

Working Together

Protecting Natural Resources & Their Functions

Water and related natural resources have value—for our economy, the environment and for people, generally.

Our activities on the land impact the health and sustainability of natural resources and can threaten how much water we have available as well as how well we can adapt to the impacts of climate change.

The best way to protect resources is on a **watershed basis** using **integrated watershed management**. This approach allows us to address multiple issues and objectives; and enables us to plan within a very complex and uncertain environment.

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.

Integrated Watershed Management Provides Multiple Benefits

Through integrated watershed management (IWM), all community interests work together to identify what issues and actions are impacting the watershed's resources, and then map out different strategies and plans to address those issues.

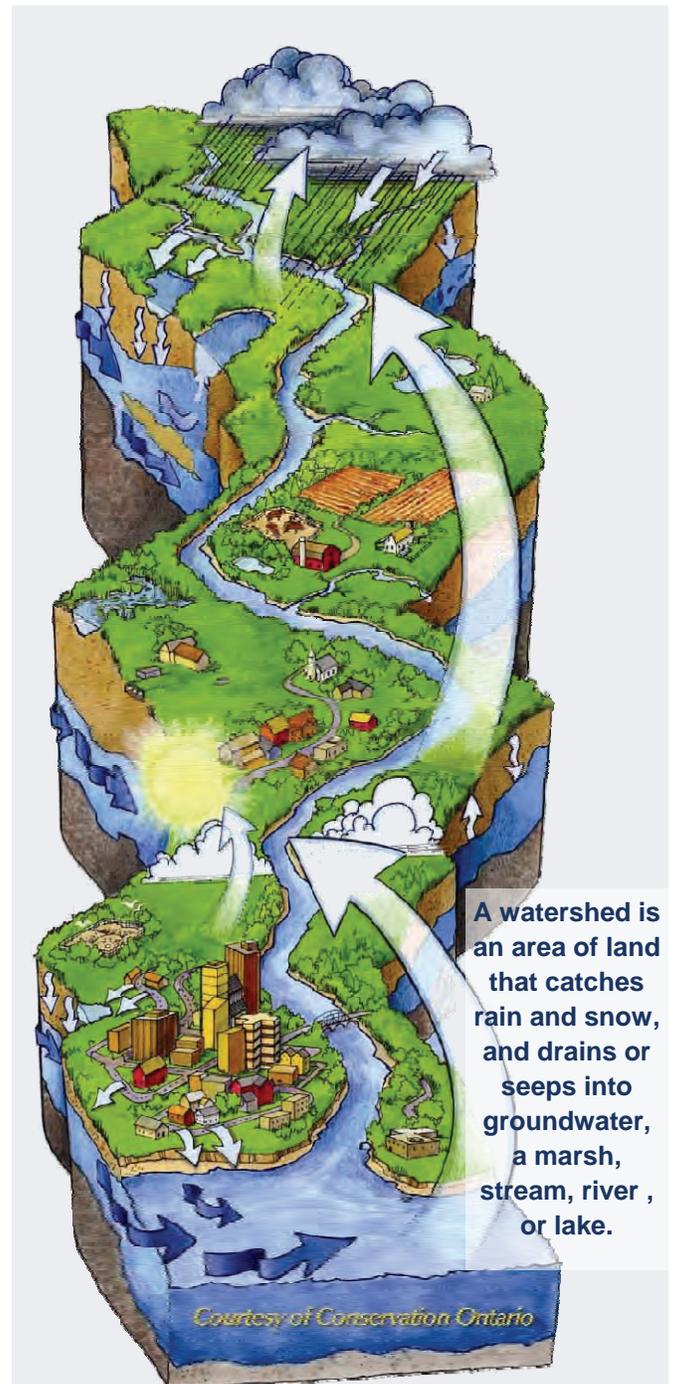
These plans and strategies are implemented, monitored, reported on, and updated — on a regular basis— in order to adapt to changing land uses, new or increasing stressors, new information, or different management approaches.



IWM helps us to focus on priorities and link strategies and actions leading to smarter, science-based decisions that ensure a long and healthy future.

An IWM approach would support:

- Improved water quality & quantity
- Flood and erosion management,
- Resilient biodiversity and habitats,
- Sustainable economic and recreation opportunities,
- Improved quality of life and neighbourhood desirability,
- Greater ability for Ontario's watersheds to adapt to the impacts of climate change, urbanization and other stressors.



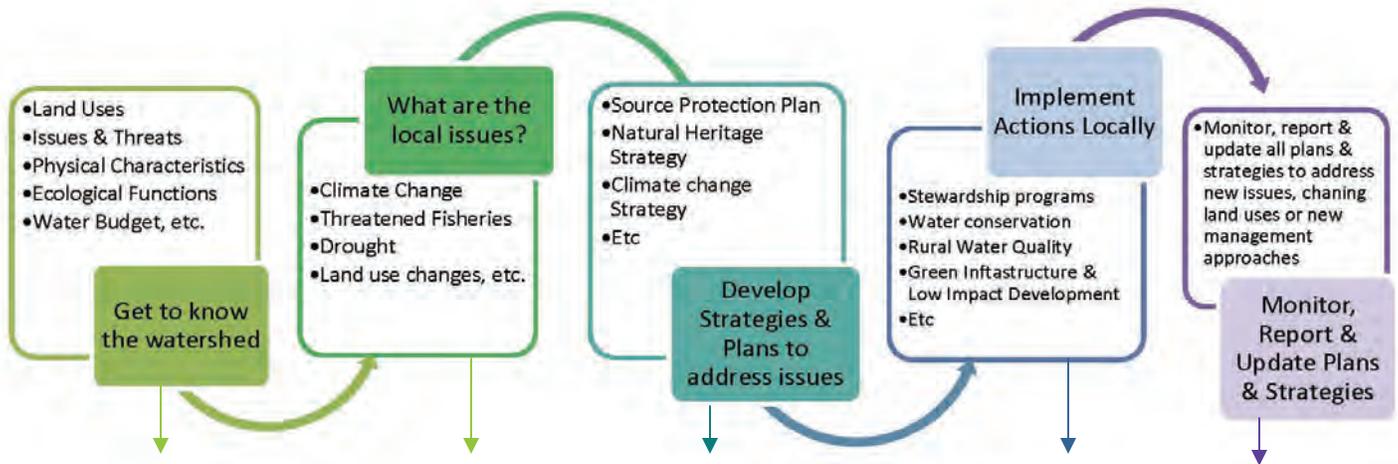
A watershed is an area of land that catches rain and snow, and drains or seeps into groundwater, a marsh, stream, river, or lake.

WATERSHED CONNECTIONS

What we do in our watershed impacts how much water we have and how well our natural environment can help us adapt to climate change impacts. A watershed is an ecosystem with interacting natural systems such as water, plants, animals wetlands, moraines, and forests. Our activities impact the quality and quantity of surface water, groundwater and other natural resources in the watershed. Upstream activities influence river flows and water quality downstream. Surface and groundwater systems have a limited tolerance for stress, and long term problems can develop that are costly and difficult to fix.

Individual Strategies and Plans that address local watershed issues all contribute to the overall integrated watershed management process.

Integrated Watershed Management Process

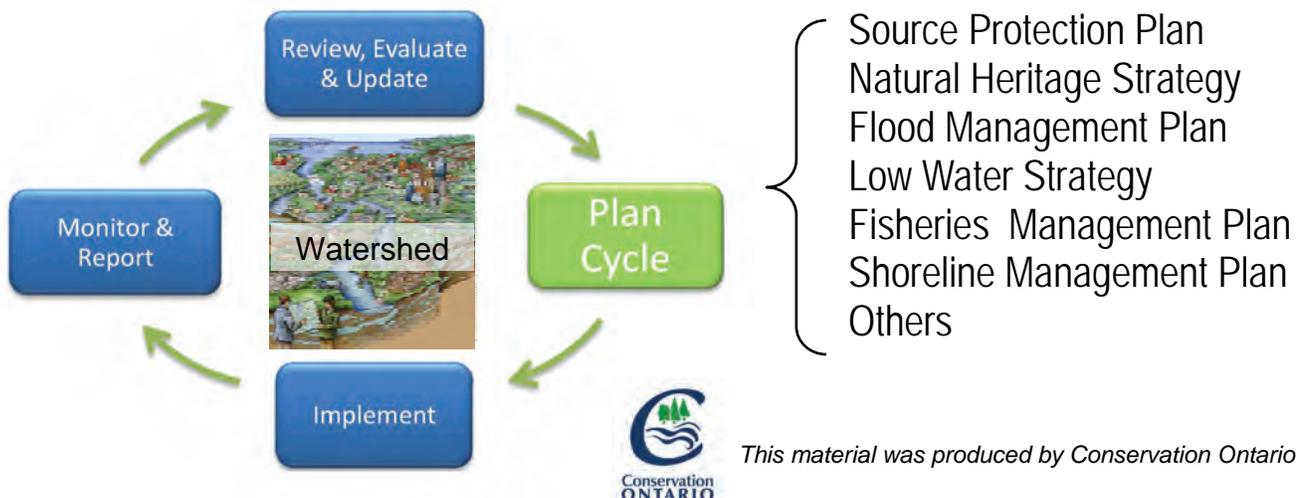


Stakeholder Input

To be successful, IWM requires collaborations and involvement of a wide variety of community interests and water users including municipalities, businesses, residents, agencies and landowners. They decide on the priority issues that need to be addressed, help to set goals, decide on what actions to take and implement locally.

Each Strategy & Plan is developed, implemented, monitored and updated through a cyclical process which keeps it up to date and responsive to local needs.

All of the Strategies and Plans are developed in relation to each other and to the overall watershed conditions, local land uses, and specific issues.



This material was produced by Conservation Ontario (2012)



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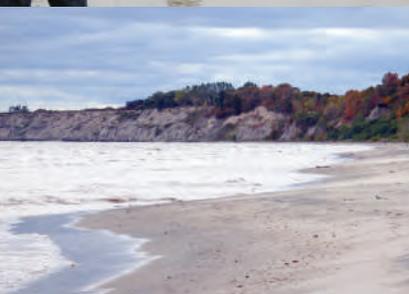
ADDING VALUE

How Conservation Authorities support provincial priorities



Climate change

- Local adaptation strategies such as green infrastructure, urban and rural stormwater management, tree planting
- Flood management programs to address climate change
- Data collection, monitoring, modelling and research



Healthy Great Lakes

- Rural stewardship, urban and rural stormwater management, nutrient management, green infrastructure and other programs reduce nutrient impact on Great Lakes
- Great Lakes Guardian Fund projects
- Data collection, monitoring, modelling and research



Growth and urbanization

- Conservation Authorities Act Section 28 regulations control development in and near wetlands, floodplains, steep slopes and Great Lake shorelines
- Advice to municipalities to ensure development is compatible with a healthy and sustainable environment and consistent with the Provincial Policy Statement and provincial plans (e.g. Greenbelt Plan, Oak Ridges Moraine Conservation Plan, Growth Plan for the Greater Golden Horseshoe)



Flood warning and protection

- \$2.7 billion worth of public infrastructure including more than 900 dams, dikes, channels and erosion control structures
- Floodplain mapping, flood monitoring and warning systems to protect lives and properties
- Flood damage reduced \$100 million annually

ADDING VALUE

How Conservation Authorities support provincial priorities



Natural heritage and biodiversity

- 146,000 hectares of natural land protected through CA ownership
- Tree planting, forest management, river habitat and wetland protection and improvements
- Support provincial efforts to protect Species at Risk and manage Invasive Species



Recreation, health and tourism

- 250 Conservation Areas attracting 6.8 million visitors annually
- 2,500 kilometres of trails connecting people to nature



Education

- Close to 50 outdoor education facilities serving more than 400,000 students annually at 3,800 schools in partnership with 50 of the province's 72 district school boards
- Partners in Water Festivals: fun, interactive way for kids to learn about water issues
- Partners in Specialist High Skills Major Program



Water quality

- Implementing the Clean Water Act for drinking water source protection
- Stewardship programs protect water quality on farm and rural land



Water supplies

- Implement Low Water Response Program during dry conditions
- Water budgets and other research guide informed decisions on municipal water supplies
- Some CAs operate reservoirs used to maintain river flows in summer and fall



Monitoring and reporting

- Partner in Provincial Water Quality Monitoring Network and Provincial Groundwater Monitoring Network, Hydrometric Network and others
- CA Watershed Report Cards provide an overview of watershed health

Conservation Authorities are proud to work with these ministries:

Natural Resources & Forestry, Environment & Climate Change, Municipal Affairs & Housing, Agriculture, Food & Rural Affairs, Economic Development, Employment & Infrastructure, Health, Tourism Culture & Sport, Education, Northern Development & Mines