

Fact Sheet



Integrated watershed management is the process of managing human activities and natural resources on a watershed basis, taking into account social, economic and environmental issues, as well as community interests in order to manage water resources sustainably.

An Integrated Watershed Management Approach to Great Lakes Protection

What we do in our watersheds impacts the Great Lakes

Our activities on the land impact the health and sustainability of the Great Lakes which we depend on, daily, for our drinking water, livelihoods and social well being. Given the premise that healthy watersheds contribute to healthy Great Lakes, a more integrated approach that recognizes the connections between the Great Lakes and their watersheds can be used to identify threats and actions that can be taken to ensure current and future sustainability of this important resource.

Integrated watershed management (IWM) focuses on water and related resources, including aquatic and terrestrial biodiversity and ecosystems, addressing the inter-relationships between them and the broader socio-economic systems which they support.

The integrated watershed management approach is applied through a continuous and cyclical process involving the collaborative development of plans that address identified issues and concerns that are then implemented, monitored, reported on, and updated as required in order to adapt to changing or emerging stressors, management approaches, or new information.

Integrated watershed management enables a host of interconnected issues to be addressed collectively, offering a number of benefits such as science-based decision-making, improved collaboration, and leveraging existing local environmental and natural resource investments ultimately resulting in more sustainable outcomes.

An IWM approach would result in:

- ~ improved water quality and erosion control,
- ~ more resilient biodiversity and habitats,
- ~ more sustainable economic and recreation opportunities,
- ~ improved quality of life and neighbourhood desirability, and
- ~ greater ability for Ontario's watersheds to adapt to the impacts of climate change.

How to achieve greater Great Lakes sustainability:

1. Set measurable targets for nearshore areas to achieve Great Lakes objectives;
2. Ensure coordinated actions by various watershed stakeholders (including agencies and municipalities) takes place through integrated watershed management;
3. Enhance existing tools and programs (e.g. urban and rural stormwater management) to implement local actions for broader Great Lakes' benefits and to engage Ontarians' support for their Great Lakes;
4. Support actions with adequate science, research and monitoring.

5. Build upon existing models for efficiency (both watershed and bi-national) and without creation of additional prescriptive processes requiring excessive provincial oversight.

Factors for Success

- ❖ **Integration and Collaboration:** Protecting water supply and quality requires collaboration and coordination at the watershed-level in order to effectively address cross jurisdictional boundary issues and impacts from many different and sometimes conflicting uses. Actions should be guided by clear Great Lakes objectives and targets if benefits are to be achieved. Success requires the input of watershed management practitioners and science experts at the political decision-making tables.
- ❖ **Strengthened Watershed and Nearshore Science:** Watershed-based analysis, modeling, and linking quantity to quality are critical tools to assess and establish priority watershed actions to benefit the important nearshore area which contributes significantly to the social, economic and environmental health of the Great Lakes basin. Understanding nearshore processes and the aquatic /shoreline ecosystems is an important aspect of successful watershed and shoreline action implementation. In order to address the growing and expensive impacts of climate change, a proposed Great Lakes science priority agenda needs to focus on:
 - ✓ Setting measurable targets for nearshore areas to achieve Great Lakes objectives
 - ✓ Understanding the relationship between watersheds/shorelines and the nearshore
 - ✓ Targeting watershed and shoreline restoration actions with the greatest nearshore benefits
 - ✓ Adapting to climate change
 - ✓ Monitoring and reporting to track progress
 - ✓ Sharing knowledge and information between practitioners and the public
- ❖ **Action Agenda:** An effective action agenda for the *Great Lakes Protection Act* should coordinate activities within both the Great lakes watershed and shoreline areas and should encompass climate change adaptation work, drinking water source protection implementation, flood, erosion and low water and stormwater practices, water management technology development as well as biodiversity restoration and protection.

A series of 'best bets' should be established building off current existing practices and programs such as watershed management plans, stewardship programs, agricultural best management practices and green infrastructure initiatives, development of green jobs, urban and rural stormwater management practices, and phosphorous reduction programs.

An action agenda also should strive to reconnect the general public with the Great Lakes through its watershed and shoreline communities.
- ❖ **Using Collaborations to Leverage Sustainable Funding:** All levels of government need to collaborate to identify issues and goals, as well as develop sustainable funding approaches sufficient to support the expertise required to undertake science development and program implementation. Initial work should focus on a 'best bet' action agenda in order to be efficient and able to be implemented within reasonable and sustainable budget levels.

This fact sheet is a summary of the key messages contained in Conservation Ontario's report: *An Integrated Watershed Management approach to Great Lakes Protection. Conservation Ontario's recommendations for a Great Lakes Protection Act* (March 2012). The full report is available on Conservation Ontario's website: www.conservationontario.ca