

# Environmental Performance Partnership Agreement

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Minnesota Pollution Control Agency  
U.S. Environmental Protection Agency Region 5

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October 1, 2012 – September 30, 2016  
FFY 2013 - 2016



**Minnesota Pollution  
Control Agency**

February 2013

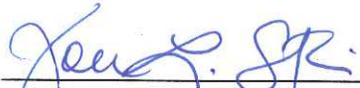
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## Authorizing Signatures

This PPA is approved on the date of the last signature received.

For the State of Minnesota:

  
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John Linc Stine, Commissioner  
Minnesota Pollution Control Agency

2/22/13  
Date

For the U.S. Environmental Protection Agency, Region 5:

  
\_\_\_\_\_  
Susan Hedman, Regional Administrator  
U.S. Environmental Protection Agency, Region 5

4-25-13  
Date

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## **Purpose and Scope of the PPA**

The Minnesota Pollution Control Agency (MPCA) and the United States Environmental Protection Agency (EPA) Region 5 are entering their ninth Environmental Performance Partnership Agreement (PPA) with the approval of this document. This agreement describes the environmental outcomes that both Agencies are striving to achieve and joint program priorities that the State and EPA think need additional management attention. Roles and responsibilities for carrying out the priorities and key strategies are described in detailed supporting information that can be found on MPCA's website <http://www.pca.state.mn.us>, or by contacting the persons listed at the end of each priority write-up. The agreement runs from October 1, 2012 to September 30, 2016.

This agreement is a product of the National Environmental Performance Partnership System (NEPPS), a joint initiative of the EPA and Environmental Council of States (ECOS). The objective of the NEPPS initiative is to strengthen protection of public health and the environment by directing limited resources toward a state's most pressing environmental issues. Performance Partnership Agreements (PPAs) formed under NEPPS is designed to provide states and EPA with flexibility in how they achieve environmental results and enhance accountability in achieving environmental progress. The Performance Partnership Grant (PPG) is the federal grant used to fund many of the PPA activities.

This agreement does not replace or supersede statutes, regulations, delegation agreements, or other agreements entered into previously between MPCA and EPA.

## **PPA / PPG Separation**

The PPA is an extension of MPCA's Strategic Plan and EPA's Regional Plan. For this grant cycle, the MPCA joint effort with EPA's Maximizing Performance Partnership Initiative and separates out its Performance Partnership Agreement (PPA) from the Performance Partnership Grant (PPG). This allows focus on shared priorities and other high level regional discussion items separate from the detailed workplan measures and activities under the PPG.

## **Elements of the PPA**

The PPA is a concise, strategic document focused on common goals, well-defined outcomes, and strategies with program tools and resources targeted at the most important environmental problems. It includes both MPCA and EPA work. In addition to Joint Priorities, the PPA includes a limited set of critical performance measures and commitments for the base environmental programs.

- The PPA is a summary of the work done under EPA grants as well as some work done under non EPA grants. Supporting documentation is available in separate documents and references. Much of this information can be found on the MPCA web site referenced in the opening paragraph.
- The PPA provides strategic direction to the workforce and influences program work plans by promoting environmental innovations that result in more efficient approaches.
- The PPA is viewed as a “living document” that is flexible and can be changed to reflect MPCA and EPA needs.
- The PPA directs planning at the MPCA and EPA Division and Program levels, by establishing joint priorities, desired outcomes, and a holistic approach to environmental protection. It will also promote environmental innovations that result in more efficient approaches. To the extent applicable, base programs will use the joint priorities as they develop program work plans to influence the targeting of work.
- If a program has been performing in a successful manner, and is expected to continue performing in that manner. *Program performance will be identified as either “adequate” or “needs improvement.” “Adequate” program areas are meeting their stated commitments and performing to the mutual satisfaction of both agencies. “Needs improvement” means a program area is, or is at risk of, inadequately functioning, and the deficiency represents a significant vulnerability to the integrity of the environmental protection program in the State. Adequate programs would receive significantly less review and oversight than programs needing improvement.* The level of detail will need to meet the minimum reporting requirements for EPA Headquarters and Congress. It will be Region 5’s responsibility to identify and inform MPCA of the minimum level of detail needed. The evaluation to determine “adequate” and “needs improvement” programs will occur during the joint assessment process held at the end of each year.
- The PPA and supporting documentation establishes a framework for mutual accountability by clearly defining joint priorities, desired outcomes, and clear roles for EPA and MPCA.
- The PPA includes a summary of the environmental conditions in Minnesota to be used as a baseline for measuring future success.
- The PPA establishes joint assessment for the priority work. By “joint assessment” we mean the following:

An annual discussion between the EPA and MPCA leadership including program Division Directors to highlight and celebrate successful program achievements; to identify areas that need improvement and/or additional resources; to make adjustments in program direction or approaches; and to reflect on lessons learned for the coming year.

## **Unexpected Requests**

When EPA forwards requests from headquarters, it will be accompanied by a short explanation of what is expected from MPCA, and the deadline for response. MPCA will respond to requests in a timely manner. Both agencies will provide ample lead time for review, collection and feedback on data and information. In some cases, this may require the two agencies to determine if there are PPG/PPA activities that need to be altered to provide available funding and staff for the new request.

## Reporting

The MPCA will report to EPA the necessary information required by Congress and EPA Headquarters to continue state delegated programs. The MPCA will reference its web site and other existing reports as supporting documentation of the PPA and PPG. Both EPA and MPCA will report through the Joint Assessment process.

## Joint Planning and Timeline

MPCA and EPA agree that it is important to clearly articulate how all the components of the PPA are evaluated. In order to evaluate this agreement, both agencies will participate in a joint planning and evaluation process. The process timeline is as follows:

<b>Actions</b>	<b>Deadlines</b>
2013-2016 PPA begins	Oct 1, 2012
2013 Self-Assessment Report	Dec 31, 2013
2013 Joint Evaluation & 2014 PPA & PPG Workplan revisions	Jan/Feb 2014
EPA Evaluation of State's 2013 Self-Assessment Report	Mar 2014
2014 Self-Assessment Report	Dec 31, 2014
2014 Joint Evaluation & 2015 PPA & PPG Workplan revisions	Jan/Feb 2015
EPA Evaluation of State's 2014 Self-Assessment Report	Mar 2015
2015 Self-Assessment Report	Dec 31, 2015
2015 Joint Evaluation & 2016 PPA & PPG Workplan revisions	Jan/Feb 2016
EPA Evaluation of State's 2015 Self-Assessment Report	Mar 2016
Senior Management Planning Meeting (2017-2020 PPA)	Feb/Mar 2016
MPCA/EPA Program-to-Program Meeting (2017-2020 PPA)	Apr - Jun 2016
Workplan Negotiation (2017-2020 PPA)	July - Sept 2016
Workplan Finalized (2017-2012 PPA)	Sept 2016
2017-2020 PPA Begins	Oct 1, 2016
2013-2016 PPA Final Self-Assessment Report	Dec 31, 2016
EPA Evaluation of State's Final Self-Assessment Report	Mar 2017

The joint assessment process for this agreement will:

- Provide general discussion, measurements of outcomes, and analyze the environmental and programmatic results of each element;
- Identify emerging issues, environmental trends, and strategies for improvement;
- Provide flexibility in both form and substance, as warranted by program performance;
- Seek to eliminate duplicative or unnecessary efforts and reporting;
- Respond with appropriate solutions, including redirecting goals and resources; and
- Encourage MPCA to find innovative program implementation alternatives, as long as the desired result is able to be measured and achieved.

The success of each outcome of this agreement relies on clear, constructive communication and the commitment of MPCA and EPA to work together to implement MPCA's **Plan-Do-Check-Adapt** model, to solve problems and improve the programs. If any differences exist on specific issues or problems, MPCA and EPA should move quickly to resolve them at the staff level or elevate the issue through the dispute resolution process in order to gain resolution.

## **Mutual Accountability**

The approach to mutual accountability affects the way that EPA and MPCA interact and is a change from EPA's traditional approach to oversight. EPA and MPCA will agree on the appropriate level of EPA oversight of State program implementation. One primary consideration will be those program areas that are deemed to "need improvement." However, EPA will continue to review and act on new regulations in program areas that impact State authorization or where federal statute or regulation requires EPA review and approval of State actions (e.g., water quality standards).

## **Dispute Resolution Process**

MPCA and EPA will use the following agreed-upon dispute resolution process to handle the conflicts that may arise as this agreement is executed. The resolution process will be treated as an opportunity to improve our joint efforts and not as an indication of failure. For the purpose of this agreement, the following definitions will apply:

**Dispute:** Any disagreement over an issue that prevents a matter from going forward.

**Resolution Process:** A process whereby the parties move from disagreement to agreement over an issue.

### **Dispute Resolution Guiding Principles:**

- Recognize disagreement as a normal part of the state/federal relationship;
- Approach disagreement as a mutual problem requiring efforts from both agencies to resolve;
- Approach the conflict as an opportunity to improve joint efforts;
- Aim for resolution at the staff level, while keeping management informed;
- The MPCA and EPA will agree if, when and how to include others in the resolution process (because our conflicts sometimes intersect with external parties such as tribal governments, etc.);
- Disclose underlying assumptions, frames of reference, and other driving forces;
- Clearly differentiate positions and check understanding of content and process with all appropriate or affected parties;
- Document discussions to minimize future misunderstandings;
- Pay attention to timeframes and/or deadlines and escalate quickly when necessary.

For matters involving this agreement, the following procedures will be utilized:

- Principle: Disputes should be resolved at the front line or staff level, when feasible.
- Timeframe: Disputes should be resolved as quickly as possible but within two weeks of the issue arising at the staff level. If unresolved at the end of two weeks, the issue should be raised to the next level of each agency.
- Escalation: When there is no resolution of the issue and the two weeks have passed, there should be comparable escalation in each agency, a conference call between the parties should be held as soon as possible. Disputes that need to be raised to a higher level should again be raised in comparable fashion in each agency, until resolution is obtained.

## **Enforcement and Compliance Assurance**

Compliance and enforcement activities to be accomplished during the term of this PPA are included in the detailed State program plans, however, a summary of the federal and MPCA roles in compliance and enforcement is helpful.

The following tenets serve as the foundation for the EPA-MPCA relationships with respect to Enforcement and Compliance Assistance activities:

- Explore the most effective application of the full spectrum of compliance tools - from compliance assistance through compliance assurance, administrative/civil enforcement to criminal prosecution - to encourage/maintain the compliance of sources of all sizes.
- Use joint up-front planning to coordinate priorities, maximize agency resources, avoid duplication of efforts, eliminate surprises and institutionalize communication.
- Manage for environmental results which support the respective agencies' environmental goals and objectives.
- MPCA will ensure that compliance and enforcement information is complete, accurate and timely, consistent with EPA policies and the ICR.

There is a continuing role for EPA in environmental protection in the State of Minnesota. EPA carries out its responsibilities in the enforcement arena in a variety of ways. EPA acts as an environmental steward, ensuring that national standards for the protection of human health and environment are implemented, monitored and enforced consistently in all States. EPA can assist MPCA in conducting inspections and can conduct joint enforcement actions with the State and its local government partners. EPA can also conduct enforcement actions as discussed below and provide compliance and technical assistance to the State and its regulated entities. Under this PPA, EPA and MPCA retain their authorities and responsibilities to conduct enforcement and compliance assistance, and such enforcement will be accomplished in the spirit of cooperation and trust. Specific compliance and enforcement data needs will be discussed and shared per each agency's applicable policies and regulations within the applicable data practices and public information limits. Specific federal enforcement and compliance assistance responsibilities include but are not limited to the following:

- Work on National Priorities (e.g. multi-media inspections, companies with significant company-wide non-compliance in several states, and OECA Priorities) and Regional Priorities.
- Ensuring a level playing field and National consistency across State boundaries.
- Addressing interstate and international pollution (watersheds, air sheds, or other geographic units).
- Addressing criminal violations.
- Conducting enforcement to assure compliance with federal consent decrees, consent agreements, federal interagency agreements, judgments and orders.
- Conducting State Reviews in accordance with the OECA's National State Review Framework.

EPA performed a review of the MPCA's RCRA, NPDES and CAA compliance and enforcement program in 2007 under the State Review Framework, and performed the second round of the state review framework in 2010. The next scheduled review is in 2015. EPA also performed an on-site file review of MPCA's RCRA enforcement files in 2008 through 2012. All file reviews, as well as the review under the State Review Framework; will include a subset of files from any metro county which has entered into a Joint Powers Agreement (JPA) with MPCA. Currently only Hennepin County has entered into a Joint Powers Agreement with the MPCA.

MPCA has requested and received inspection flexibility from the RCRA program. MPCA has executed a JPA with Hennepin County in 2008, and both parties intend to maintain this agreement through the PPA time frame (FFY2013 – 2016). MPCA intends to conclude JPAs with additional metro counties during the PPA time frame. MPCA has executed its Hospital Initiative flexibility plan in 2008, and continued this initiative to its conclusion in 2009. EPA and MPCA will continue efforts to be flexible when coordinating priorities and maximizing individual agency resources.

EPA will take enforcement actions in Minnesota as necessary and appropriate to ensure implementation of federal programs and as a deterrent to non-compliance, in accordance with the communication and coordination activities outlined above. There may be emergency situations or criminal matters that require EPA to take immediate action (e.g., seeking a temporary restraining order). In those circumstances, EPA will consult with the State as quickly as possible following initiation of the action.

## **NPDES Permitting**

Accurate and enforceable NPDES permits are an essential part of our environmental protection efforts. MPCA and EPA recognize that there are general areas within the NPDES program that will receive our attention within the course of this PPA. These include the issuance of priority permits, maintenance of permit backlog goals, and accomplishments identified in the Performance for Environmental Results action items.

EPA Region 5 and MPCA will explore opportunities to continue to expand the use of water quality trading, watershed permitting, and implementation of nutrient controls in NPDES permits.

## Quality Assurance and Quality Management Plans

The MPCA has a quality system in place as described in the Quality Management Plan found on the web at <http://www.pca.state.mn.us/index.php/about-mpca/mpca-overview/agency-strategy/mpca-quality-system.html?expandable=1&menuid=&redirect=1>. The system consists of various levels of management oversight on projects and programs, staff training on quality assurance principles, and the use of the quality assurance coordinators at the agency for document review and technical assistance. Additional parts of the program policies can be found on the QA website noted above. The policies direct staff and individuals working with the MPCA on minimal requirements for field and laboratory quality assurance, documents required on sites, and links to other agencies and federal programs where additional information may be found.

The MPCA quality system was audited (July 2004) by EPA Region V verifying that the system is in place, is functioning properly, and is documented in the Quality Management Plan. A revised MPCA QMP was submitted in March 2007 for review and comments by EPA Region 5. The document was finalized in June 2007. A 2012 revision of the QMP has gone through MPCA review and has been submitted for review and comments to EPA Region 5. When that document is finalized (April 1, 2013), it will replace the 2007 document on the QA website.

## Public Involvement

In addition to the public participation opportunities required by regulation, the MPCA will continue to use citizen and stakeholder surveys and other methods of gathering input to influence environmental decision and direction. The MPCA has a long history of public involvement in decision making and developing environmental programs. In past years, the MPCA has considered input from the public through the use of statewide surveys and focus groups, listening sessions and citizen juries. All of these methods give us information on the public's environmental priorities so that they may be incorporated into the selection of our environmental goals. Citizen input is used to draft guiding documents such as basin plans and TMDL studies. Citizen input is part of the MPCA Citizens' Board process as well as the environmental review and permit process.

The MPCA will continue to work closely with EPA Region 5 to identify stakeholders for Minnesota's environment, develop general public support for state and federal environmental programs, raise awareness about important environmental issues, and share information about these issues.

## On-going Public Involvement Projects

The MPCA's 2008 strategic plan includes the following goal:

*Goal R.3 Minnesotans act on their environmental knowledge to support healthy ecosystems.*

To that end, the following objective was adopted as part of the strategic plan:

*Objective R3a: Minnesotans maintain or increase their general environmental knowledge and environmental behavior scores from the baseline data presented in the 2002 Minnesota Report Card on Environmental Literacy.*

The Report Card is based on a random telephone survey of over 1000 adults throughout the state of Minnesota who were surveyed for their knowledge about, attitudes toward, and behaviors related to the environment in Minnesota. The first survey was done in 2001 and reported in 2002. The second survey was done in 2003 and the results released in 2004. The third survey was done in 2007 and the results were released in 2008. Among the findings of the third Report Card:

- 93 percent of Minnesotans support environmental education in schools.
- 85 percent participate in recycling programs.
- 67 percent believe that renewable energy is the best means to meet America's energy needs.
- 41 percent of Minnesotans reported that they frequently purchase locally grown food.
- Time spent outdoors in a non-work capacity ranged from 12 percent reporting five or fewer hours per week outdoors to 7.4 percent reporting more than 40 hours per week outdoors.

Public participation is an important aspect of the environmental review process, permit process, and public notice process. The MPCA is using a variety of tools to facilitate public participation and to increase environmental awareness for important issues. The MPCA continues to hold public meetings related to permits, environmental review, cleanup efforts, and watershed efforts. The agency also conducts traditional media relations with television, print, radio, and online news media outlets to deliver key agency messages about the environment. Media relations take place throughout the year with active story pitches and distribution of news releases by agency communications staff.

Over the past three years, the MPCA has focused on improving the external web site for nearly 600,000 visitors annually. The MPCA sees the web site as a critical communication pathway with a wealth of environmental information and a number of online tools to enhance communication efforts. These online tools include an agency Facebook page, a Twitter feed, a MPCA YouTube (video) page, a webcast system, and messaging services via GovDelivery. These tools allow individuals to receive information on a wide variety of topics and to experience the important MPCA messages in multiple ways.

The MPCA is currently developing options for online public comments for permits being noticed. The agency has developed an interactive watershed map of the state that provides information on specific watersheds at [www.pca.state.mn.us/jsrie74](http://www.pca.state.mn.us/jsrie74). The MPCA has an interactive map and text-based search tool with environmental information about individual sites or facilities titled "What's in My Neighborhood?" This tool includes specific information about businesses or activities regulated by the MPCA according to location or address. The MPCA is currently working on improvements to the Air Quality

Index page to provide the most current data in a more interactive and user-friendly format.

The MPCA is supporting citizen forum discussions scheduled throughout the state in November and December of 2012. These discussions will culminate in an environmental congress in early 2013. The forums and congress will help guide Minnesota leaders and environmental agencies in shaping the vision for clean air, clean water, and clean energy in Minnesota.

The MPCA's Eco Experience is a major public outreach effort that takes place at the Minnesota State Fair each year. This exhibit experience reaches an estimated 300,000 visitors. The exhibit is designed to inspire people to lead more sustainable lives while improving quality of life and the environment. This exhibit also receives extensive media coverage during the 12-day event.

### **Civic Engagement in Watershed Planning**

As stated in the last PPA, public participation is seen as an integral part of the Total Maximum Daily Load (TMDL) study and implementation process.

The goal of the Impaired Waters (or Total Maximum Daily Load (TMDL)) Program is to ensure that all Minnesota waters meet water quality standards. For each water body not meeting standards, a TMDL study must be developed. A TMDL study examines all sources of pollution causing a water body to be impaired and suggests specific ways to reduce both point and nonpoint sources of pollution. While point source reductions can typically be accomplished using regulatory mechanisms (permit requirements, etc.), nonpoint sources must still be addressed through voluntary actions by individual citizens and stakeholders.

For many years, government efforts to address water pollution through regulation have focused on the application of technological tools for reducing pollutant loadings. The use of technology and natural resource management expertise has, in fact, resulted in impressive achievements in reducing municipal and industrial pollution. However, nonpoint sources of pollution now pose the greatest remaining challenge to ensuring that waters meet water quality standards. Because nonpoint sources must be addressed through the voluntary actions of citizens, applying best practices to those problems will require establishing trusting relationships with the public and at the right scale so that water goals are achievable and measurable.

The pollution problems that remain require new solution strategies – ones that encourage and support creative partnerships, citizen empowerment, effective networks, increased citizenship, government transparency, and local leadership. While recognizing individual interests, this work will seek to instill and draw upon a common sense of purpose and obligation to protect important water resources. This new approach acknowledges that citizens are key collaborators in achieving water quality goals, whether it is in the policy-making realm or when implementing Best Management Practices (BMPs) on the ground.

Replacing the traditional top-down model of decision-making with one that is more collaborative and participatory will require citizens to shift their role as well – from one that is more passive to one that seeks a greater role in policymaking for the common good. A significant goal in civic engagement is to build civic capacity at the local level for problem-solving around the issue of water quality and to do it in a way that achieves sustainable results.

To achieve this goal, MPCA staff will support local government partners and nonprofit organizations as they engage, dialogue and partner with stakeholders and citizens in the 81 watersheds across Minnesota. This will increase the likelihood that the best ideas for addressing water problems are allowed to find voice and to influence the direction of water policies for each river or stream we work on.

Civic engagement must begin with a philosophy of transparency and openness about water governance and with a belief that people, when given the opportunity, will step forward and help government agencies solve their community's water problems. In order to achieve the goal of developing local civic capacity for solving water problems, communities will need to create intentional and strategic plans around the concept and philosophy of civic engagement. MPCA is encouraging development of these strategies as part of every watershed plan.

Over the past two years, MPCA watershed projects have incorporated civic engagement activities at the level of effort local staff are able to commit to, given available resources and staff time. Given that there is minimal experience in intentionally creating and executing civic engagement plans within state and local agencies, significant experimentation will need to occur in order to learn what approaches, activities and events are most effective at encouraging greater citizen involvement and leadership in watershed projects. There are approximately 40 watershed projects with some kind of civic engagement work underway. MPCA has and will continue to provide planning frameworks, resources, networks for peer-to-peer learning, and consultation for local projects trying to engage citizens with greater intention than they have in the past.

For more information about MPCA's Public involvement efforts, go to:

<http://www.pca.state.mn.us>

<http://www.seek.state.mn.us/publications/reportcard2008.pdf>

[http://www.seek.state.mn.us/eemn\\_b.cfm](http://www.seek.state.mn.us/eemn_b.cfm)

## **Environmental Justice**

EPA and MPCA agree that fair treatment and meaningful involvement are core environmental justice principles that should be integrated into environmental programs.

Environmental justice is a priority for EPA, and EPA is advancing this priority through work under Plan EJ 2014. Recognizing community concerns and EPA's renewed focus on environmental justice, the MPCA updated its policy on incorporating environmental justice principles and practices into its operations in late 2012.

The MPCA's permitting and environmental review programs have actively adopted enhanced community involvement for projects that raise environmental justice concerns, to provide for meaningful participation. Efforts to ensure fair treatment have been more difficult because of the lack of resources and the inherent challenges of correlating environmental conditions to health outcomes. EPA and MPCA seek to advance fair treatment through the joint priority on environmental justice and urban air toxics described below.

## **Environmental Conditions in Minnesota**

To put the elements of the 2013 – 2016 PPA in context, it is useful to take a brief look at the past four decades of progress and the current state of our waters, our air and our land. A summary of Minnesota's current environmental conditions follows:

### **Groundwater**

It is important to protect and monitor the quality and quantity of the State's valuable groundwater resources. Groundwater provides nearly 75 percent of Minnesotans with their drinking water and nearly 90 percent of the water used for agricultural irrigation.

Groundwater monitoring in Minnesota is an interagency effort. The MPCA, MDA (Minnesota Department of Agriculture), and MDH (Minnesota Department of Health) monitor ambient groundwater quality, focusing on vulnerable aquifers and recharge zones. The DNR (Department of Natural Resources) monitors the amount of water in the State's aquifers.

Increasing groundwater withdrawals are a current threat to groundwater users and surface water resources. Recent investigations of groundwater pumping in both rural and urban watersheds have found that large amounts of groundwater have been diverted away from creeks and lakes. Fish numbers and diversity have been severely affected by reduced groundwater inflow into Little Rock Creek due to increased irrigation. In White Bear Lake, groundwater withdrawals for residential use have caused recent declines in lake levels.

Most of Minnesota's groundwater generally has good quality and complies with drinking water standards. However, human-caused impacts to this resource are apparent in several regions.

- Nitrate continues to be one of the most common contaminants in the state's groundwater. The significance of this contaminant was identified over 20 years ago in a report prepared by the MPCA and MDA, and a 2010 report jointly prepared by the two agencies still identifies nitrate as a persistent problem.
- Nitrate contamination is linked to land uses where there are human-induced sources in combination with vulnerable geology. Most nitrates enter the groundwater from fertilizers, animal manure, and failing surface sewage treatment systems. Nitrate concentrations are frequently elevated or exceed standards in the shallow aquifers in rural and agricultural areas, especially in central and southeastern Minnesota.

- Pesticides commonly are detected in agricultural areas, especially atrazine and its degradates. Most measured concentrations are less than applicable drinking water standards.
- Chloride from road-deicing salts is a threat to groundwater quality in urban parts of the state. The shallow groundwater in urban areas has the highest concentrations and most exceedances of the secondary drinking water standard.

The MPCA is actively working to assess the threat from new contaminants in the groundwater. In 2009, the MPCA Ambient Groundwater Monitoring Network began monitoring groundwater for chemicals used in consumer products, such as medicines and detergents that can be endocrine active compounds. The initial results published in 2012 indicated these chemicals were detected at low concentrations in about one-third of the wells sampled.

Recent expansion and modifications to the MPCA's monitoring network will enhance future groundwater quality assessments and our ability to understand Minnesota's groundwater quality and water quality trends over time. Using Clean Water Legacy funds, the MPCA has installed 78 monitoring wells between July 1, 2008 and July 1, 2012.

## **Surface Waters**

Minnesota waters are decidedly cleaner today than they were 40 or 50 years ago, thanks to ongoing efforts to address industrial and municipal discharges, separate combined storm and sanitary sewers, and improve Minnesota's wastewater treatment facilities. Fish, wildlife and boaters have returned to waters once heavily polluted by human and industrial waste, yet there is still a long way to go to restore Minnesota's water resources to full health.

Passage of Minnesota's Clean Water Legacy Act (CWLA) in 2006 and the Clean Water, Land and Legacy Amendment (Amendment) in 2008 has provided the MPCA with public support and on-going resources to continue implementing and developing the watershed approach. The watershed approach is the key strategy and organizing principle that guides the agency's surface water monitoring activities and many other aspects of the agency's water programs. The MPCA piloted the strategy for two years before adopting it in 2008. Using the watershed approach, the MPCA and its partner agencies and organizations conduct numerous surface water monitoring activities to provide information about the status of the state's water resources and to identify potential or actual threats to the quality of surface water, choose options for protecting and restoring waters that are impaired, and evaluate the effectiveness of implemented management plans. The goal of the MPCA and its partners is to provide information to assess – and ultimately to restore or protect – the integrity of Minnesota's waters.

A key element of the watershed approach is the goal to assess the condition of Minnesota's waters (all 81 watersheds) via a 10-year cycle that starts over again after the first 10-year cycle is complete. During the second 10-year cycle, the same progression of

intensive monitoring to assess current condition and detect any changes, followed by updating of protection and restoration strategies, and then additional implementation efforts, is pursued in each watershed. As of the end of the 2012 field season, monitoring has been completed in 41 (51%) of the state's major watersheds and the MPCA is on track to complete monitoring in all 81 watersheds by the target date of 2017. Results to date indicate that about 60 percent of Minnesota lakes and streams meet water quality standards; about 40% are impaired by pollution.

Monitoring of Minnesota's lakes and streams has identified that in many watersheds the source of contamination is attributable to non-point sources including agricultural fertilizers and pesticides, urban runoff, manure applications, septic systems, and road salt, as well as to industrial and municipal wastewater. Some of the most common impacts to surface water come from sediment, phosphorus (agricultural, industrial and residential), coliform bacteria, nitrate, mercury and pesticides. An emerging concern to surface water quality is the potential effect of endocrine disrupting compounds on aquatic life and reproduction. Water quality varies greatly by region, with waters in northern forested areas of the state generally showing higher quality than the southern and western regions where agriculture and urbanization are more prevalent.

Wetland quality in Minnesota has been less well understood than lake and stream quality. However, as recognition of the many ecological and societal benefits provided by wetlands has grown, the MPCA and DNR initiated a statewide wetland monitoring program to assess status and trends of both wetland quantity and quality. The MPCA recently completed its initial wetland quality monitoring survey, the first with which it is possible to evaluate the state's goals of no-net-loss of quantity, quality, and biological diversity of Minnesota's existing wetlands. Focusing only on depressional or marsh-type wetlands, the survey found that plant and macroinvertebrate communities (including insects, snails, crustaceans, and leeches) of depressional wetlands in the northern forested areas of the state have the highest proportion in good condition, 54 and 60 percent, respectively. The proportion of depressional wetlands with plant and macroinvertebrate communities in good condition decreases significantly in regions of the state located west and south of the northern forests.

Impaired waters identified through monitoring are studied further to identify corrective actions needed to restore water to quality that meets standards set to protect public health, recreation, and aquatic life. Local governments and others partnering with state and federal agencies (i.e. cities, watershed management organizations, counties, soil and water conservation districts, landowners, citizens and other stakeholders) are leading efforts to upgrade wastewater treatment plants and septic systems; reduce polluted runoff from city streets, agricultural fields and feedlots; and undertake other on-the-ground actions called best management practices or BMPs to help clean up the state's waters. Still, it can take decades to clean up an impaired water. Although full restoration of Minnesota's waters will take time, the Clean Water Fund investments will help accelerate the pace of these activities.

## **Air**

By many measures, Minnesota has good air quality. Even in the Twin Cities Metropolitan area, which includes over three million people, the state has historically attained national ambient air quality standards. This is due in part to favorable geography and weather patterns, but also to pollution control efforts by government and industry.

However, Minnesota still has air quality challenges. As knowledge of health impacts grows, air standards continue to be tightened. As a result, Minnesota now has one non-attainment area for lead near a point source. While Minnesota currently meets other new standards, such as for ozone and fine particles, air concentrations are much closer to the new standards resulting in the need for more monitoring and modeling to track attainment.

While most areas in Minnesota meet standards, air quality can still be a concern on certain days and in localized areas. In 2012, daily concentrations of ozone or fine particles were high enough to result in air quality alerts for sensitive groups on four days in the Twin Cities area and 137 days were considered to have Moderate air quality. Additionally, the majority of air pollutants, such as the air toxics, does not have standards, but may still cause health concerns.

The combined effect of lower standards, regional air masses drifting into Minnesota from other states and increasing temperatures may trigger future air quality violations of the standards and compel more air quality alerts and result in increased health impacts. Current regulations have significantly decreased emissions from point sources leaving smaller, non-point sources of pollution, particularly from combustion, as a major contributor to Minnesota's air pollution. These sources are not as easily controlled under the traditional regulatory structure.

The MPCA is exploring ways to address these sources through voluntary initiatives, partnerships, and dissemination of information on best practices. In 2010, MPCA began developing strategies to reduce the levels of pollutants by identifying those of greatest concern. Besides the criteria pollutants, MPCA also identified air toxics including diesel particulate, formaldehyde, acrolein, polycyclic aromatic hydrocarbons, and dioxins and furans.

Now, the MPCA is working with Environmental Initiative to foster discussions around Minnesota's air quality and convene Minnesota's Clean Air Dialogue. The Clean Air Dialogue furthers the discussion of what Minnesota businesses and communities can do to proactively improve air quality, by working in partnership and developing innovative approaches. In particular, the goal of the Dialogue is to develop strategies that will ensure Minnesota remains in attainment with the National Ambient Air Quality Standards for ozone and fine particles.

In addition to criteria pollutants and air toxics, emissions of carbon dioxide in Minnesota, primarily from the burning of fossil fuels, continue to contribute to rising atmospheric concentrations. The increased levels of carbon dioxide and other global warming gases result in climate change. In Minnesota, observed changes include higher temperatures, shorter winter lake ice cover, higher summer dew points, northward species migration,

and more frequent heavy rain falls and floods.

## **Land**

During the 1980s and 90s, Minnesota took decisive and effective steps to clean up industrial and municipal waste dumps and leak sites that contaminated land and ground water. A series of laws and programs were enacted in Minnesota and nationally to appropriate funds, compel cleanup of the most serious sites, and to create incentives and funding sources to encourage voluntary cleanups.

The state Superfund, enacted in 1983, handles contaminated sites that are large and complicated and that may take several years to fully address. Remediation Division has done or overseen full investigation and final cleanup or control of 170 out of 244 State listed industrial waste sites, and 21 of 46 Minnesota sites on the federal Superfund list. The remainder of the listed sites are in the cleanup process. Most sites need ongoing monitoring and maintenance for many years or decades.

Since 1990, the Resource Conservation and Recovery Act (RCRA) remediation program has completed the investigation and remediation of 300 hazardous waste release sites. The sites consist of hazardous waste generators, permitted RCRA facilities, and former facilities that operated under interim status.

The Petrofund and Petroleum Remediation Program were created in 1987 to deal with contamination from leaking petroleum tanks. The program has investigated and closed more than 16,300 of the 17,500 petroleum leak sites as of 2010. About 350 new sites are expected to enter this program each year for the foreseeable future.

The MPCA's Brownfield Program has returned to productive use over 25,000 plus acres of contaminated land since its inception in the late 1980's. The Voluntary Investigation and Cleanup Program (VIC) and the Petroleum Brownfield Program (PBP) comprise the MPCA Brownfield Program. About 350 plus new projects are screened and processed each year in this program. This program is voluntary and can issue liability assurance letters as well as development plan approvals aiding in redevelopment of contaminated properties.

The Closed Landfill Program (CLP) was created by the legislature in 1994 as an alternative to Superfund. The CLP is responsible for cleanup and long-term care at up to 112 qualified closed state-permitted municipal waste landfills. Cleanup actions have included relocation of wastes, enhancement of site covers to current standards and installation of ground water pump/treat and active gas collection systems. Other response actions have included sampling and monitoring, operation of active remediation systems, general site care, reimbursement of certain past costs and land & property management. The CLP now operates 20 active gas collection systems which have destroyed more than 100 million pounds of methane in the past 4 years alone. The CLP has undergone a redesign effort to better address implementation of program requirements including development of Land Use Plans (LUPs) for landfills. LUPs are recognized as institutional controls to help the CLP, land owners and local governmental units responsibly manage

qualified [landfill] facilities. The CLP completed LUPs on all eligible sites in calendar year 2012; however, implementation work is still needed by the LGUs.

## **Outlook**

Minnesota, in partnership with EPA and other stakeholders, can be proud of its environmental record, but must be ready for continuing challenges, as noted above. Cross-boundary problems such as persistent toxins, climate change, invasive species and hypoxia in the Gulf of Mexico, along with multi-media issues like mercury and unregulated contaminants with toxic or endocrine effects, will require good science, increased partnerships, and innovation to assure a healthy environment for current and future generations.

## **Joint Priorities for FFY 2013 – 2016**

Joint priorities represent a subset of environmental program responsibilities that MPCA and EPA jointly agree to carry out. They represent investment priorities for the PPA period for one or more reasons below:

- the program is an important, newly developing program that requires the attention of the Commissioner and Regional Administrator and senior managers to adequately grow;
- the program area is, or is at risk of, inadequately functioning, and the deficiency represents a significant vulnerability to the integrity of the environmental protection program in the State;
- the program represents a long-term strategic investment opportunity in the State;
- the program offers the opportunity to demonstrate innovations to promote environmental improvement or enable efficiency enhancements.

In the PPA, and supporting documentation, MPCA and EPA will describe the basis for the priority and the expected outcome of the effort; the roles each agency will undertake and level of effort; and significant milestones.

The results of our work on each joint priority will be reported during the joint assessment, including, to the extent applicable the impact of any disinvestments made to support the joint priority work.

*The priority write-ups in the PPA are only of summary of the actual priorities. Complete write-ups and detailed information about the priorities is available by contacting the staff persons listed at the end of each priority summary.*

MPCA and EPA have agreed to the following six priority areas:

1. Environmental Justice and Urban Air Quality
2. Impaired Waters – with added element: Major watershed framework for completing multi-parameter/multi-segment TMDLs
3. Water Quality Monitoring
4. Water Sector Homeland Security
5. Air Quality Permits
6. Mining Permits

## *Environmental Justice and Urban Air Quality*

October 1, 2012 – September 30, 2016

(FFY 2013-2016)

### **Statement of Environmental Problem/Issue:**

The Minnesota Pollution Control Agency's (MPCA) analysis of air quality information, including air monitoring data, air emissions data, air modeling data and risk modeling data, show two significant findings. The first finding is that a significant portion of Minnesota's air pollution comes from on-road mobile sources, off-road mobile sources and small stationary sources. The second finding is that locations in Minnesota with higher population densities, including Rochester and the core cities of Minneapolis and St. Paul, have higher levels of air pollution and experience higher resulting health risks from air pollution.

Within the densely populated urban areas of Minneapolis and St. Paul are communities of color, including Native American communities, and communities with lower economic status. Minnesota Department of Health data shows these communities have higher rates of adverse health outcomes with potential air pollution exposure components, such as asthma prevalence, asthma hospitalizations and cardiovascular hospitalizations. The Minnesota Department of Health reports cancer rates at the county level and has not analyzed cancer rates for the core cities of Minneapolis, St. Paul or Rochester.

The MPCA has recently experienced significant community opposition during permitting decisions and environmental review decisions. In many of these cases, the emissions from the point source seeking the permit were small and well controlled. In addition, the MPCA's review found that the emissions would not likely create additional health risks, either individually or on a cumulative basis, and that mobile sources and small stationary sources were the major sources of air pollution in the area. The community comments for these projects centered on community characteristics such as asthma rates, cancer rates and environment justice concerns. A common characteristic of all of these projects is the lack of trust between the community and the MPCA regarding the major sources of air pollution, the potential health risks from point sources and the connection between point source air pollution and health disparities.

To begin addressing the fair treatment pillar of environmental justice, the MPCA applied for a competitive grant under the Community Scale Air Toxics Grant process. The grant sought funding to develop new monitoring techniques for air toxics of concern in South Minneapolis, an area with environmental justice concerns, and engage the community in the deployment of the monitors and evaluating the results of the monitoring. This grant is not part of Minnesota's PPG. However, the MPCA recognizes this important environmental justice work in the context of the state and federal relationship and seeks to acknowledge the environmental commitments embodied in the PPA with the specific commitments contained in the Community Scale Air Toxics Grant.

Additionally, in a fall 2012 environmental review for a permit application, the MPCA identified a potential modeled exceedance of the 2006 24-hour PM2.5 National Ambient Air Quality Standard (NAAQS) in North Minneapolis. The potential modeled violation was not caused by the permit under review and the MPCA committed to deploy a new PM2.5 monitor near the potential modeled exceedance, work with nearby permitted sources to improve PM2.5 controls in the area and maintain engagement with the community to keep them informed of new data and information. The initial discussions with the community indicates that the commitment in North Minneapolis will include broader discussions of the nature of air pollution in the area, significant sources of air pollution for the area and potential reduction options available.

This joint priority supports EPA's Environmental Justice Plan 2014, specifically under Supporting Community-Based Action Programs section 1 (advance environmental justice principles by building strong state partnerships with the National Environmental Performance Partnership System (NEPPS)) and section 3.4 (build on and leverage Agency efforts to promote greater coordination in the use of programs and tools that support community empowerment). The joint priority also supports Section 4 Tools Development Areas, Strategy 5 which is intended to build and strengthen technical capacity of community-based organizations and community EJ and health leaders to address environmental health disparities and environmental sustainability issues by building community capacity to address asthma disparities and increase citizen participation in science and decisions.

Recognizing that environmental justice and urban air quality are important to both agencies, these activities will offer the opportunity to address these issues as they arise. Acknowledging that a variety of statewide issues may warrant support during the state's air quality planning, permitting and enforcement efforts, USEPA is prepared to support the state when they occur. For example, air toxics and asthma community concerns may need to be explained to the community, and support and assistance given to MPCA. USEPA will participate in planning meetings and outreach efforts as well as attend meetings to explain risk and public health concepts as well as share the results of studies.

On an annual basis, MPCA and EPA Region 5 program leadership will jointly identify the specific programs to involve in the community engagement efforts in South and North Minneapolis to provide a coordinated and effective deployment of each agency's air quality experts. Depending on the needs of the community and the grant progression, these experts may be air monitoring staff, air toxics staff, risk assessment staff, or risk communication staff.

**Actions to be accomplished:**

The MPCA and EPA Region 5 seek to work jointly in the following areas over the duration of this PPA and the Community Scale Air Toxics Grant.

1. The MPCA will meet all grant commitments as described in the Community Scale Air Toxics grant for the development of air monitoring techniques, the deployment of additional monitors and community engagement.

2. The MPCA will engage communities in areas where there are environmental justice concerns in South Minneapolis and Northern Minneapolis, to address concerns about air pollution, health risks, and air pollution sources and seek to build better trust and communication between community members and the MPCA.
3. The MPCA will engage other communities in areas where there are environmental justice concerns related to air pollution in other parts of Minnesota as resources allow.
4. EPA Region 5 Air Monitoring Program, Air Toxics Program, and Environmental Justice Program will participate in the community engagement efforts of the MPCA in North and South Minneapolis to build and strengthen technical capacity of community-based organizations and community environmental justice and health leaders to address environmental health disparities and environmental sustainability issues.” (Plan EJ 2014, Science Tool Development Implementation Strategy 5)
5. On an annual basis, MPCA and EPA Region 5 program leadership will jointly identify the specific programs to involve in the community engagement efforts in South and North Minneapolis, or other locations in Minnesota, to provide a coordinated and effective deployment of each agency's air quality experts. Depending on the needs of the community and the grant progression, these experts may be air monitoring staff, air toxics staff, risk assessment staff, or risk communication staff.
6. In addition to building and strengthening technical capacity of communities, the MPCA and EPA Region 5 agree to work collaboratively to build trust between the communities of North and South Minneapolis, or other locations in Minnesota, and the environmental agencies to improve the understanding of air pollution sources and risks as well as identify common ground for emission reduction opportunities.
7. EPA Region 5 Asthma Program will coordinate with relevant stakeholders (including the Minnesota Department of Health, American Lung Association of the Upper Midwest, and the Minnesota Asthma Coalition) to provide community outreach, education, and resources about comprehensive asthma management and improve their understanding of asthma associated with indoor and outdoor air quality and other common triggers.

**Additional information:**

For more information on the Environmental Justice and Urban Air Quality Joint Priority, contact:

*At MPCA: Frank Kohlasch at 651-757-2500 or [frank.kohlasch@state.mn.us](mailto:frank.kohlasch@state.mn.us).*

*At EPA Region 5: Carlton Nash at 312-692-2543 or [nash.carlton@epa.gov](mailto:nash.carlton@epa.gov).*

## *Impaired Waters*

October 1, 2012 – September 30, 2016

(FFY 2013-2016)

### Statement of Environmental Problem/Issue:

Based on Minnesota's draft 2012 303(d) impaired waters list, there are 2,575 impairments on 1028 lakes and 349 rivers. MPCA submitted its final 2012 303(d) impaired waters list in October of 2012. This was the first list based on MPCA's Intensive Watershed Monitoring Approach, which MPCA believes allows for more efficient monitoring, and generates a more robust water quality data set for assessing whether or not a water is impaired. Minnesota is committed to using the impaired waters approach to restore water bodies to meeting their designated uses, while at the same time maintaining those waters that are meeting designated uses.

The MPCA will continue to work on its impaired waters approach with stakeholders through the Clean Water Council (see program development section below), with other state agencies through the Clean Water Fund Interagency Coordination Team and its sub teams, and while working with Region 5 to meet the commitments set out in 303(d) of the Clean Water Act. This revision of the joint priority addresses these mutual efforts over the next four years.

This joint priority is broken into three components: **Program Development, Total Maximum Daily Load Studies (TMDLs), and Implementation.** Assessment and impaired waters listing activities are addressed in the Monitoring and Assessment shared priority section of this report.

**MPCA Strategy: Restore the chemical, physical and biological integrity of Minnesota lakes, streams, and wetlands that do not support designated uses.**

**EPA Strategy: Improve water quality conditions in impaired watersheds and restore impaired waterbodies to achieve designated uses.**

### Program Development Priorities:

The MPCA's program development activities are driven in large part by Minnesota's Clean Water Legacy Act (CWLA). Signed into law on June 2, 2006, the purpose of the law is "to provide authority, direction and resources to protect and restore the state's surface waters, as required by section 303(d) of the federal Clean Water Act." (MN statutes, chapter 114D)

Following passage of the CWLA, stakeholders wanted to ensure a long-term source of sustainable funding for restoring and protecting Minnesota's waters. A further campaign with additional stakeholders resulted in a ballot initiative to amend Minnesota's

Constitution. On November 4, 2008, Minnesota voters approved the Clean Water, Land and Legacy Amendment to *protect drinking water sources; to protect, enhance, and restore wetlands, prairies, forests, and fish, game, and wildlife habitat; to preserve arts and cultural heritage; to support parks and trails; and to protect, enhance, and restore lakes, rivers, streams, and groundwater.*

The Amendment increased Minnesota's sales and use tax rate by three-eighths of one percent on taxable sales, starting July 1, 2009, continuing through 2034. One-third of those funds are dedicated to a Clean Water Fund (CWF) to protect, enhance, and restore water quality in lakes, rivers, streams, and groundwater, with at least five percent of the fund targeted to protect drinking water sources. When passed, it was explicitly stated that these funds are to supplement, not supplant, existing funding for state agencies.

The MPCA received \$51.16M for the FY2010-11 biennium from the newly-created CWF. Activities funded included significantly enhanced monitoring, TMDL and protection strategy development, and implementation. For the FY2012-13 biennium, the MPCA received \$47.7 M for these activities.

To continue steady progress with the implementation of our watershed approach (see next section below), the MPCA will continue to work closely with other Minnesota state agencies with water programs supported by the Clean Water Fund, along with the Clean Water Council, which provides funding recommendations to the Governor and the Legislature.

### **MPCA Program Priorities for FFY 2013-2016:**

#### **1. Implement Statewide Watershed Approach to prioritize and integrate Monitoring and Assessment, TMDL, and Restoration and Protection Activities**

To meet its responsibility to develop plans to restore impaired waters and protect waters from becoming impaired, the MPCA has developed a Watershed Approach, a holistic strategy through which the state's 81 major watersheds scale (i.e. primarily 8-digit level HUCs, with some exceptions) are monitored and TMDLs and protection plans are developed into one Watershed Restoration and Protection Strategy (WRAP) Report for each watershed. The WRAPS are developed on a repeating, 10-year schedule.

The Watershed Approach provides for better coordination between federal and state government and local partners, including watershed districts, consultants, non-profit groups, and citizens, by using the element of common interest – the health of the watershed – as its focal point. More information on The Watershed Approach can be found in the report submitted to the U.S. Environmental Protection Agency entitled, [Minnesota's Water Quality Strategy](#).

The Watershed approach is already increasing the efficiency and predictability of our work by integrating monitoring and assessment, TMDLs, and protection activities. This will be incorporated into the water plans of local government (watershed management

organizations, soil and water conservation districts, counties and cities) who will develop and implement the detailed activities to implement the reductions called for in the WRAP Report. Implementation funding for local implementers will be primarily provided by Minnesota's Board of Water & Soil Resources for nonpoint-related activities, and the Public Facilities Authority for wastewater and stormwater infrastructure projects.

## **2. Design and Implement an Effectiveness Tracking System**

The CWLA's implementation policies required agencies "to establish and report outcome-based performance measures that monitor the progress and effectiveness of protection and restoration." (114D.20, subd. 3(7))

Since December 2007, the MPCA has been working with state, federal and local partners, including EPA, on a process to develop an effectiveness measurement framework. The initial phase of this project concluded in the fall of 2008 and resulted in the design of a framework that will describe progress at different scale and time periods.

The next phase of this project, which began in October, 2008, developed specific measures, a measurement tracking system, and pilot projects to evaluate the framework. To help implement this phase, the MPCA volunteered to participate in an EPA pilot on program effectiveness. EPA provided a consultant to assist the MPCA and its partner agencies over two years to help facilitate the process.

In February 2012, Minnesota agencies released their first collaborative report. It is designed to help clarify connections between Clean Water Funds invested, actions taken and outcomes achieved in FY2010-2011. Eighteen measures in the report provide a snapshot of how Clean Water Fund dollars are being spent and what progress has been made. The measures are organized into three sections: investment, surface water quality, and drinking water protection. Each measure has detailed status ranking and trend information.

Overall, the report shows the state is on track with its investments, though challenges remain. Of the 18 measures, status and trends vary; six measures showed improving trends, 11 showed no trend or were too early to assess, and one showed a slightly declining trend.

It is important to note that the report does not include information on other ongoing water-related work as it would be impossible to measure everything in one report or project. This report is the beginning of what is to come over the next 25 years in outcome-based water quality data and information.

The FY2010-2011 final report, the summary document and the metadata sheets can be found on [Minnesota's Legacy website: http://www.legacy.leg.mn/funds/clean-water-fund](http://www.legacy.leg.mn/funds/clean-water-fund).

### **3. Develop a Watershed Data Integration System**

To help track and report on effectiveness measures, among many other management needs, the MPCA is developing an information management system, called the Watershed Data Integration Project (WDIP), for elements of its watershed programs including: assessment and monitoring; administrative and financial; geospatial data and information; and TMDL development and implementation and protection efforts. When fully implemented, the system will integrate and enhance existing and new databases, and connect them through an information portal. A business object model was completed for the project in 2007 and the initial design of system requirements was completed at the end of FFY09.

Because of support from the Clean Water Fund, the MPCA continues to make progress with the WDIP. Phase 3 of WDIP, to be completed in June 2013, undertakes a variety of data integration and stabilization initiatives. These are vital to building a foundation for future progress in the WDIP in order to provide access to water quality data, transparency and accountability for watershed activities. Right now WDIP has 12 IT projects. Three are completed, six are active and three are pending.

Outcomes from the completed projects include:

- Overall data cleanup that allowed the watershed webpages to accurately display monitoring, assessment and implementation activities.
- Internal water body search tool - access via the Launchpad, or at <http://nettrans.pca.state.mn.us/internal/WatershedManagementAdmin.aspx?RequesterPage=SearchWaterUnitsCriteria&task=SearchViewWaterUnitsTask>
- External data retrieval tool for accessing monitoring and assessment information on water bodies  
<http://cf.pca.state.mn.us/water/watershedweb/datasearch/waterSearch.cfm>
- Electronic documentation of interagency measures and outcomes.

More than 100 staff and management play an integral part in the success of this on-going effort, participating in roles ranging from project sponsors and subject matter experts, to IT analysts and developers. For further information, go to:

<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/watershed-approach/watershed-data-integration-project.html>

EPA will be looking for potential transferability of what is accomplished here to other states.

### **4. Special Joint Projects with EPA**

In addition to the effectiveness measures project discussed in #2 above, MPCA and EPA are working together on several nationally recognized special projects, supported in part by EPA Headquarters' funding. Projects include the Minnehaha Creek Watershed Stormwater TMDL effort to assess BMP effectiveness, Lake Pepin TMDL

Implementation Plan, and Nutrient Reduction Strategy to reduce hypoxia problems in the Gulf of Mexico. As a member of the Hypoxia Task Force, Minnesota is developing State Level Nutrient Reduction Strategies concurrently with sister states and consistent with the Hypoxia Action Plan and EPA guidance in the Nancy Stoner memorandum titled "Working with States..." March 16, 2011. Minnesota's strategies will build on the watershed approach targeting pollutant reduction and water quality protection in each of the state's 81 HUC8 watersheds by addressing nutrient reductions needed for waters at a scale of HUC 8 and greater (ex. Minnesota River, St Croix River, and Lake Pepin) as well as downstream of Minnesota. The pollutant reduction programs that the state has established will be assessed and recommendations for programs needed to meet milestone nutrient reductions will be provided. The primary goal of these strategies will be meaningful and achievable interim nutrient load reduction to Minnesota and downstream waters. Minnesota strategies will be completed by the end of 2013, with implementation as resources are provided. Recommendations for tracking progress of nutrient reduction will be a component of the State Level Strategies.

In addition, the MPCA has partnered with EPA's Healthy Watershed Initiative to conduct a pilot project in the Snake River Watershed. We are participating with The Nature Conservancy, the Department of Natural Resources, and several local partners to develop the protection elements of our WRAP for the Snake, utilizing expertise of EPA's contractor, Cadmus Consulting, to identify priority protection areas and how to sequence protection activities in the watershed. The results of this work will also serve as a pilot to help the MPCA design its protection strategies for watersheds throughout the state.

#### **TMDL Priorities:**

As of May 2012, the MPCA has received EPA approval of, 1,355 TMDLs – 239 for waters impaired by conventional pollutants and 1,096 for mercury-impaired waters. Overall, as of the 2010 approved impaired waters inventory, 66% of total TMDLs needed for conventional impairments are underway or in implementation, and 68% of TMDLs needed for toxic impairments.

The MPCA's top priority is to continue to initiate eight major watershed projects per year through our watershed approach. Currently, intensive monitoring projects are completed or underway in 52% of Minnesota's watersheds, while WRAP strategies are underway in 42% of our 81 watersheds.

To continue to improve our efficiency, we are currently developing a standardized template for our WRAP Reports. We are working with local stakeholders and a consultant to create an approach that will ensure that our reduction targets, timelines, milestones, sources, and other key elements are clearly identified so that they can be effectively implemented into local water plans.

**Implementation Priorities:**

Through Clean Water Fund appropriations, implementation projects are being supported in almost every watershed in the state. Nevertheless, demand still out paces available funding. As a result, the MPCA working with BWSR and other state agencies have directed significant resources towards improving our prioritization and targeting tools to better understand where funding can have the highest impact. Targeting will be improved through LiDAR, which has been completed for the entire state, as well as through other geospatial tools. New criteria have been set in state funding programs to improve accountability and effectiveness. The MPCA looks forward to reporting progress in this area over the next three years.

**Additional information:**

For more information on the Impaired Waters Joint Priority, contact:

*At MPCA: Doug Wetzstein at 651-757-2819 or [doug.wetzstein@state.mn.us](mailto:doug.wetzstein@state.mn.us).*

*At EPA Region 5, Matthew Gluckman at 312-886-6089 or [gluckman.matthew@epa.gov](mailto:gluckman.matthew@epa.gov).*

## *WQ Monitoring*

October 1, 2012 – September 30, 2016

(FFY 2013-2016)

### **Objective:**

MPCA and EPA Region 5 will collaborate to enhance our monitoring and assessment efforts so that each agency will have sufficient data available to assess the condition of the states' and the Region's waters. Also, we hope to identify stressors and sources of water quality impairments/threats, and to measure changing environmental conditions to support Clean Water Act program needs and track our progress towards protecting and restoring water quality.

### **Statement of Environmental Problem/Issue:**

Effective and comprehensive water quality monitoring is an essential part of our environmental protection and restoration efforts. Monitoring information is needed to assess the condition of water quality within the State and EPA, identify pollutant sources/threats, detect new and emerging water quality problems, and evaluate and inform the effectiveness of water quality protection and restoration programs. It is critical to have appropriate waterbody classifications and standards to assess the data against to determine the state of water quality. Enhanced data management and reporting are also key to ensure the data collected is available to staff, partners, and stakeholders, and also to ensure that partners and stakeholders can contribute their monitoring data to assessment and management efforts.

The passage of the Minnesota's CWLA in 2006 significantly increased the State of Minnesota's investment in and support of water quality monitoring. The law led to significantly increased appropriations for the following activities:

- Accelerate monitoring and assessment of Minnesota's waters with a goal of comprehensive assessment every 10 years;
- Develop TMDLs with an emphasis on 3<sup>rd</sup> party projects led by local government and other local agencies; and
- Provide grants to implement TMDLs and protection activities through existing state and local programs designed to improve water quality.

Biennial allocations for these activities have persisted since the law's passage, and are assumed will continue on for the FY14-15 biennium.

With this heightened level of effort comes a greater need for support and flexibility from EPA in conducting water monitoring and assessment activities in a manner that meets both state and federal expectations. The EPA approved the MPCA's updated "Minnesota's Water Quality Monitoring Strategy 2011-2021" in December 2012, which

relies heavily on the Watershed Approach for its execution. Identifying monitoring and assessment as a joint priority for the next four years will provide continued focus and attention on collecting, analyzing, and managing the data necessary for both agencies to better understand the quality of the state's rivers, streams, lakes, wetlands and groundwater and to target future work.

**MPCA Monitoring and Assessment Priorities for FFY 2013-2016:**

**1. Operate Water Monitoring Networks/Approaches:**

- Continue implementation of Intensive Watershed Monitoring 10-year cycle. Incorporate wetlands monitoring.
- Continue to operate Watershed Pollutant Load Monitoring Network and expand to subwatershed level.
- Continue participation in NARS.
- Continue to operate Citizen Lake and Stream Monitoring Programs.
- Continue to expand and monitor the Ambient Groundwater Monitoring Network.
- Participate in Mississippi River Monitoring Network Task Force and Water Quality Task Force of Upper Mississippi River Basin Association.
- Continue to identify and prioritize monitoring gaps that need to be filled, and identify additional resources that would be needed to fill them.

**2. Develop and use tools for lake and stream biological monitoring and for waterbody assessment:**

- Begin implementing Intensive Large River Monitoring approach.
- Continue to develop lake IBIs and aquatic life monitoring and assessment protocols for lakes.
- Establish a Tiered Aquatic Life Use (TALU) waterbody classification system.
- Continue to implement and continuously improve the state's comprehensive assessment approach, to identify impaired and unimpaired waters, to add waters that are newly determined to be impaired to the impaired waters list, and to delist waters that are no longer impaired.

**3. Enhance data management and access to water quality monitoring data:**

- Continue use and expansion of EQUIS database for surface and groundwater data.
- Address need to upgrade Hydstra time-series database.
- Continue to make progress on Watershed Data Integration Project to bring multiple PCA databases' data together and make it readily accessible.
- Begin Interagency Data Portal development to bring together data from state water agencies.

**Additional information:**

For more information on the Water Monitoring Joint Priority, contact:

*At MPCA: Glenn Skuta at 651-757-2730 or [glenn.skuta@state.mn.us](mailto:glenn.skuta@state.mn.us).*

*At EPA Region 5: Linda Holst at 312-886-6758 or [holst.linda@epa.gov](mailto:holst.linda@epa.gov).*

## *Water Sector Homeland Security*

October 1, 2012 – September 30, 2016

(FFY 2013-2016)

### **Objective:**

Increase the security and resiliency of waste water treatment plants (WWTP's) against all hazards.

### **Statement of Problem/Issue:**

Waste water treatment plants are part of the nation's critical infrastructure, and their ability to function is essential to public health and environmental protection, the economic viability of communities, and the general welfare. It is important for waste water utilities to be secured as well as possible against all hazards (natural and man-made) and to be as resilient as possible when adverse events affect them.

### **Actions to be accomplished:**

1. MPCA and USEPA will support and assist the Minnesota Water and Waste Water Agency Response Network (MnWARN) in order for them to prepare for mutual assistance during natural and man-made disasters. MPCA will report annually the number of WWTP's that are signatory members of MnWARN.
2. MPCA will collaborate with USEPA and MDH on developing revisions to the state pandemic flu plan, to help ensure that WWTP critical staff and operations are appropriately identified and prioritized in the state plan.
3. MPCA will develop an on-line mechanism to disseminate security related information and bulletins to WWTP's.

### **Additional information:**

For more information on the Water Sector Homeland Security, contact:

At MPCA: Wendy Turri at 507-206-2651 or [wendy.turri@state.mn.us](mailto:wendy.turri@state.mn.us), or  
Stephen Lee at 651-757-2160 or [stephen.lee@state.mn.us](mailto:stephen.lee@state.mn.us).

At EPA Region 5: Charlene Denys at 312-886-6206 or [denys.charlene@epa.gov](mailto:denys.charlene@epa.gov).

## *Air Quality Permits*

October 1, 2013 – September 30, 2016

(FFY 2013-2016)

### **Objective:**

Reduce the MPCA's renewal backlog.

### **Statement of Environmental Problem/Issue:**

The MPCA implements the requirements of Title V of the Clean Air Act through its combined construction and operating permits program, which was approved by EPA on December 4, 2001 (66 Fed Reg 62967). Through regular program interactions, our annual planning process, and periodic program reviews, EPA and MPCA discuss program progress and implementation issues. MPCA and EPA agree that there is a large backlog of Title V renewal applications. EPA and MPCA seek to work jointly to significantly increase issuance of Title V operating permit renewals, thereby reducing MPCA's renewal backlog.

### **Actions to be accomplished:**

1. MPCA will maintain a minimum number of FTEs to processing Title V permit actions. A Title V action is a reissuance, a first time Title V permit for a new facility or a facility moving from a state permit to a Title V permit. The MPCA will also look for ways to increase the minimum number of staff working on Title V actions.
2. EPA and MPCA will work to identify areas to assist the permit program, as a whole, to improve efficiency. EPA and MPCA will select 3-4 permit processing impediments per year (continuing throughout the term of the PPA) to investigate possible solutions. The impediments to work on will be identified no later than April 1 of each year. In order to maximize MPCA staff time to write permits EPA Region 5 staff will take the lead in researching the impediments and proposing possible solutions. As necessary, EPA will elevate issues internally for resolution.
3. By December 31, 2013 the MPCA will issue 20 Title V actions.
4. By December 31, 2014 the MPCA will issue an additional 25 Title V actions.
5. By December 31, 2015 the MPCA will issue an additional 25 Title V actions.
6. By December 31, 2016 the MPCA will issue an additional 30 Title V actions.
7. By December 31, 2017 the MPCA will issue an additional 30 Title V actions.
8. Thereafter, MPCA will continue to issue Title V actions with the goal of continuing to reduce the backlog of pending Title V applications.

### **Additional information:**

For more information on Air Quality Permits Joint Priority, contact:

*At MPCA: Don Smith at 651-757-2736 or [don.a.smith@state.mn.us](mailto:don.a.smith@state.mn.us).*

*At EPA Region 5: Genevieve Damico at 312- 353-4761 or [Damico.Genevieve@epa.gov](mailto:Damico.Genevieve@epa.gov).*

## ***Mining Permits***

**October 1, 2012 – September 30, 2016**

**(FFY 2013-2016)**

### **Objective:**

Complete timely NPDES permitting actions for metallic mining projects in Minnesota to address outstanding environmental issues, eliminate permit backlog, and issue permit decisions for construction projects.

### **Statement of Problem/Issue:**

Water quality permits for the metallic mining sector are critical to the protection of surface waters. These permits are often associated with economic development, are under increasing public scrutiny, and involve complex permitting situations. As a result, NPDES permits for the metallic mining sector have a higher than average reissuance backlog and permit decisions for new or expanding facilities are often delayed.

### **Scope:**

All new, expanding and existing metallic mining operations in Minnesota needing NPDES permits.

### **Strategy:**

Complete a workload analysis and schedule for pursuing staffing revisions; identify permit priorities and schedules; identify necessary process improvements based on past experience and implement process revisions; develop standard operating procedure(s) to expeditiously move to final permit decisions.

The Metallic Mining Joint Priority will include identification and prioritization of metallic mining permitting projects, and streamlining/improving the permitting process to assure NPDES permit decisions in a timely manner and eliminate the permit backlog over a 5 year period.

### **Work Load Analysis and Staffing**

It is anticipated that significant additional staff resources will be needed to meet performance measures for this joint priority. The commitments in this joint priority are based on the assumption that the following activities are successfully completed:

By March 29, 2013 a work load analysis will be developed – MPCA lead. The work load analysis will include projections necessary to eliminate the metallic mining permit backlog to zero by July 1, 2018 and assure timely permit decisions for new construction

(new and expanded mines) projects. The work load analysis will include known significant barriers to permit issuance and resources needed to address these barriers.

By April 30, 2013, EPA and MPCA will each independently develop staffing initiatives that reflect the work load analysis and meet the commitments of the joint priority. By June 30, 2013, EPA and MPCA will each independently achieve approval of staffing initiatives.

By September 30, EPA and MPCA will complete hiring or assignment of staff identified in the respective staffing initiatives.

By December 31, 2013, newly assigned EPA and MPCA staffs will complete permit writer training and other training, as appropriate to achieve a level of expertise needed to issue metallic mining permits.

### **Permit Project Prioritization and Scheduling**

By April 1, 2013 MPCA and EPA will develop a Metallic Mining Permit Priority List that will focus staff resources on critical construction projects and permit reissuances necessary to eliminate the permit backlog by July 1, 2018 (5 years). The Priority List will include tiered goals and performance measures based on staffing (fewer projects under current staffing levels and more projects under the level identified in the staffing initiatives). Assuming the scope including the 25 existing metallic mining permits identified below, performance measures should achieve an average of 1) work on 2 new permits, 2) complete 5 permit modifications, and 3) complete 5 permit reissuances per year over the next 5 years to achieve a 20% backlog reduction per year and issue construction permits. This prioritization and schedule will be evaluated and updated by EPA and MPCA by October 1, 2013 and annually thereafter.

MPCA will lead the development of the Metallic Mining Permit Priority List and proposed schedule for completing each of the active permitting projects. The initial Metallic Mining Permit Priority List is provided below and will be updated every 12 months. Permit project schedules will be reviewed and revised monthly via MPCA/EPA conference calls.

**Metallic Mining Permit Priority List (Preliminary)**

NPDES ID	Permit Name	Current Major Minor Status	Issue Date	Expiration Date
NEW	POLYMET	TBD		
MN0054089	CLIFFS ERIE, LLC-HOYT LAKES (combining 2 permits)	Minor	5/4/2001	11/30/2005
MN0042579	CLIFFS ERIE LLC-DUNKA	Minor	8/3/2000	6/30/2005
MN0055301	NORTHSHORE MINING/SILVER BAY P	Major	1/26/2004	9/30/2008
MN0057207	US STEEL/MINNTAC TAILINGS BASI	Minor	9/30/1987	7/31/1992
MN0050504	US STEEL CORP-MINNTAC WWTF	Minor	12/31/1984	12/31/1989
MN0069078	MESABI MINING/STEEL DYNAMICS	Minor	11/30/2007	6/30/2010
NEW	ESSAR EXPANSION	TBD		
NEW	TWIN METALS	TBD		
NEW	TECK	TBD		
NEW	DIRECT REDUCED IRON	TBD		
MN0070378	Magnetation LLC - Plant 4			NEW
<b>TOP PRIORITIES ARE ABOVE THIS LINE</b>				
MN0044946	EVELETH MINES LLC DBA EVTAC	Minor	6/30/1999	5/31/2004
MN0055964	ISPAT INLAND MINING CO-MINORCA	Minor	9/29/2000	7/31/2005
MN0042536	CLEVELAND CLIFFS LLC	Minor	5/4/2001	11/30/2005
MN0052116	UNITED TACONITE, LLC	Minor	8/25/2005	7/31/2010
MN0052493	US STEEL CORP-RESERVOIR	Minor	1/7/2004	11/30/2008
MN0049760	Hibbing Taconite Co - Tails Basin Area			4/30/2000
MN0044946	United Taconite LLC - Thunderbird Mine			5/31/2004
MN0060151	MDNR Soudan State Park			9/30/2008
MN0059633	ArcelorMittal Minorca Mine Inc - Laurentian			12/31/2011
MN0001465	Hibbing Taconite Co - Mining Area			5/31/2013
MN0069221	Magnetation Plant 1 & Mesabi Chief Tailings Basins			6/30/2013
MN0069400	Northshore Mining Co - Silver Bay Dredge Disposal			2/28/2014
MN0046981	Northshore Mining Co - Peter Mitchell			7/31/2014
MN0069868	Magnetation Plant 2			9/30/2015
MN0020249	Midland Research Center			7/31/2016
MN0055948	Keewatin Taconite Operations - Tailings			10/31/2016
MN0031879	US Steel Corp - Keetac			10/31/2016
MN0070050	Mining Resources LLC			10/31/2016
MN0068241	Essar Steel Minnesota LLC			9/30/2017

## **Process Improvement**

By June 30, 2013, EPA and MPCA will work together to develop Standard Operating Procedure(s) (SOP) for the development and review of Metallic Mining permits. The SOP shall include EPA and MPCA roles and responsibilities, and include generic time commitments for each step. The SOP shall describe EPA's early consultation on TMDL implementation, pre-TMDL impaired waters, compliance schedules, and complex effluent limit determinations. EPA and PCA will continue to work together on the variance process improvement effort currently underway.

To maximize permit decision making and processing, EPA and MPCA will work jointly on process improvement activities throughout the term of the PPA. Process improvement activities will include, but not be limited to, EPA/MPCA communications, communication with external parties, and addressing tribal concern. Initial improvements will focus on improved EPA/MPCA collaboration, development and improvement to permit templates, and avoiding duplication of work efforts.

As process impediments are identified EPA and MPCA agree to evaluate and resolve the impediment in a fixed period of time. If an issue is not resolved within the established period it will be elevated to the Division Director (EPA) level and Assistant Commissioner (MPCA) level for resolution.

### **Additional information:**

For more information on the Mining Permits Joint Priority, contact:

*At MPCA: Jeff Stollenwerk at 218-302-6612 or [jeff.stollenwerk@state.mn.us](mailto:jeff.stollenwerk@state.mn.us).*

*At EPA Region 5: Kevin Pierard at 312-886-4448 or [pierard.kevin@epa.gov](mailto:pierard.kevin@epa.gov).*