to carry out elements of the plan clearly identified.
- Apply for and secure funding to carry out the plan (Appendix D).
- Develop jurisdictional authority (e.g. 28E cooperative agreement), if needed.
- Use the DNR's Watershed Management Plan guidebook to draft your plan, so that the plan will meet U.S. Environmental Protection Agency requirements if you decide to seek a DNR Watershed Implementation Grant to put the plan into action. The guidebook is located on the DNR website at www.iowadnr.gov/water/watershed/wmp.html.



IMPLEMENT

PUT THE WATERSHED MANAGEMENT PLAN IN ACTION

- Consider applying for grants to provide funding, guidance and technical assistance in rolling out your plan, including DNR Watershed Implementation Grants, Watershed Improvement Review Board grants and funding from IDALS-DSC's Water Protection Funds (WPF) and Watershed Protection Funds (WSPF).
- Choose or hire a project coordinator to work with the community on making changes on the land and in the water.
- Hold a public meeting to discuss strategies to put the watershed plan into practice
 - Public meeting #4 - Present schedule, budget, monitoring and milestones, and assigned responsibilities.
 - Roll out the outreach plan portion of watershed management plan to promote the project, encourage participation and behavior change (using conservation practices), and to raise support for your effort.
- Develop an ongoing communications plan, as part of your outreach plan, to report work, successes, opportunities, funding needs, etc. to your community.
- Use regular, long-term water monitoring to track progress.



EVALUATE PROJECT, SHARE SUCCESSES

- Monitor the progress of the project; make necessary adjustments to options, schedule and budget.
- Evaluate and report progress with the help of the technical advisory team and local steering committee.
- Evaluate water monitoring data to measure success; if possible, track additional benefits to local communities – increased recreation, tourism, creation of related amenities, etc.
- Share results and successes via press releases, events, celebrations or other public functions as identified in your outreach plan.



APPENDIX A:

WATERSHED IMPROVEMENT ONLINE RESOURCES

COMMUNITY-BASED PLANNING

North Carolina Cooperative Extension Service. (2004). Local watershed planning: getting citizens involved. (88pp.) Retrieved January 14, 2010, from <http://www.ces.ncsu.edu/depts/agecon/WECO/publication/LWPguidebook.pdf>

The Guidebook is written for natural resource managers, planners and others who need to convene citizens to develop local watershed plans. It focuses on the participatory, collaborative watershed planning process – a method of actively involving watershed stakeholders in identifying problems and designing acceptable solutions through education and negotiation. The first section helps determine how involved the public needs to be in the planning process, based on the individual project. Remaining sections look at setting up a collaborative process to develop an effective planning committee. This is an easy to follow guide/resource that walks through a planning process that can be used in a variety of situations.

Bonnell, Joe. (n.d.). Community-based watershed management. Ohio State University College of Natural Resources. Retrieved January 14, 2010, from <http://ohioline.osu.edu/ws-fact/0001.html>

This web-based fact sheet provides an overview of the characteristics of community-based watershed management, challenges associated with community-based management, and keys to success. It also includes a list of additional resources on the topic

University of Nebraska-Lincoln. (2003). Watershed Management Planning Guidebook for Communities. (90 pp.) Retrieved January 14, 2010, from <http://www.deq.state.ne.us/>

This guidebook demonstrates the Community Based Approach to the Watershed Management Planning process. It guides local stakeholders through the step-by-step planning process from the point of organizing themselves through the implementation of their plan. It describes how to develop a watershed plan with community involvement. It offers technical information and hints throughout plan development and implementation of management practices.

Note: Guidebook link located in the “Nonpoint source management” section of the webpage.

WATERSHED PLANNING

Iowa Department of Natural Resources. (2009). Watershed Management Plan Guidebook. (67 pp.) Retrieved Feb. 12, 2010 from <http://www.iowadnr.gov/water/watershed/wmp.html>.

This guidebook takes you step-by-step through the process of creating a Watershed Management Plan in Iowa. Additional assistance in creating a plan is also available through DNR Watershed Planning Grants.

EPA. (2008). Handbook for developing watershed plans to restore and protect our waters. Retrieved January 14, 2009, from http://www.epa.gov/owow/nps/watershed_handbook/

This handbook is intended to help communities, watershed organizations, and state, local, tribal and federal environmental agencies develop and implement watershed plans to meet water quality standards and protect water resources. It was designed to help any organization undertaking a watershed planning effort, and it should be particularly useful to persons working with impaired or threatened waters. The handbook is generally more specific than other guides with respect to guidance on quantifying existing pollutant loads, developing estimates of the load reductions required to meet water quality standards, developing effective management measures and tracking progress once the plan is implemented. Webpage includes a link to an online fact sheet and downloadable PDF of the handbook (400 pp).

Indiana Department of Environmental Management. (2003). Indiana watershed planning guide. (110pp). Retrieved January 14, 2010 from <http://www.in.gov/idem/catalog/documents/water/iwpg.pdf>

This is a comprehensive manual designed to steer watershed groups through the development of a watershed plan. It includes step-by-step instructions for planning as well as a list of additional resources. It does not include technical instructions for watershed assessment or implementation measures.

Michigan Department of Environmental Quality. (2000). Developing a watershed management plan for water quality: an introductory guide. (56 pp.) Retrieved January 14, 2010, from http://www.michigan.gov/documents/deq/ess-nps-watershed-planning_210637_7.pdf

This guide was written to help local units of government, nonprofit organizations, and citizens develop watershed management plans. It outlines a process for gathering people, information and resources together to protect and improve water resources. It includes sections on development of partnerships, identification of issues and conservation practices needed to resolve, identification of related efforts/issues, development of objectives and assessment of progress/success, as well as public information/involvement and plan assembly.

WATERSHED PRACTICES

National Water Program. (2009). Watershed scale planning and implementation. Retrieved January 15, 2010 from <http://www.usawaterquality.org/themes/watershed/research/planning.html>

Web site includes information in the areas of "Identifying Critical Areas to Best Locate BMPs" and "Factoring Economics into Watershed Management Decisions." Includes general information with more in-depth PDFs and links to other sites.

Iowa NRCS. (2010). Iowa Natural Resources Conservation Service home page. Retrieved January 15, 2010 from <http://www.ia.nrcs.usda.gov/>

Home page for the Iowa NRCS. Includes information about programs, technical assistance and contacts for Iowa.

IDALS. (n.d.) Water resource bureau: watershed protection. Retrieved January 15, 2010, from <http://www.iowaagriculture.gov/waterResources/watershedProtection.asp>

Home page of the Watershed Protection Program, which provides technical and financial assistance for the development and implementation of local watershed initiatives. The site includes information about technical assistance as well as development/planning and funding/implementation assistance.

Metropolitan Council. (2009). Urban small sites best management practice manual. Retrieved January 15, 2010, from <http://www.metrocouncil.org/environment/Water/BMP/manual.htm>

The Urban Small Sites Best Management Practice (BMP) Manual provides information on tools and techniques to assist Twin Cities municipalities and WMOs in guiding development and redevelopment. It includes detailed information on 40 BMPs that are aimed at managing storm water pollution for small urban sites in a cold-climate setting. The goal of the manual is to support the principles of accommodating growth while preserving the environment. The BMP Manual is available online as PDFs. A CD version is also available.

NRCS. (n.d.) Water related best management practices in the landscape. Retrieved January 15, 2010, from <http://www.wsi.nrcs.usda.gov/products/UrbanBMPs/>

This website includes detailed instructions for a variety of conservation practices related to water runoff management, stream system protection, restoration, and re-establishment, and tree protection and restoration. Information is downloadable as PDFs.

APPENDICES B - E

B POTENTIAL TECHNICAL ADVISORY TEAM (TAT) MEMBERS

The following are suggestions of groups and individuals that you may want to serve on your technical advisory team, but they are not required:

- Iowa Department of Natural Resources programs: Fisheries, Wildlife, Parks, Law Enforcement, Forestry, Lake Restoration, Watershed Improvement (including Basin Coordinators and TMDL staff), Water Quality and Watershed Monitoring and Assessment
- Natural Resources Conservation Service – local District Conservationist
- Iowa Department of Agriculture and Land Stewardship – watershed project coordinator; Basin Coordinator
- Local Soil and Water Conservation Districts
- Regional Resource Conservation and Development staff
- United States Geological Survey
- Local County Conservation Board staff
- Iowa Department of Public Health
- Iowa State University Extension

C POTENTIAL STAKEHOLDERS/COMMITTEE MEMBERS

The following are suggestions of groups and individuals that you may want to serve on your local steering committee, but they are not required:

- Respected individuals in the community
- Chamber of Commerce
- City/County Government (mayor, City Planner, Parks and Recreation, Board of Supervisors, Storm Water Manager, County Sanitarian; County Engineer)
- Community Development
- Councils of Government
- Appointed Boards - Chairman
- Leaders of service groups
- Outdoor recreational organizations/user groups
- Neighborhood associations
- Friends groups
- Landowners
- Lake associations
- Local colleges or universities

E PLANNING AND IMPLEMENTATION FUNDING SOURCES

PLANNING

- Iowa Department of Natural Resources
 - DNR Lake Restoration Program www.iowadnr.gov/water/lakerestoration/index.html
 - DNR Watershed Improvement Program
 - Watershed Planning Grants www.iowadnr.gov/water/watershed/planning.html
- Iowa Department of Agriculture and Land Stewardship www.iowaagriculture.gov
 - Watershed Development and Planning Assistance Grants www.agriculture.state.ia.us/waterResources/watershedProtection.asp

IMPLEMENTATION

- Iowa Department of Natural Resources
 - DNR Watershed Improvement Program
 - Watershed Implementation Grants - www.iowadnr.gov/water/nonpoint/app.html
 - DNR Lake Restoration Program - www.iowadnr.gov/water/lakerestoration/index.html
 - State Revolving Fund - www.iowasrf.com
- Iowa Department of Agriculture and Land Stewardship - www.iowaagriculture.gov
 - Public Owned Lakes Program
 - Water Protection Fund, Watershed Protection Fund
 - Watershed Improvement Review Board Fund
- Check with your local Soil and Water Conservation District for available funding programs



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