

INTEGRATED WATERSHED MANAGEMENT PLANNING IN MANITOBA

What is a Watershed?

A watershed is a topographically defined area of land where the water flows, seeps or drains to a common point such as a river or lake. Within a watershed, surface and groundwater are generally connected as water flows across the landscape through waterways or down through layers of soil and substrate. This movement of water across and through the landscape connects an area hydrologically.

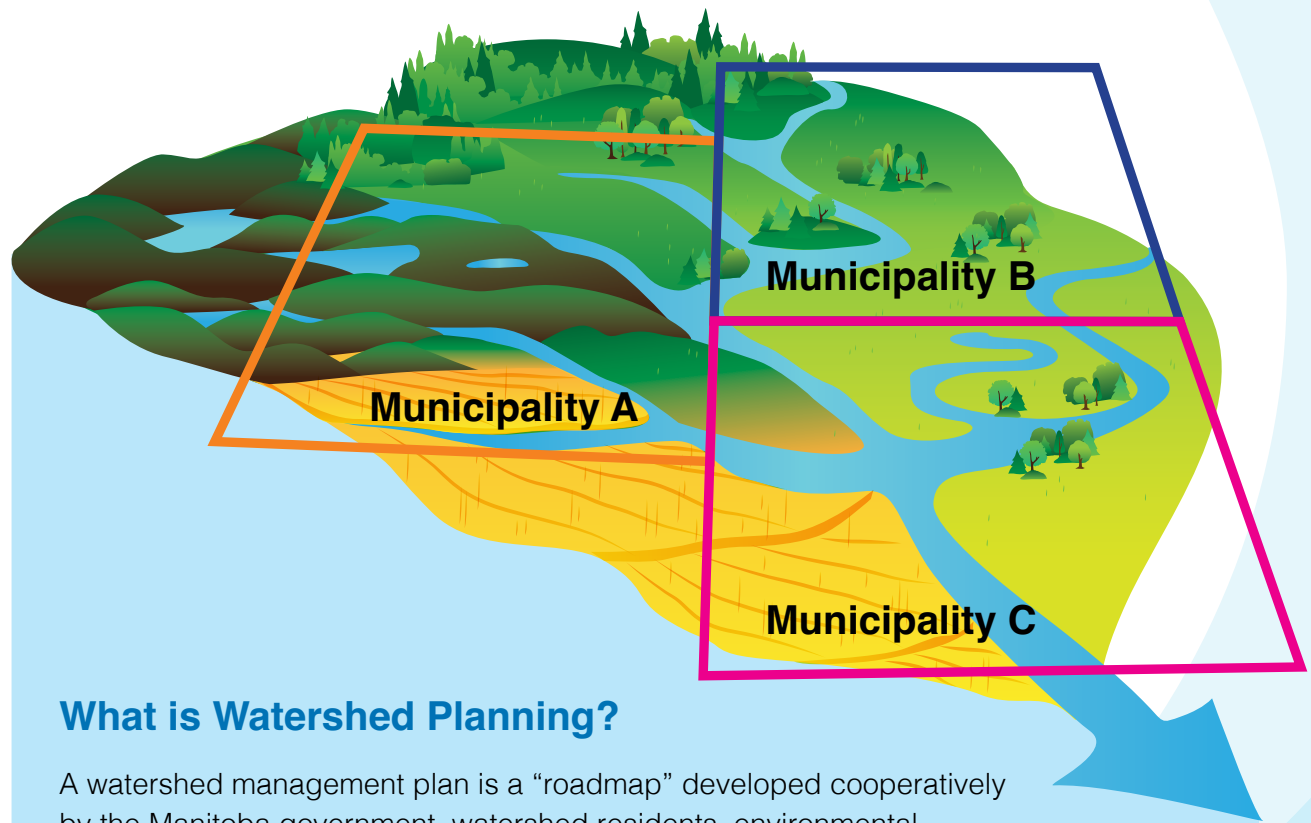


Watersheds can be identified at different scales depending on the defined downstream point. A large watershed, such as the Lake Winnipeg Watershed, spans almost a million square kilometres across four Canadian provinces and four American states, and includes dozens of smaller scale watersheds, all of which eventually flow into Lake Winnipeg.

Why Watersheds?

Watershed features, whether natural (forests, wetlands and rivers) or created by human activity (homes, farms, and towns), are connected by the water that flows through them. Activities on the land that affect water in one part of the watershed may affect water or land in another part of the watershed. Understanding the interconnections between activities on the land and the impacts on water within a watershed is essential.

Commonly, watershed boundaries include portions of multiple jurisdictions and do not align with administrative boundaries. Effective and sustainable watershed management requires cooperation, coordination and partnership among all jurisdictions within a watershed. In an effort to enhance cooperation, coordination and partnerships related to watershed management, Manitoba has adopted a watershed-based planning philosophy, enabled through The Water Protection Act.



What is Watershed Planning?

A watershed management plan is a “roadmap” developed cooperatively by the Manitoba government, watershed residents, environmental organizations, and local and Indigenous government partners that outlines actions to manage land and water resources on a watershed basis. Planning at the local watershed scale is important to ensure that local issues are addressed in a way that is meaningful to watershed residents. The planning process gives community members an active voice in identifying common goals that everyone can work together to achieve.

Under Manitoba’s watershed-based approach to planning, watershed districts are designated as water planning authorities to lead planning efforts. Watershed management plans guide the work of watershed districts and their partners by:

- helping to prioritize and target projects and programs to improve watershed health
- targeting activities and programs to areas in need of greater protection, or to areas where resources will be most effective
- setting a baseline for measuring the success of management efforts
- reducing future costs by identifying actions that will prevent future problems

What is an Integrated Watershed Management Plan?

An Integrated Watershed Management Plan (IWMP) identifies priority land and water-related issues in a watershed, determines projects or policies targeted to address the issues, and identifies how land and water management programming will be cooperatively carried out in a watershed.

Watershed planning in Manitoba is guided by The Water Protection Act which requires plans to:

- identify issues relating to the protection, conservation or restoration of water, aquatic ecosystems and drinking water sources in the watershed
- outline objectives, policies and recommendations respecting some or all of the following:
 - the protection, conservation or restoration of water, aquatic ecosystems and drinking water sources
 - the prevention or reduction of water pollution, including wastewater
 - land drainage and flood control, including the maintenance of land drainage and flood control infrastructure
 - activities in water quality management zones, riparian areas, wetlands, flood areas, flood plains and reservoir areas
 - water demand management, water use practises and priorities, the conservation of water supplies, the reduction of water use and consumption during droughts, and measures to ensure access to clean drinking water
- specify linkages between water management and land use planning
- identify ways in which the plan can be implemented, monitored and evaluated, recognizing the need to implement the plan with the assistance of residents, environmental organizations, and all levels of government

GOAL 1:
REDUCE NUTRIENTS IN BIG RIVER BY 15% OVER NEXT 10 YEARS

ACTIONS	ORGANIZATION
Install fencing along Big River in target areas	Watershed District
Consider upstream area of Big River a sensitive area and include protections in development plan	Planning District
Teach grade 5 students about watershed health	Watershed District
Better enforce illegal drainage activities	Manitoba Government

An example of how plan actions work towards a broader goal for the watershed.

The Planning Process

The planning process engages watershed residents, local interest groups, and all levels of government (Indigenous, municipal, provincial, and federal). Water planning authorities, typically watershed districts, develop local planning teams that consult with and represent these groups. They identify and prioritize watershed issues, gather and analyze local, technical, and Indigenous knowledge, and develop recommendations to address priority issues in specific areas of the watershed. Developing an IWMP takes two to three years, and implementation is ongoing throughout the life of the plan. Plans are generally reviewed and revised every 10 to 15 years.



Watershed residents discuss land and water issues during public engagement.

There are several key groups that are critical to developing a successful plan:

Water Planning Authority (WPA): Designated under The Water Protection Act, the group that takes on the responsibility to develop and complete an IWMP in accordance with The Act. Once a plan is implemented, the WPA is responsible for ensuring the plan is monitored, evaluated, and progress is reported.

Project Management Team (PMT): A small group of key decision-makers appointed by the WPA to represent the interests of everyone in the watershed. The team includes representatives from the WPA, Indigenous governments, organizations or groups with a special interest in the watershed, and a provincial watershed planner.

Watershed Team: This is a large group (30 to 50 people) that includes a diverse and committed group of people who represent stakeholder groups, or are technical experts who can contribute technical information about the watershed.

PRE-PLANNING	INFORMATION GATHERING	PLAN DRAFTING	PLAN REVIEW	PLAN APPROVAL	IMPLEMENT
Designate Water Planning Authority	Watershed Characteristics	Compile information from public engagement and Watershed Team	Review plan with PMT and Watershed Team	Water Planning Authority submits the plan to the Minister for Approval	Implement plan Monitor and evaluate
Sign Memorandum of Understanding	Source Water Assessments	Prepare draft plan	Provincial Department Review		
Establish Project Management Team (PMT)	Surface Water Management Planning				
	Public Engagement Meetings				
	Watershed Team Meetings				
YEARS 1-2		YEARS 2-3		10 YEARS	

Overview of the process for developing an Integrated Watershed Management Plan in Manitoba.

What Does it Cost to Develop a Plan?

Each water planning authority is provided with funding to offset expenses related to the development of the plan. These expenses include printing and advertising costs, consultant fees, meeting costs (room bookings, refreshments, etc.). In-kind support makes up the bulk of the costs when developing a plan. Each team member involved in the plan will dedicate valuable time to this effort. Costs for developing an integrated watershed management plan are separate from the costs necessary to implement the plan.

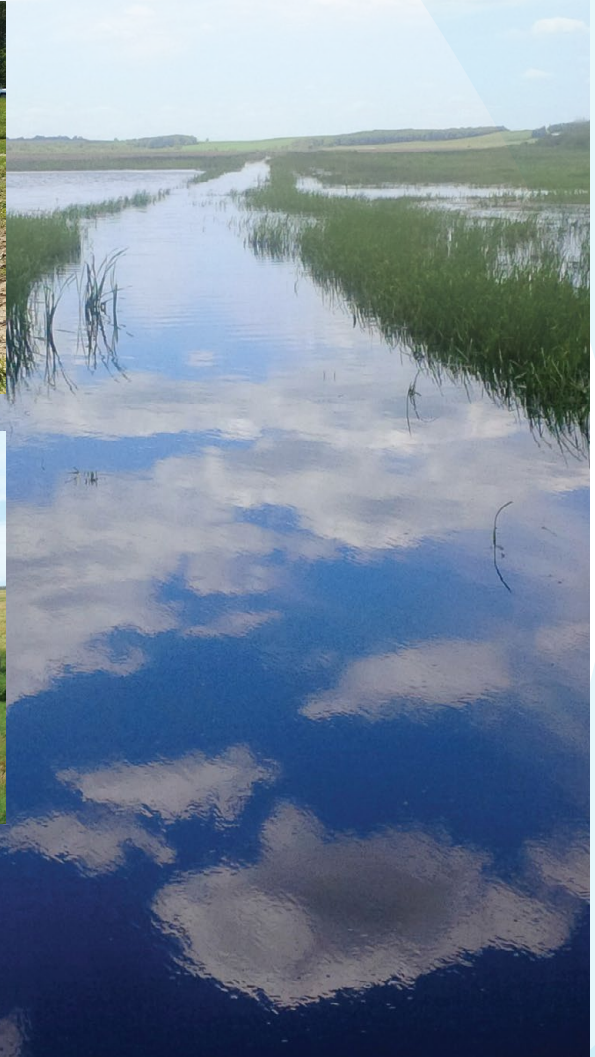
How is a Watershed Plan Implemented?

Plan implementation is shared by watershed districts, all levels of government, organizations and watershed residents. Watershed districts take the lead in identifying programming and projects, finding project partners and coordinating funding to complete projects on the ground that will contribute to achieve the goals identified in the IWMP.

Plan implementation is funded through many sources and the organizations tied to each action. The Manitoba government supports plan implementation through an annual grant to the Watershed Districts Program. Indigenous, municipal, provincial, and federal governments, organizations and individuals all contribute support as they implement plan actions.



Manitoba's watershed districts are some of the many organizations that turn plans into action on the ground.



Contact Us

For more information, please see www.manitobawatersheds.ca
or call **204-945-0002**.



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