

A Water Strategy for New Brunswick

2018 - 2028

Draft for Discussion



Department of Environment and Local Government
October 2017

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This draft Strategy contains internet links that are functional in the web-based version, which can be accessed by visiting www.gnb.ca and following the links to “Departments” > “Environment and Local Government” > “Working Towards a Water Strategy for New Brunswick”.

A Message from the Minister

Your government takes its responsibility to protect water and the environment seriously. That is why we have developed a draft Water Strategy, based on the input of New Brunswickers.

Last year, our government began the process of engaging stakeholders, First Nations and the public on their ideas concerning water. The ideas collected were used to develop this draft strategy and provide the necessary framework from which we can continue to protect our province's most important natural resource.

I am confident that New Brunswick's Water Strategy will help ensure that our water is managed sustainably, realizing its benefits to ecosystems and society.

We invite you to review the draft strategy and welcome your final input as we move New Brunswick forward and get things done.

Serge Rousselle, Q.C.
Minister, Environment and Local Government



Building the Draft Water Strategy

In early 2016, the Department of Environment and Local Government began developing a strategy aimed at guiding decisions in relation to New Brunswick's water. The strategy will provide the foundation for program improvements that will enable the Province to continue to manage water resources in a sustainable way now and into the future. It will define the main water-related priorities for government over the 10 year life of the strategy.

Previous Engagement

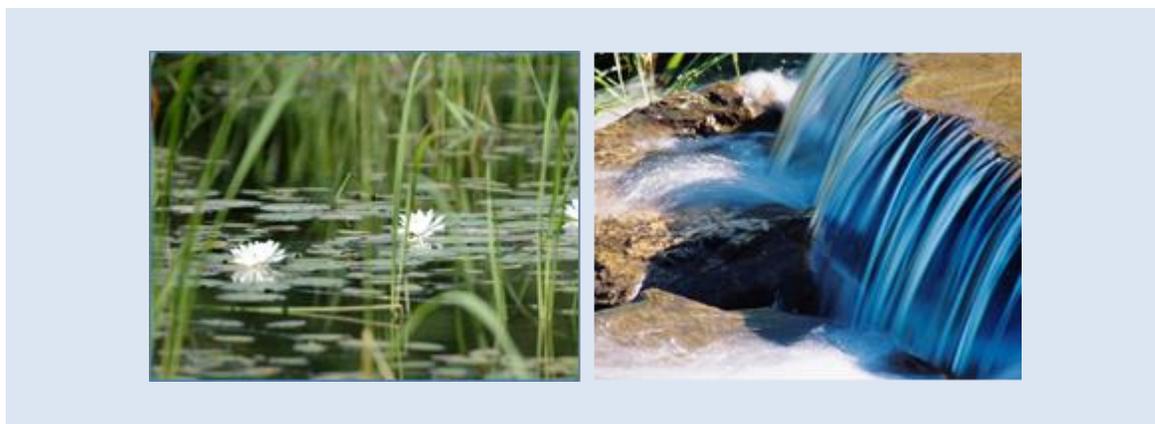
This draft strategy was developed with the assistance of New Brunswickers who told us about their water-related concerns and ideas on how to move forward. The discussion paper [Working Together to Build a Water Strategy for New Brunswick](#) was released in the spring of 2016 to begin a conversation about water, and was followed by workshops and open houses in Grand Falls, Bathurst, Miramichi, Moncton, Saint John and Fredericton. All New Brunswickers were invited to submit written comments.

Over 250 people attended a meeting or submitted written comments via the province's water strategy website. Participants included representatives of non-governmental organizations, businesses, consultants, local, provincial and federal governments, and individuals.

Information regarding the proposed water strategy was sent to First Nations Chiefs at the outset of the initiative and an invitation to discuss water-related topics of interest was extended. Since then, a number of meetings have been held and engagement with First Nations is on-going.

What We Heard

A summary of comments from the early engagement was released on the Department of Environment and Local Government's water strategy web page as [Working Together to Build a Water Strategy for New Brunswick - Summary of Comments](#) (September, 2016). This input, along with dialogue and input from First Nations, was used to inform the development of this draft strategy.



An Opportunity for Further Comment

This draft strategy is being made available for review until November 20, 2017. All comments received on or before this date will be considered prior to finalizing the strategy.

Comments are welcome and may be submitted by:

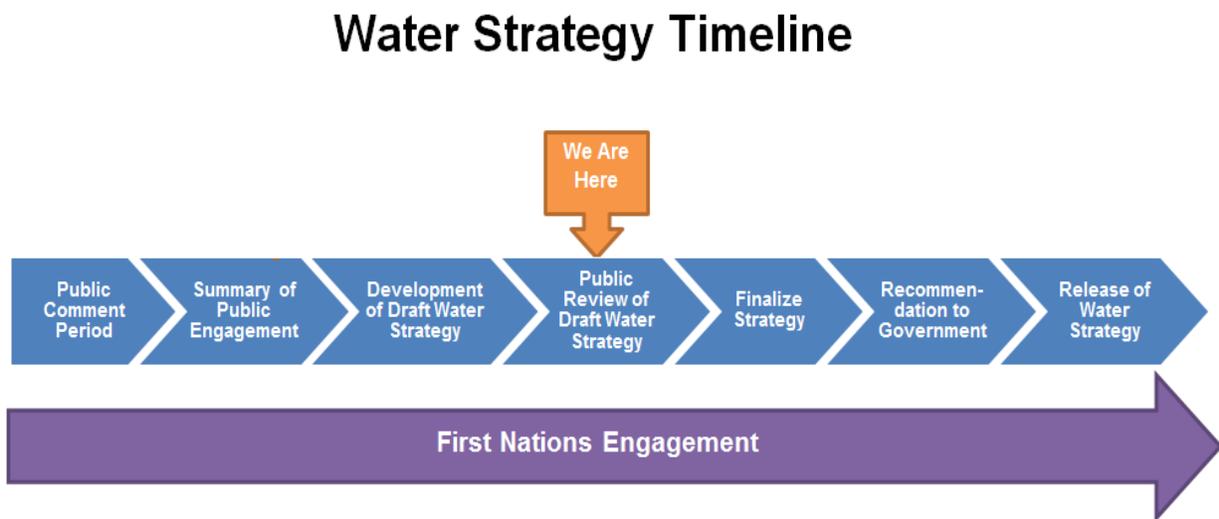
- Email to: waterstrategy-strategiedeleau@gnb.ca;

or

- Mail to: Department of Environment and Local Government,
Policy and Planning Division,
P.O. Box 6000, Fredericton, NB E3B 5H1

Next Steps

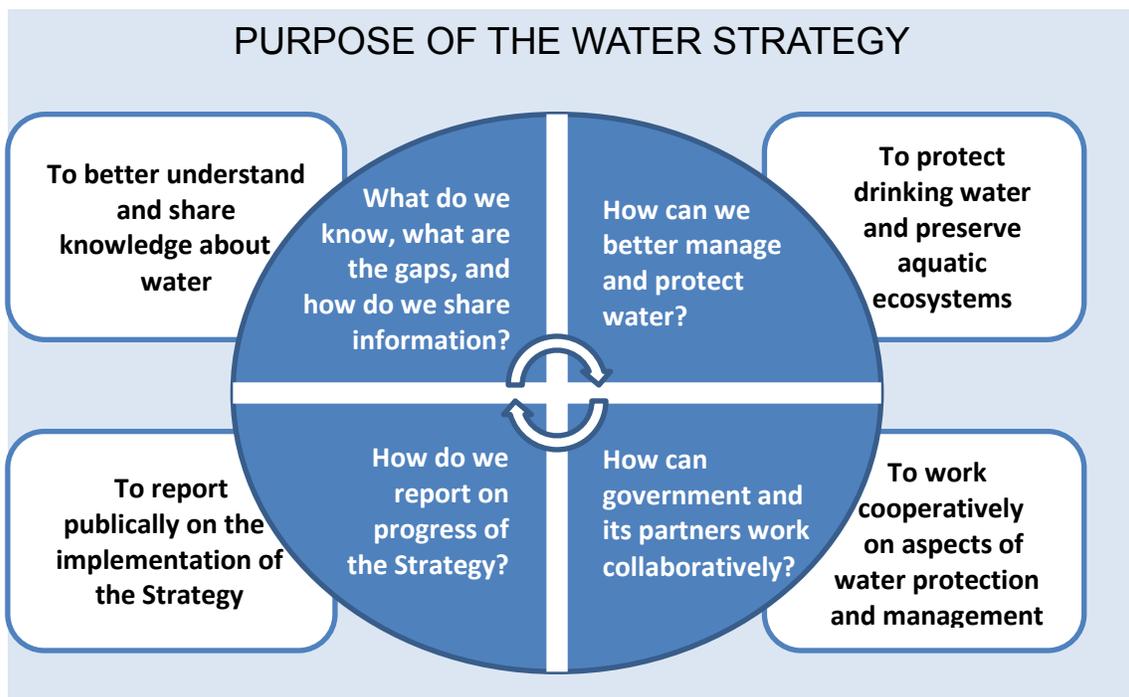
The goal is for the water strategy to be finalized and presented to government for consideration before the end of 2017.



Why a New Brunswick Water Strategy?

In New Brunswick we are fortunate to have a plentiful supply of good quality water available to use and enjoy, but this is not something that should be taken for granted. In the coming years, it is expected that a changing climate will continue to affect the quality, quantity and distribution of freshwater locally and globally and will add to the complexity and urgency of other water-related challenges described in the following pages.

The purpose of this water strategy is to help us: gain a better understanding of the state of New Brunswick's water resource, manage and protect water by identifying areas for improvement and building on areas of success, share information and knowledge with New Brunswickers and encourage collaboration. The strategy will focus on the key subject areas described in the diagram below.



In order to achieve this purpose and meet the challenges ahead, New Brunswick needs a future-oriented, publicly visible, coordinated strategy that: identifies existing and emerging challenges, opportunities and outcomes, provides a clear and comprehensive vision for the province's water resources, establishes goals in support of the vision, describes actions necessary to achieve these goals; and assigns responsibilities for the actions.

A water strategy is not a static document or a result of a one-time effort. It represents an on-going, evolving activity that will have to be reviewed and adjusted to ensure that its goals and actions remain relevant.

This water strategy is not a stand-alone initiative. Other initiatives including the [Long-Term Wetland Management Strategy \(2012\)](#), [New Brunswick's Flood Risk Reduction Strategy \(2014\)](#) and [Transitioning to a Low-Carbon Economy - New Brunswick's Climate Change Action Plan \(2016\)](#) contain additional actions to address water-related challenges and opportunities in New Brunswick.

Water Strategy Framework

Vision Statement

New Brunswick's water will be protected and managed to ensure its quality and availability for future generations.

Principles

The following five principles expand on the vision statement and will be used to guide decision making in relation to New Brunswick water.

Significance	Water is a vital resource for all life, so human and ecosystem health will be given priority when making decisions affecting water.
Sustainability	Decisions about water will take a long-term view, will be informed by science and consider the potential for impacts to Aboriginal and treaty rights.
Conservation	Water will be used wisely and will not be wasted.
Shared Stewardship	New Brunswickers will have a role to play in managing and protecting New Brunswick's waters.
Transparency and Accountability	Water-related information will be shared and progress on strategy implementation will be reported.

Goals

The goals connect the vision and principles to specific subject areas of focus. The Action Plan (page 9) describes the goals in greater detail and lists the various initiatives that will translate the goals into tangible actions.

- Goal 1: To better understand and share knowledge about water**
- Goal 2: To protect drinking water supplies**
- Goal 3: To preserve aquatic ecosystems and the water on which they depend**
- Goal 4: To work cooperatively on aspects of water protection and management**
- Goal 5: To report publically on strategy implementation**

Water in New Brunswick Today

Over the years various legislation, policies and programs have been developed in the province that have led to advances in water protection and management in New Brunswick. This is not to say that the task is complete. Some longstanding issues remain and new challenges have arisen.

New Brunswick's Water Resources

New Brunswick contains approximately 60,000 kilometres of rivers and streams, and 2,500 lakes and ponds. This represents approximately 1,460 square kilometres of surface water. Potable groundwater underlies much of the province. For these reasons, water is often taken for granted. In reality, as is the case with many other parts of Canada, water in this province is not always plentiful at the specific times and locations where it is required.

New Brunswick also faces other water-related challenges, including localized areas of poor groundwater and surface water quality, occurrences of algae blooms and increasing the effort to make information more widely available. Climate change is an overriding concern that will continue to affect water, magnifying existing challenges and adding new ones.

A First Nations Perspective on Water

Aboriginal peoples have a long-standing, integral relationship with the land, waters and environment that sustains them. New Brunswick's waters have been fundamental to the way of life of Aboriginal people since before recorded history. In preparing this water strategy, the province recognizes the unique significance of water to First Nations.

"Our people have ... relied on rivers for physical, spiritual, and cultural sustenance and their livelihood since time immemorial."

- Chief Bill Ward, Metepenagiag First Nation

"Our waters continue to be an important resource for transportation, sustenance and ceremony. Put simply, the waters are the modern day equivalent of our super highways, grocery stores, workplaces and churches."

- Wolastoqey Nation of New Brunswick

As stated in the [First Nations Integrated Watershed Planning](#) (2011) by the Centre for Indigenous Resources, "First Nations have a unique, complex relationship with water that extends beyond using water for their personal or community needs or as the life-support system for the foods they harvest and consume. First Nations' relationship with water includes cultural, spiritual, economic, stewardship, governance and rights-based aspects."

Action Plan

The following section is organized by goal and provides an overview of the progress to date in each area of focus. It also outlines the actions that will translate the goals into tangible initiatives. These actions collectively define what government would like to achieve through the implementation of this strategy. In other words, they define the main water-related priorities for government on behalf of the people of New Brunswick from 2018 to 2028. Although discussed separately here, these issues are often interrelated and require solutions that recognize the connections between natural, social and economic systems.

Goal 1: Understanding and Sharing Knowledge about Water

Timely and accurate water-related information is necessary to support sound, science-based decisions, therefore it should be available to all in order to: a) measure the effectiveness of implemented actions; b) identify and respond to emerging issues such as climate change; c) include indigenous traditional knowledge in relation to water resources and the importance of ecosystems in water-related initiatives, and d) identify new actions that should be undertaken.

Progress to Date:

Water quality and quantity information is obtained from a wide range of sources (e.g. monitoring stations, stream flow/water elevation gauges, a River Ice Observation and Reporting System, etc.). It is necessary to obtain information about the location, quantity and quality of water to understand the overall status of water in the province. Efforts must be increased to make this information more widely available in a form that can be easily understood.

The Department of Environment and Local Government's Hydrology Centre, conducts flow and water level monitoring across New Brunswick and works closely with the Emergency Measures Organization to release public alerts regarding floods or ice jams as part of the River Watch Program.

Under *New Brunswick's Flood Risk Reduction Strategy*, government launched a [Flooding in New Brunswick webpage](#) to provide the public with information on flood prediction and prevention.

On-line Access to Water Monitoring Data

[Surface Water Quality Data Portal](#)

[Canadian Water Quality Assessments](#)

[Surface water quality by watershed](#)

[Groundwater Chemistry Atlas](#)

[On-line Well Log System](#)

[Real time hydrometric \(flow\) data](#)

[Bi-annual state of surface and groundwater water levels report](#)

Goal 1: Actions

Goal 1	Corresponding Principles	Desired Outcome
To better understand and share knowledge about water.	<ul style="list-style-type: none"> • Sustainability • Shared Stewardship • Transparency and Accountability 	Sufficient information is available to all, to support sound, science-based decisions and consider the potential for impacts to Aboriginal and treaty rights.

1. Issue a report on the current state of water quality in lakes and rivers in New Brunswick and pursue a legislated requirement for annual reporting by government on the State of New Brunswick's water.	Lead agency: Department of Environment and Local Government
2. Provide on-line access to the final reports of projects funded by the Environmental Trust Fund.	Lead agencies: Department of Environment and Local Government, New Brunswick Legislative Library
3. a) Prepare a standard, electronic data reporting template for use by First Nations, non-government organizations and industry when providing water monitoring results to the Department of Environment and Local Government; and b) Develop and implement a plan to establish a government-led, publically accessible water data warehouse as part of New Brunswick's Open Data Policy .	Lead agencies: Department of Environment and Local Government, Service New Brunswick
4. Enhance provincial groundwater and surface water monitoring networks to provide more complete information about New Brunswick's water resources including the effects of climate change.	Lead agency: Department of Environment and Local Government
5. Maintain an on-going dialogue with First Nations in order to better understand and incorporate the Aboriginal perspective as it relates to water.	Lead agencies: Department of Environment and Local Government, First Nations, Aboriginal Affairs Secretariat
6. Continue implementation of water metering for industrial water users.	Lead agency: Department of Environment and Local Government

7. Identify and implement options for on-line posting of water-related permits, approvals and associated conditions.

Lead agency: Department of Environment and Local Government

Goal 2: Protecting Drinking Water

Potable water is a basic human need and all New Brunswickers should have access to safe, secure drinking water to meet their daily requirements.

Progress to Date:

New Brunswick's [Wellfield Protection Program](#) has been recognized as being one of the strongest drinking water protection programs in the country. To date, 48 of 54 local governments have moved forward with wellfield protection measures. The [Watershed Protection Program](#), and the *Water Well Regulation* and *Potable Water Regulation* are other important tools used to protect drinking water.

Government has developed guidelines recommending that private well owners have their [water quality tested](#) twice per year (preferably in the spring and fall); however, not all private well owners take this advice and are therefore not aware of the quality of their well water.

Goal 2: Actions

Goal 2	Corresponding Principles	Desired Outcome
To protect drinking water supplies.	<ul style="list-style-type: none"> Significance Sustainability 	New Brunswickers have access to clean, safe, drinking water.

8. Complete the designation of New Brunswick's existing municipal drinking water wellfields under the *Wellfield Protected Area Designation Order - Clean Water Act*.

Lead agencies: Department of Environment and Local Government, local governments

9. Develop a coordinated plan to enhance protection and testing of private water wells through a combination of public education and strengthening of the *Water Well* and *Potable Water Regulations* under the *Clean Water Act*.

Lead agencies: Department of Environment and Local Government, Department of Health

10. Evaluate options for introducing regulatory requirements for the bottling and sale of potable water and for drinking water supplies with capacity below 50 m³/day to ensure that:

Lead agency: Department of Environment and Local Government

a) public health is protected and these operations undergo inspections and monitoring; and

b) potential effects on existing water users are considered.

11. Evaluate options for extending source water protection to communal and provincially-owned drinking water supplies.

Lead agency: Department of Environment and Local Government

Goal 3: Preserving Ecosystem Health

Within each watershed, the needs of aquatic life such as fish, plants and other wildlife must be considered in water use decisions, to help ensure that ecosystem needs are respected. While meeting the primary goal of protecting ecosystem health, water must be managed in a way that recognizes its value to First Nations and for social and economic uses. There is also need to develop a renewed framework for watershed management in New Brunswick.

Progress to Date:

The *Water Classification Regulation* under the *Clean Water Act* was intended to provide a framework for watershed management in New Brunswick; however, there were deficiencies within the regulation that prevented its use. A working group with broad representation has been developing recommendations on an enhanced approach to watershed management. The Department of Environment and Local Government also continues to work with stakeholders to implement the [Wetland Management Strategy](#) including new wetland mapping and accompanying guidelines.

In response to an increase in algal blooms in lakes and ponds, government has developed a [response protocol](#) and continues to support both volunteer lake monitoring initiatives and research. Through the *Canada-wide Strategy for the Management of Municipal Wastewater Effluent*, wastewater treatment facilities have been upgraded to meet more stringent requirements. The Province has also banned the sale and use of more than 240 over-the-counter lawn care pesticide products through the *Pesticide Control Act*, all in efforts to improve environmental protection.

There are other initiatives in place that support the conservation, sustainability and diversity of ecosystems such as the *Shellfish Aquaculture Development Strategy*, the *Fisheries Renewal Framework Action Plan* and the [Biodiversity Strategy](#). Government recently released a water monitoring [protocol](#) for Parlee Beach near Shediac along with the [implementation of studies and capital investments](#) aimed at enhancing water quality.

Goal 3: Actions

Goal 3	Corresponding Principles	Desired Outcome
To preserve aquatic ecosystems and the water on which they depend.	<ul style="list-style-type: none"> Significance Sustainability Conservation 	New Brunswick's lakes, rivers, wetlands and coastal areas remain healthy, resilient and biologically diverse now and in the future.

<p>12. Develop a renewed approach to managing surface water quality in the Province of New Brunswick on a watershed basis including:</p> <p>a) the establishment of a working group tasked with making recommendations to the Minister of Environment and Local Government (an early action initiated in March 2017),</p> <p>b) presenting recommendations to government, and</p> <p>c) implementing a renewed regulatory approach to watershed management in New Brunswick.</p>	<p>Lead agency: Department of Environment and Local Government</p>
<p>13. Complete the implementation of the province's Long-term Wetland Management Strategy by:</p> <p>a) Releasing revised on-line mapping using the most up-to-date data, to better identify wetland locations;</p> <p>b) Releasing Implementation Guidelines to help ensure consistent decision-making when applying the <u>New Brunswick's Wetlands Conservation Policy</u> (2002); and</p> <p>c) Amending the <i>Watercourse and Wetland Alteration Regulation</i> under the <i>Clean Water Act</i> to extend protection to coastal Provincially Significant Wetlands less than 1 hectare in size.</p>	<p>Lead agencies: Department of Environment and Local Government, Department of Energy and Resource Development.</p>
<p>14. Revisit the criteria used to determine the required flow conveyance capacity of watercourse crossings approved under the <i>Watercourse and Wetland Alteration Regulation</i> as a means of reducing the potential for erosion and sedimentation.</p>	<p>Lead agency: Department of Environment and Local Government</p>
<p>15. Prepare a policy aimed at the identification and maintenance of environmental flows so that water resources are not over-exploited and eco-system health is preserved.</p>	<p>Lead agencies: Department of Environment and Local Government, Department of Energy and Resource Development, working with Fisheries and Oceans Canada and Environment and Climate Change Canada</p>
<p>16. Prepare a water conservation plan for the province that includes water demand management and response to drought conditions.</p>	<p>Lead agency: Department of Environment and Local Government</p>

<p>17. Understand and evaluate the causes of algal blooms in order to develop and implement a comprehensive action plan that will reduce their occurrence over the long-term.</p>	<p>Lead agencies: Department of Environment and Local Government, Department of Justice and Public Safety, Department of Health</p>
<p>18. Assemble a multi-agency working group to review the regulation and management of on-site sewage disposal systems including:</p> <p>a) Design and construction standards, such as new technology to address nutrients; and</p> <p>b) Options for ensuring that on-site sewage systems are properly functioning and maintained.</p>	<p>Lead agencies: Department of Justice and Public Safety, Department of Health</p>
<p>19. Enhance the pesticide permitting requirements for the agriculture industry under the <i>Pesticides Control Act</i> for non-domestic pesticides.</p>	<p>Lead agencies: Department of Environment and Local Government, Department of Agriculture, Aquaculture and Fisheries</p>
<p>20. Evaluate enhanced regulatory requirements for designated coastal protected areas.</p>	<p>Lead agency: Department of Environment and Local Government</p>
<p>21. Establish a recreational water monitoring program for the provincial park system that includes water quality monitoring and signage that enables the public to make informed decisions and protects public health.</p>	<p>Lead agencies: Department of Environment and Local Government, Department of Health, Department of Tourism, Heritage and Culture</p>

Goal 4: Working Cooperatively

The Province recognizes that it has a leadership role; however, all New Brunswickers have a stake in the protection and management of water and have responsibilities with respect to its safekeeping. Federal, provincial, and local governments, First Nations, stakeholders and the public must work cooperatively to better protect and manage New Brunswick's waters. Partnerships between the province and others should be further developed to achieve the province's water protection and management vision.

Progress to Date:

The Department of Environment and Local government works with community-based watershed groups to supplement water quality sampling, implement surface water monitoring plans, complete restoration work, and provide environmental stewardship at the grass roots level.

From a compliance and enforcement perspective, government continues to work on compliance through permitting and approvals processes, and educating New Brunswickers on the programs and laws that protect our water resources. This supports everyone in making wise decisions about their use of water.

Goal 4: Actions

Goal 4	Corresponding Principles	Desired Outcome
To work cooperatively on aspects of water protection and management.	<ul style="list-style-type: none"> Shared Stewardship 	New Brunswickers can participate meaningfully in the protection and management of New Brunswick's waters.

<p>22. Continue a collaborative dialogue between government and First Nations regarding permits, projects, initiatives and other topics of mutual interest.</p>	<p>Lead agencies: Department of Environment and Local Government, First Nations, Aboriginal Affairs Secretariat</p>
<p>23. Develop and begin to implement a public education and awareness plan aimed at ensuring New Brunswickers:</p> <p>a) understand the laws that affect use of water and how to follow them;</p> <p>b) have the knowledge and opportunity to become involved in water management activities; and</p> <p>c) have sufficient information to make wise decisions about their use of water.</p>	<p>Lead agency: Department of Environment and Local Government</p>
<p>24. Work collaboratively with watershed groups, lake associations, First Nations, academia, and non-governmental organizations on data collection, education, stewardship and other water protection and management-related initiatives.</p>	<p>Lead agency: Department of Environment and Local Government</p>
<p>25. Pursue a partnership with the Geological Survey of Canada to develop groundwater availability mapping.</p>	<p>Lead agencies: Department of Environment and Local Government, Department of Energy and Resource Development</p>

Goal 5: Implementing the Strategy and Reporting Progress

This 10 year Water Strategy identifies actions designed to respond to challenges facing the province. The progress of the strategy actions will be measured, tracked and reported. The strategy must also remain current; a water strategy is not a static document or a result of a one-time effort. Therefore, it will be reviewed and revised in the future to ensure that it remains relevant.

Goal 5: Actions

Goal 5	Corresponding Principles	Desired Outcome
To report publically on strategy implementation.	<ul style="list-style-type: none"> • Transparency and Accountability 	The strategy is implemented and updated to keep it relevant and New Brunswickers are informed about its progress.

- 26. a) Identify key performance indicators for each action in this strategy as the actions are initiated;**
- b) Issue annual progress reports on the status of the action items listed in this water strategy; and**
- c) Review the strategy within five years of its release to ensure its continued relevance and to identify potential new actions for consideration in the next version.**

Lead agency: Department of Environment and Local Government

How to Provide Comments

This draft is being made available for comment until November 20, 2017. All comments received on or before this date will be considered prior to finalizing the strategy.

Comments are welcome and may be submitted by:

- Email to: waterstrategy-strategiedeleau@gnb.ca;

or

- Mail to: Department of Environment and Local Government,
Policy and Planning,
P.O. Box 6000, Fredericton, NB E3B 5H1

The goal is for the water strategy to be finalized and presented to government for consideration before the end of 2017.



Glossary

Algal bloom: a rapid increase in the population of algae (including blue-green algae, also known as cyanobacteria) in an aquatic system. It is often the result of excess **nutrients**; specifically phosphorus and nitrogen.

Blue-green algae: cyanobacteria also known as blue-green algae or more commonly as “pond scum” are bacteria that occur naturally in surface waters and have photosynthetic capability, meaning they utilize the sun's energy to produce sugar which they use for growth. Cyanobacteria can contain poisons called cyanobacterial toxins which can impact human health. These toxins can also be toxic to pets and livestock if ingested.

Coastal Areas: includes features along New Brunswick's coast such as beaches, dunes, coastal marshes, inter-tidal areas, dyked lands and rock platforms.

Communal drinking water supply: a water supply serving more than one user.

Environmental flow: the quantity, timing, and quality of water flow required to sustain freshwater and estuarine ecosystems.

Environmental Trust Fund: a source of dedicated funding provided by the provincial government for community-based, action-oriented activities aimed at protecting, preserving and enhancing New Brunswick's natural environment.

Estuary: the mouth of a river that flows into the ocean. Estuaries experience tidal flows and their water is a changing mixture of freshwater and salt water.

Freshwater: water that is not salty.

Groundwater: water found in subsurface layers of sand and gravel or in bedrock fractures.

Hydrology: the scientific study of the distribution and movement of water in the atmosphere, on the earth's surface and underground.

Ice jam: an accumulation of floating or grounded ice in lakes or rivers causing full or partial blockage of flow, resulting in elevated water levels and potential damage due to moving ice.

Invasive species: plants, animals or other organisms introduced to a new location as a result of human activity, including climate change. Species are considered invasive when their introduction or spread threatens to disrupt existing ecosystems.

Nutrients: various chemical compounds and elements essential to the growth and survival of living organisms. In aquatic ecosystems, nitrogen and phosphorus are the most important, as they are most often in short supply relative to the needs of aquatic plants, algae, and micro-organisms.

On-site Sewage Disposal System: a septic tank with subsurface disposal field, and all other on-site sewage disposal systems that are not connected to a wastewater treatment facility approved by the Minister of Environment and Local Government under the *Clean Water Act*.

Private well: a water well that supplies a single user or supplies a water distribution system other than one operated on behalf of a municipality or the province.

Provincially Significant Wetlands: wetlands defined in the *New Brunswick Wetlands Conservation Policy* (2002) as having provincial, national or international importance, including all coastal wetlands. Provincially Significant Wetlands are identified using a set of seven social, biological and hydrological criteria listed in the Wetlands Conservation Policy.

Source Water Protection: measures to prevent the contamination of the sources (lakes, rivers and groundwater) that are used to supply drinking water.

Surface water: any flowing or standing water on the surface of the earth water (e.g. water found in lakes, rivers, and wetlands).

Watershed: all the watercourses (lakes, rivers and wetlands) that drain to a single, defined point (e.g. the mouth of a river) plus all the land that contributes drainage to these watercourses.

Wellfield: the area from which a well draws water. It is defined by the location of the groundwater, the maximum rate at which the well is pumped and the resultant time it takes groundwater to reach the well.

Wellfield Protected Area Designation Order: a legislative instrument under the *Clean Water Act* that enables the protection of water wells that serve as public drinking water supplies. The Designation Order establishes appropriate restrictions on land use in a **wellfield**.

Appendix A –Government Roles and Responsibilities

Some of the key water-related roles of the Government of Canada and the Government of New Brunswick are summarized below. The complexity and variety of water-related issues and the number of agencies involved is readily apparent.

Federal Agencies

Fisheries and Oceans Canada	<ul style="list-style-type: none"> • Management of Canada’s fisheries, oceans and freshwater resources, and safeguarding its waters. • Habitat protection. • Management of fishery-related activities for conservation, contamination or other reasons. • Research concerning marine and freshwater ecosystems, aquaculture and biotechnology.
Environment and Climate Change Canada	<ul style="list-style-type: none"> • Long-term water monitoring and data collection for water resource management (in partnership with the New Brunswick Department of Environment and Local Government).
Transport Canada	<ul style="list-style-type: none"> • Regulation of navigable waters ports, marine safety and security. • Ballast Water Management Program (water quality and invasive species) • Regulation of transportation of dangerous goods.
Health Canada	<ul style="list-style-type: none"> • Preparation of guidelines for drinking water quality and recreational water quality. • Pesticide regulation.
Indigenous and Northern Affairs Canada	<ul style="list-style-type: none"> • Development of proposals for regulations under the <i>Clean Drinking Water for First Nations Act</i> in association with First Nations and Health Canada. • Provision of support for services on reserves, including drinking water and wastewater.
Natural Resources Canada	<ul style="list-style-type: none"> • Management of hydroelectric projects and mining on federal lands.

Intergovernmental Agencies

Canadian Council of Ministers of the Environment (CCME)	<ul style="list-style-type: none"> • Development of management tools such as the <i>Canadian Water Quality Guidelines for the Protection of Aquatic Life</i> and the <i>Canadian Water Quality Index</i>.
Federal-Provincial-Territorial Ministers responsible for Conservation, Wildlife and Biodiversity	<ul style="list-style-type: none"> • Fostering of cooperation in the areas of conservation, wildlife and biodiversity.
Canadian Council of Fisheries and Aquaculture Ministers (CCAFM)	<ul style="list-style-type: none"> • Enhancement of national collaboration on a range of issues including marine conservation, market access for Canadian fish and seafood, responsible aquaculture development and aquatic invasive species.

New Brunswick Provincial Agencies

Department of Environment and Local Government

- Operation of the provincial water quality and quantity monitoring network.
- Providing municipal drinking water supply protection (Wellfield Protection Program for groundwater and Watershed Protection Program for surface water).
- Issuing licenses to water well contractors and water well drillers.
- Funding for development and upgrade of municipal water and wastewater systems in partnership with the Government of Canada.
- Regulatory oversight of public drinking water systems that use 50 or more cubic metres of water per day, in co-operation with the Department of Health.
- Regulation of private water supplies with a capacity to use 50 or more cubic metres of water per day.
- Regulation of activities within 30 metres of a watercourse or wetland.
- Regulation of facilities that manage materials that result in the potential or actual emission of contaminants including industries, municipal sewage treatment plants, and aquaculture facilities.
- Regulation of the sale, storage and use of all non-domestic pesticide products.
- Administration of remediation of contaminated sites.
- Coordination of environmental impact assessments of proposed activities (including those which may affect water quality and quantity) using technical experts from various

	<p>government departments.</p> <ul style="list-style-type: none"> • Integrated community and land use planning (social, economic and environmental issues). • Lead Department responsible for New Brunswick's <i>Flood Risk Reduction Strategy</i>. • Lead Department responsible for New Brunswick's <i>Wetlands Conservation Policy</i>. • Flood Forecasting, River Watch (ice jams), and the Hydrology Centre. • Permitting of in-land aquaculture facilities having a discharge to the environment. • Administration of the Environmental Trust Fund that funds various projects including aquatic ecosystem monitoring, restoration activities, education, research on water, as well as efforts to address climate change impacts in the province.
<p>Climate Change Secretariat (Department of Environment and Local Government)</p>	<ul style="list-style-type: none"> • Identification of mitigation and adaptation activities for climate change impacts on water resources. • Preparation and administration of climate change action plans.
<p>Department of Health</p>	<ul style="list-style-type: none"> • Investigating and issuing orders regarding health hazards and communicable diseases. • Establishing guidelines for drinking water quality. • Assessing drinking water quality. • Co-operating with the Department of Environment and local Government in the regulation and protection of public drinking water systems. • Issuing public advisories regarding drinking water quality. • Issuing public advisories regarding recreational water quality in public beaches. • Issuing public advisories regarding mercury in fish. • Investigation of water quality conditions that may affect public health. • Provision of information on health risks of flooding.

<p>Department of Energy and Resource Development</p>	<ul style="list-style-type: none"> • Management of Crown lands, the regulation of activities on Crown land, and measures to protect aquatic habitats. • Development of policy and planning for establishing and managing Protected Natural Areas for the conservation of ecologically significant features including surface waters. • Management of populations of fish and wildlife and their habitats, including lakes, rivers and wetlands • Management, inventory and the protection of forest resources contributing to watercourse mapping, the protection of aquatic habitats and water quality. • Mapping and classification of ecological regions. • Regulation of mineral and petroleum exploration activities including protection of water resources. • Reviewing and approving closure and reclamation plans for mines and mineral quarries including drainage management. • Lead department responsible for the New Brunswick Biodiversity Strategy. • Protection of species at risk under provincial legislation • Oversight of river and water stewardship projects funded by the New Brunswick Wildlife Trust Fund. • Provision of technical expertise to the Department of Environment and Local Government in the review of applications under the <i>Watercourse and Wetland Alteration Regulation</i> and the <i>Environmental Impact Assessment Regulation</i>.
<p>Department of Agriculture Aquaculture and Fisheries</p>	<ul style="list-style-type: none"> • Identification of freshwater requirements for agriculture and aquaculture. • Operation of provincial fish health laboratory. • Working with agriculture and aquaculture practitioners to promote beneficial management practices to protect the environment, including water quality. • Offering technical advice to food producers on water management and irrigation. • Licensing of inland aquaculture sites. • Integrated Pest Management education and awareness.
<p>Department of Tourism Heritage and Culture</p>	<ul style="list-style-type: none"> • Promotion of tourism including recreational use of water. • Operation, maintenance and development of provincially owned tourism infrastructure including provincial parks. • Water Quality monitoring at selected beaches.
<p>Department of Justice and Public Safety</p>	<ul style="list-style-type: none"> • Compliance and enforcement. • Approvals and inspections of on-site sewage disposal systems. • Co-ordination of emergency preparedness including flooding (Emergency Measures Organization). • Co-ordination of provincial emergency response (Emergency

Measures Organization).

- Co-ordination of provincial disaster financial assistance programs (e.g. flood damage) (Emergency Measures Organization).
- Release of public alerts for floods or ice jams.