

# Engaging Manitobans on Water Management

## Project Overview

Manitoba Agriculture and Resource Development is leading the development of a new provincial Water Management Strategy. The last provincial water management strategy for Manitoba was completed in 2003. Much has changed over the last 20 years and a new water strategy will support effective and sustainable management of our water resources. Engagement with Manitobans, provincial, local and federal governments, Indigenous peoples, industry and other agencies will support the development of the strategy.

## Engagement Overview

Public engagement included a survey and idea board that were open for feedback from July 13 to Aug. 23, 2021. The survey sought feedback on the drafted strategy framework, specifically on the proposed vision statement, guiding principles and focus areas. The idea board asked participants to share how a made-in-Manitoba water management strategy can reflect the unique needs of their community or industry.

The department also invited industry organizations, non-governmental organizations and other stakeholders to participate via email and requested they raise awareness with their own membership. Facebook and Twitter were also used to promote additional participation in the engagement.

## Survey Results

A total of 457 responses were received.

The survey included the following **vision** statement:

“Manitoba is home to resilient, healthy waters that support thriving ecosystems, communities and economies for generations.”

The survey asked participants, ‘When thinking about the future of water in Manitoba, does the vision statement capture the most important elements?’ Eighty-three per cent of survey participants indicated that ‘all or most of the important elements are captured’.

Seventeen per cent of survey participants answered 'few or none of the important elements are captured' in the proposed vision statement. The survey asked those participants 'what key words need to be included in Manitoba's water strategy vision statement?' Their list of key words included:

Agriculture	Healthy	Wetlands
Habitat restoration	Partnerships	Restore
Biodiversity	Stewardship	Protect
Sustainability	Rights of nature	Ecosystem health
Climate change resilient	Indigenous knowledge	Abundant
Respect	Natural infrastructure	Water is life

The survey asked participants 'are there other important elements that were not mentioned in the proposed vision statement.' Ideas shared included the following:

- Highlight that access to clean water is a human right.
- Reference partnerships and collaboration, including across governments, with Indigenous peoples, with industry and with the public.
- Communicate and share water information and integrate traditional Indigenous knowledge.
- Focus on sustainable agricultural production with consideration of irrigation needs and protection of agricultural lands from drought and flooding.
- Reduce focus on social and economic aspects of water and increase emphasis on environmental protection, including protection related to wetlands and building resiliency to climate change.
- Replace the word waters with watersheds to emphasize the importance of a whole ecosystem approach.

Manitoba's Expert Advisory Council proposed nine **guiding principles** for the Manitoba Water Management Strategy. The survey asked participants to rate the level of importance for each of the proposed guiding principles.

The top two guiding principles with the highest numbers of 'very important' ratings were:

1. Protect the quality and quantity of surface and groundwater.
2. Ensure a basis in science and evidence.

'Plan for the long-term with short-term milestones' and 'Link land and water planning' were the guiding principles with the third and fourth-highest number of 'very important' ratings.

'Define roles and responsibilities' was the guiding principle with the fifth-highest number of 'Very Important' ratings.

**Please identify the level of importance you place on each of the proposed guiding principles:**

■ Unimportant   ■ Somewhat important   ■ Very Important



For a follow-up question, the survey asked participants, 'are there additional guiding principles that should be included in the provincial Water Management Strategy.' Suggestions included:

- Maintain water levels that are able to support aquatic ecosystems and the species that live there.
- Improve drought management and flood protection.
- Build resiliency to climate change.
- Recognize the importance of managing water to increase social and economic development opportunities in the agricultural community, and in the tourism and recreation industry.
- Work towards shared management with Indigenous communities and incorporate Indigenous Knowledge.
- Focus resources towards advancements in technology and education on the current state of our water resources.
- Improve data sharing, analysis and collection across inter-provincial and international boundaries to improve planning and preparedness for the future.

The proposed **focus areas** provide overarching goals for the provincial water management strategy. The survey asked participants to indicate their level of agreement with each of the 11 proposed focus area statements.

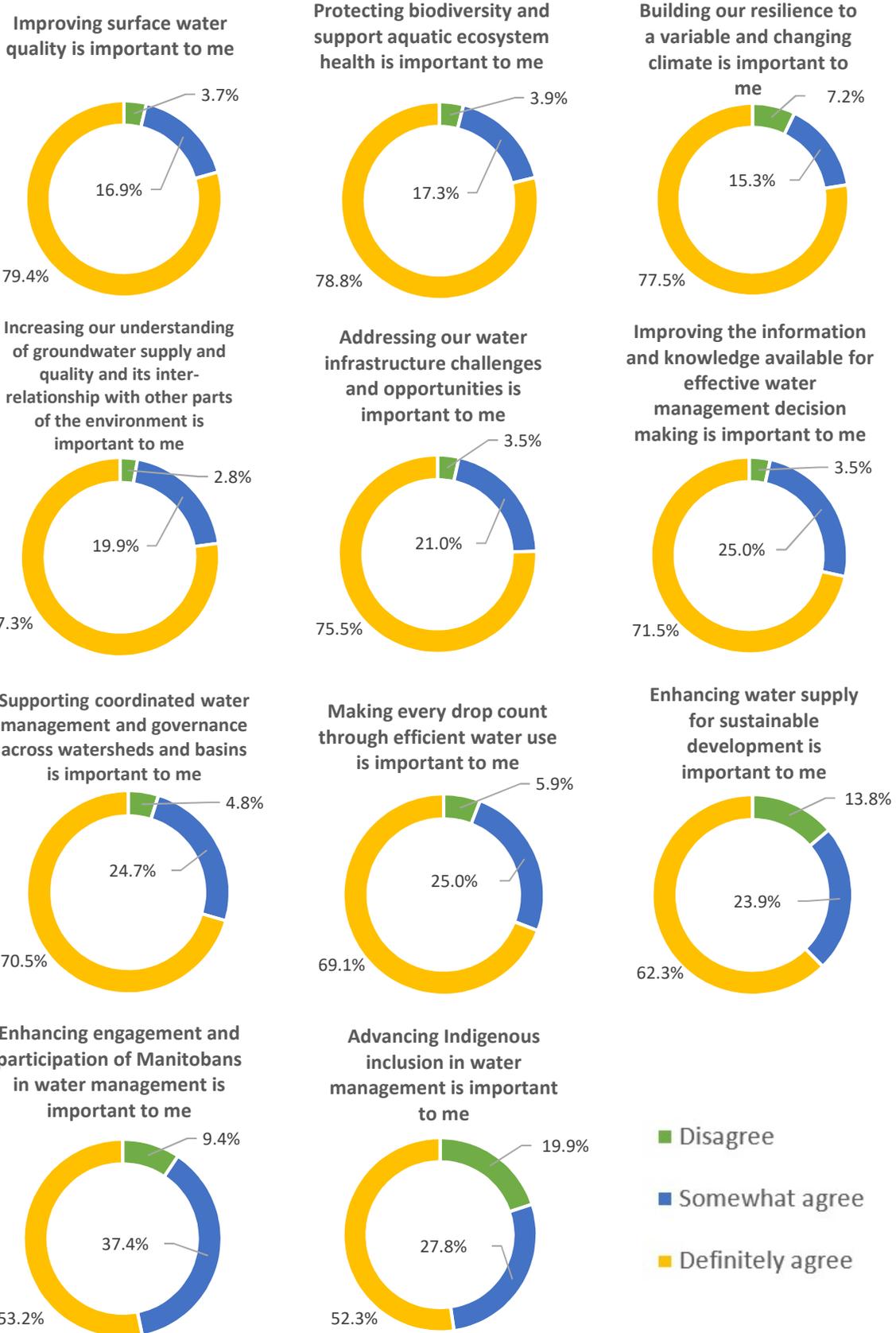
The top four proposed focus area statements that received the highest number of 'definitely agree' ratings were:

1. improving surface water quality
2. protecting biodiversity and supporting aquatic ecosystem health
3. building our resilience to a variable and changing climate
4. increasing our understanding of groundwater supply and quality and its inter-relationships with other parts of the environment

Ranking fifth to eighth with a high number of 'definitely agree' ratings were:

5. addressing our water infrastructure challenges and opportunities
6. improving the information and knowledge available for effective water management decision-making
7. supporting coordinated water management and governance across watersheds and basins
8. making every drop count through efficient water use

**Please indicate your level of agreement with the proposed focus areas:**



- Disagree
- Somewhat agree
- Definitely agree

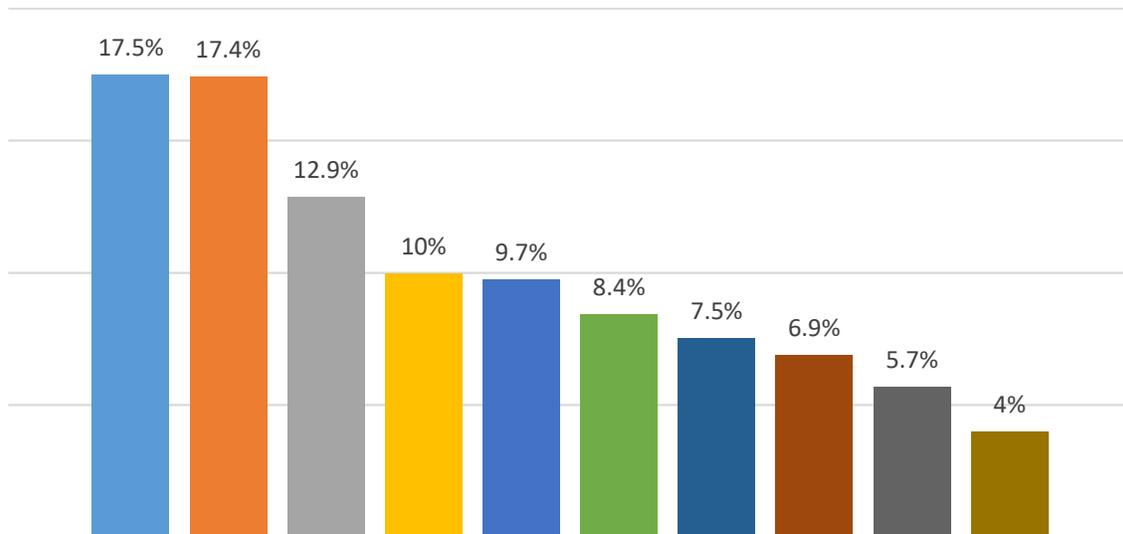
As a follow-up question, the survey asked participants 'are there other focus areas Manitoba should consider including in the provincial water management strategy?'. Suggestions included:

- Use geospatial and engineering technology to improve water supply allocation planning and decision-making.
- Advance agricultural development and resilience through on-field water management techniques.
- Enhance participation in the circular economy, both urban and rural, through grey water capture, industrial water re-use and nutrient management.
- Increase water storage capacity in watersheds.
- Improve enforcement of existing land and water management legislation.
- Enhance watershed education and outreach to build awareness.

The survey asked participants 'in thinking about water management in Manitoba, which three of the following are most important to you?' out of the 10 survey response options, the top three were:

1. maintaining ecosystem integrity and protecting biodiversity – including wetland conservation
2. improving water quality including in aquifers, lakes and rivers
3. enhancing climate resilience

In thinking about water management in Manitoba, which three of the following are most important to you?



- Maintaining ecosystem integrity and protecting biodiversity - including wetland conservation
- Improving water quality including in aquifers, lakes and rivers
- Enhancing climate resilience
- Drought preparedness
- Strengthen our water infrastructure, including natural infrastructure solutions
- Supporting agricultural productivity
- Indigenous inclusion in water management
- Enhancing water supply from surface and ground water
- Flood protection
- Growing a vibrant economy

The final survey question asked: 'do you have any other comments you would like to share on the development of the provincial water management strategy?' in some instances, areas of suggested focus for the provincial water management strategy were outside of the jurisdiction of the Manitoba government (such as providing safe drinking water on First Nation reserves). Other suggestions are grouped by theme as follows:

#### Scope, Collaboration, Partnerships and Funding:

- Include all of Manitoba (north and south) in the strategy.
- Seek strong collaboration and participation with Indigenous peoples, industry, government, transboundary organizations, and other key stakeholders to ensure success.
- Engage Indigenous peoples in water management through functional co-management bodies and the establishment of an Indigenous water advisory panel to support water management and decision-making.
- Consider how water is managed by various areas of the provincial government and opportunities to bring functions together in a single area.
- Consider how to resolve disputes over water use.

- Integrate watershed actions and investment by all stakeholders to achieve environmental, social and economic sustainability outcomes.
- Provide adequate funding on an ongoing basis, including funding for major capital infrastructure projects and for water research.

#### Agriculture:

- Address the availability of water supply for current and future food production, while balancing the need to protect water systems, preserve wetlands and support rehabilitation.
- Make investments to drive the adoption of regenerative agriculture, irrigation systems, water retention and storage infrastructure.
- Develop new crops adapted to a changing climate to support sustainable food production while protecting the health of Manitoba's waterways.

#### Recreational Development:

- Recognize that recreational use of Manitoba's waterways are vitally important.
- Acknowledge that recreational use and development can increase pollutants and damage shorelines.
- Ensure that waterways continue to provide benefits to Manitobans while safeguarding their future, through education, data collection and enforcement.

#### Economic Development:

- Ensure optimal stewardship of our abundant natural resources for the continued and increased prosperity of the province.
- Balance economic growth targets against protection measures.
- Establish Manitoba as a leader in water stewardship and growth.

#### Infrastructure:

- Ensure infrastructure provides flood protection while enabling increased water retention.
- Increase investments in protecting and restoring natural water management ecosystems such as watersheds and wetlands.
- Invest in wastewater management infrastructure, including wastewater treatment plants to attract industry and investment, while preventing further damage to lakes and waterways.
- Enhance Manitoba's participation in the circular economy, including through reuse of grey water.

## Idea Board Results

Thirty-four individuals submitted 103 contributions (ideas, comments and likes) through the idea board.

The idea board stated, "We want your ideas on how a made-in-Manitoba water strategy can reflect the unique needs of your community or industry." Responses were grouped into several thematic areas and some summarized examples of the ideas submitted are below. These ideas will be considered as we develop specific actions under the strategy's focus areas.

#### Agriculture:

- Manage, capture and store water on farmland through tools such as controlled (tile) drainage, engineered wetlands and consolidating existing wetlands.
- Develop irrigation scheduling to match crop water needs and water retention capacity of soil.
- Increase investments in regenerative agriculture.

#### Indigenous inclusion:

- Invest in capacity building to enhance First Nation participation in Watershed District watershed planning.

#### Circular economy:

- Invest in initiatives that build circular economies and address the global climate change and biodiversity crisis.
- Promote the re-use of wastewater and grey water through changes to the Manitoba Building Code.

#### Climate change:

- Align water management strategies with greenhouse gas emission targets. Opportunities for this exist at both the regulatory and ecosystem management levels.
- Address the relationships between aquatic systems management and the effect on climate through greenhouse gas dynamics.
- Prepare for climate change and extreme weather events by developing water storage structures to capture and store excess water for use later.

#### Education and research:

- Include water studies in elementary through post-secondary curriculum. Make it part of curriculum for kids to understand where their water comes from, where it goes and what happens to it along the way. Careers in resource-related disciplines require communication and computational skills blended with an understanding of environmental sustainability.
- Increase knowledge on water conservation practices that everyone can adopt.
- Use citizen behavior change programming to reduce water use and increase the adoption of community water management best practices.

#### Data:

- Share water quality data with community members, industrial developers and provincial experts.
- Use organizations conducting community-based monitoring and citizen science research to fill in key gaps in current monitoring programs, such as water quality.
- Encourage public participation.
- Complete a wetland inventory.

#### Infrastructure:

- Allow riparian zone vegetation to flourish, creating wildlife and fish habitat in drains where agricultural potential is low.
- Build small dams (holdbacks) in escarpments where gullies form a natural reservoir.

#### Collaboration:

- Include the north in water management and planning.

- Include a clear plan for coordinating data sharing, analysis and collection with our provincial and national border partners. These interactions should be strengthened, data should be accessible via centralized data hubs, and work should be made more transparent and accessible.
- Include sharing, coordination, standardization and organization of water quality and quantity data between multiple stakeholders, including federal, provincial, academic and non-governmental agencies.

## Next Steps

The next steps in developing Manitoba's new provincial water management strategy will include further engagement with Indigenous peoples and water stakeholders in the fall and winter of 2021-2022. These engagement activities will help us refine the framework document and develop detailed actions for the water management strategy. The final strategy is expected to be complete in 2022.

Visit [https://engagemb.ca/water\\_management\\_strategy](https://engagemb.ca/water_management_strategy) for further updates.