

Grand River Watershed Water Management Plan

Collaborative Water Management in Ontario



Facilitating dialogue on water management issues builds a common understanding

High Level Results

- A process for building collaboration around a common vision and goals was used to update the Grand River Watershed Water Management plan.
- The result was a joint action plan that aligns the voluntary efforts of all plan partners to achieve the Plan's goals.
- Communities of practice help share knowledge across the watershed. There is a voluntary commitment to maintain these communities, including working groups for water managers, wastewater optimization, urban stormwater and others.
- Actions will significantly contribute to achieving the goals of the Plan.

"Action starts when the discussion starts"

Lorrie Minshall, Former Director
Water Management Plan, GRCA

Project Context

The responsibility for water management in Ontario is shared by many agencies. The Grand River watershed, which is the largest in southern Ontario, faces many challenges: population growth, extensive agriculture and a changing, more variable climate. All of the agencies will have to do their part to address these challenges.

There is a long history of collaborative water management in the watershed. The current update to the Water Management Plan was built on the foundation of earlier plans, notably the 1982 Grand River Basin Water Management Study. It was also built on the spirit of collaboration among the agencies involved in water management.

The Plan demonstrates a collaborative, innovative approach to showcase shared water management in Ontario.

Challenge

Water management in Ontario is a shared responsibility. Many agencies have a role in managing the quantity and quality of water resources in the province. For example, the Ontario Ministry of Environment and Climate Change has a role to approve Permits To Take Water; the ministry is also responsible for compliance with provincial laws and regulations. Municipalities have a role in water supply and wastewater treatment. Conservation Authorities have a role in watershed planning, flood management and other areas. These roles cross local, regional and provincial scales thus a coordinated effort is needed for these agencies to share information and approaches used to manage water and adapt or align work plans to achieve common goals.

The Grand River watershed has had a Water Management Plan since 1932, with the latest completed in 1982. Renewed concern brought on by persistent and intensifying watershed challenges such as population growth, agricultural intensification and climate change led watershed partners to agree to update the Plan. Given the shared responsibility for water management, the project required a collaborative approach to engage key implementers.

Project Goals

The goal was to update the Grand River Watershed Water Management Plan and align the actions of the Plan's partners to achieve their shared goals – improve water quality, ensure water supplies, reduce flood damages and build resiliency to deal with climate change.

Solution

The project was funded by the Showcasing Water Innovation Program of the Ministry of Environment and Climate Change. A Plan could have been drafted by a single agency with prescribed actions that would, theoretically, achieve the goals of the Plan. However, the risk of this approach is that it could result in partners only taking as much action as required to meet compliance standards. A prescriptive Plan would not realize the benefits that a collaborative process can produce.

A process for building collaboration around a shared vision, common goals and objectives and guiding principles for the shared management of water was facilitated to update the Plan.

Partners were able to share information, learn and adjust their own work plans. They developed a common understanding of the issues and a greater appreciation of the different approaches to water management by the partner agencies. The process built connections among peers, strengthened relationships and provided opportunities to discuss a wide-range of local solutions.

The process included the following elements:

- The creation of a Steering Committee provided legitimacy, formality and accountability. Steering Committee members were the sponsors for the project, provided strategic direction and addressed institutional barriers.

- A project charter, signed by the partner agencies, showed their buy-in and allowed them to begin participating in the process.
- A Project Team was created to represent the implementers: agency staff who oversaw their own agency's workplans. The Project Team met regularly to exchange information and ideas. This allowed team members to adjust and align existing work plans, or even create new ones to achieve the goals of their agencies as well as the goals of the Plan.
- Working Groups were set up to address specific parts of the plan. This enabled a wider discussion on issues and solutions and allowed staff from all levels to interact, build relationships and bring forward information that could be used to identify actions to achieve the goals of the Plan.
- Workshops on specific challenges (e.g. water supply demand management, wastewater treatment plant optimization, nutrients in rivers, etc.) broadened input into the Plan as well as engaged other communities such as researchers and wastewater plant operators.

One important key to success of a collaborative process is to have a supporting agency to co-ordinate the process. The Grand River Conservation Authority provided staff to coordinate and chair the project team and working groups, as well as to compile and synthesize information and draft reports in which solutions and actions were identified.

Results

The Water Management Plan update was completed in Spring 2014 and posted on the GRCA's website at www.grandriver.ca/wmp

Following that, the Steering Committee sought formal endorsement by watershed municipalities, provincial ministries, federal departments and Six Nations of the Grand River.

Implementation has already started on some of the key actions in the plan. Innovative approaches and solutions such as the Wastewater Optimization Program are continuing and other water management communities are adopting the GIS decision-support tools developed for the Plan.

The collaborative approach was critical to the success of the update. It fostered stronger working relationships, a greater respect for the various roles in water management across agencies, and a greater understanding of the opportunities or constraints among partners for managing water.

The joint Action Plan was written based on what the partners have agreed to do. It is a Plan that will not sit on the shelf but, rather, will be integrated into the work plans of each partner.

The Action Plan was built on the obligation of each agency to each other and to public to achieve the goals of the Plan. It was not built on regulation: it is a voluntary plan.

The success of the collaborative approach is illustrated by the fact that the key agencies implementers were not only engaged in the process but continue to remain in the table.

Lessons Learned

The implementers were at the table. The implementers -- water services managers, resource managers, wastewater treatment plant operators, regulators -- can carry out the actions needed to achieve the goals. Further, the implementers maintained control of the things that affected them and they were willing to align their actions with others to achieve the goals of the Plan.

A signed project charter enabled initial buy-in and engagement. A champion, beyond the coordinating agency (e.g. GRCA), was needed to rally support and ensure accountability. There were a few champions at the table who provided critical support at key times. This leadership helped secure funding and ensured information was shared among a broader agency community.

Institutional commitment enables participation. Collaborative water management requires an institutional commitment so support for the Plan goes beyond the individuals and experts sitting on committees. This commitment helps to facilitate ongoing engagement and action when current committee members retire or move on to other positions. This will be the biggest challenge to the successful implementation of the Plan in the future.

Communities of practice enable shared learning. Many working groups were formed to share knowledge, skills and workplans. This helped some members to lever support for implementing their agency's actions. There is a commitment to maintain these communities into the future, including the water managers working group, wastewater optimization and urban stormwater managers, among others.

It is a voluntary Plan. The Plan is not a list of what needs to be done, but what the partners agree they will do. It was not driven by regulation but rather by the partners' obligation to each other, the public and their own agencies. A voluntary, collaborative process can be more progressive and innovative than a regulatory approach as it allows water managers to set the bar a bit higher and doesn't prevent them from making adjustments if things change.

Better information improves decision making. Many of the projects completed for the Plan used existing tools and information already available to the agencies. The province's investment in Drinking Water Source Protection Planning provided the opportunity to compile information that could be applied to broader water management planning. The process of compiling information and identifying gaps illustrated that collecting better data would improve decision making in many areas, e.g. sludge accountability, improved wastewater treatment process control, soil moisture data to improve timing and quantity of irrigation, etc.). Adequate data collection remains a challenge for most water management agencies.

"Best value solutions" are efficient investments that yield effective solutions. "Best value solutions" make use of existing water infrastructure and funding to achieve the goals of the Plan. These solutions go beyond standard "hard solutions" and encourage investment in "soft solutions" such as changes in how systems are operated or managed. Examples include wastewater treatment plan optimization, proper

maintenance of stormwater ponds so that they operate effectively, encouraging changes in consumer behavior to manage water demand and promote conservation, and providing farmers with improved information to help them get the most out of their management practices. These soft solutions challenge a typical regulatory approach which may continue to be a barrier during Plan implementation.

A collaborative approach to water management takes time. A long-term vision and perseverance is needed to support the partnership and facilitate shared learning to achieve common goals for effective water management.

Next Steps

Future success of the Plan will depend on:

- A commitment by the partners to maintain and participate in the Grand River Implementation Committee. This is a committee of senior managers who will champion the Plan's implementation, to keep the momentum going and help to address barriers to implementation.
- Ongoing, regular meetings of the implementers who make up the Water Managers Working Group to maintain engagement and ensure that the actions are implemented.
- Recognition of the plan by the federal and provincial governments to elicit their commitment to continue to participate. Endorsement of the Plan also is a way to recognize the Plan's significant contribution to Great Lakes objectives. Recognition of the Plan will keep it alive as staff change and will support knowledge transfer to the next generation of water managers.
- Annual reporting on the progress to implement the actions in the Plan. Reporting on the collective actions, early wins and celebration of successes will establish and reinforce the moral obligation to continue to take action.
- A commitment of the partners to continuous improvement and to regular plan renewal. This is how the goals and targets for the watershed will be achieved.

Application for Ontario communities

Conservation Authorities are well positioned to help coordinate watershed water management in Ontario. The collaborative process put in place to update the Water Management Plan could be used across Ontario where there is an authority willing to take on this role.

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