











2018-2023 Action Plan

2018-2030 Québec Water Strategy





COORDINATION AND DRAFTING

This publication was written by the Direction générale des politiques de l'eau of Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC), in collaboration with government ministries and agencies. It was produced by the Communications Branch of MDDELCC.

INFORMATION

Contact the Information Center for more information.

Phone: 418 521-3830 1 800 561-1616 (toll-free) Fax: 418 646-5974 Form: www.mddelcc.gouv.qc.ca/formulaires/renseignements.asp Online: www.mddelcc.gouv.qc.ca

To obtain a copy of the document:

Direction générale des politiques de l'eau

Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques

675 boul. René-Lévesque Est, 8° étage boîte 42 Québec (Québec) G1R 5V7

Phone: 418 521-3885

Or

Visit our website at: www.mddelcc.gouv.qc.ca

CITE AS

Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques.

2018–2023 Action Plan for the 2018–2030 Québec Water Strategy. 2018. 24 pages. [Online]. http://www.mddelcc.gouv.qc.ca/eau/strategie-quebecoise

Legal deposit – 2018 Bibliothèque et Archives nationales du Québec ISBN : 978-2-550-82306-3 (printed) ISBN : 978-2-550-82307-0 (PDF)

All rights reserved for all countries.

© Government of Québec - 2018



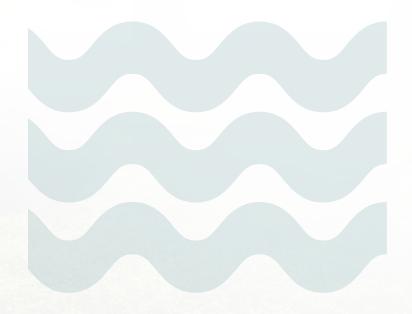


100% post-consumer recycled fiber paper, EcoLogo certified. Processed without chlorine and manufactured using biogas energy.









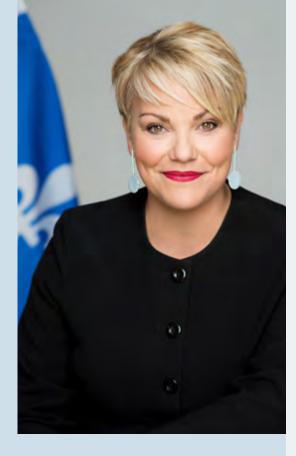
Foreword

The 2018–2030 Québec Water Strategy is the cornerstone of Québec's new water resources management framework. It sets out seven policy priorities and 23 objectives to ensure the protection, use, and management of water and aquatic environments in a responsible, integrated, and sustainable manner. Achieving these goals will require the knowledge, commitment, and cooperation of all stakeholders involved.

The measures defined for each objective are designed to ensure coordinated efforts among government and community partners in the protection and management of water resources.

This plan also supplements initiatives undertaken by ministries and agencies as part of their specific water management mandates and responsibilities. The combined measures in the 2018–2023 Action Plan represent investments of more than \$552 million.

Implementation of these initial measures will undoubtedly inspire future generations, who will be called upon in their turn to take action to protect this invaluable resource so central to the quality of life of communities and to Québec's economic and social development.



Message from the Minister **Isabelle Melançon**

In presenting the 2018-2030 Québec Water Strategy, the Government of Québec proposed an inspiring vision comprising seven major policy priorities to protect and enhance this priceless resource. As the custodian of Québec's water, the government will ensure that this resource is an even greater source of collective wealth and pride once the strategy is in place.

Québec is proud to adopt an action plan for the protection and management of water resources for the first time in its history. Implementation of the plan will allow us to deal more effectively with climate change and other emerging environmental challenges, such as pollution from new contaminants and plastics. It will help us develop a blue economy and continue to acquire and share knowledge on this vital resource. The Action Plan will also help mobilize the population behind responsible, sustainable water use. And it will ensure consistency in the water management and protection measures put in place by the government and its partners.

Informed and committed, the government, its partners, and the public will protect, use, and manage water and aquatic environments in a responsible, integrated, and sustainable manner. The 2018–2023 Action Plan lays the groundwork for this strategy by establishing milestones to guide Québec toward a prosperous and water-friendly future.

Like the 2018–2030 Québec Water Strategy, the 2018–2023 Action Plan depends on the invaluable contributions of numerous ministries and partners, in addition to more than \$550 million in funding to improve water management and mitigate flood-related risks. Everything is in place to ensure an abundant supply of quality water for all Quebecers.

The success of the 2018–2023 Québec Water Strategy is contingent on the collaboration and cooperation of the many organizations that share a common desire to sustainably protect and manage one of Québec's greatest natural resources. I wish to thank in advance all those who embody the vision set out in these key documents.

Let us work together to protect and preserve this precious resource—the source of life for us all—for the benefit of future generations.

LIST OF LEAD MINISTRIES

MDDELCC

Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques

MAPAQ

Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec

MAMOT

Ministère des Affaires municipales et de l'Occupation du territoire

MFFP

Ministère des Forêts, de la Faune et des Parcs

MFQ

Ministère des Finances du Québec

MSP

Ministère de la Sécurité publique

MTMDET

Ministère des Transports, de la Mobilité durable et de l'Électrification des transports

MTO

Ministère du Tourisme

MRIF

Ministère des Relations internationales et de la Francophonie

MESI

Ministère de l'Économie, de la Science et de l'Innovation

SAM

Secrétariat aux affaires maritimes

Priorities of the 2018-2030 Québec Water Strategy

Foreword IV

Message from the Minister Isabelle Melançon V

Priority 1 Ensure public access to quality water 2

Priority 2 Protect and restore aquatic environments 4

Priority 3 Better prevent and manage water-related risks 6

Priority 4 Harness the economic potential of water 8

Priority 5 Promote sustainable water use 10

Priority 6 Acquire and share the best knowledge on water 12

Priority 7 Ensure and strengthen integrated water resources management 14

Implementation, Monitoring, and Reporting 16

Ensure public access to quality water

Drinking water in Québec is generally of very good quality but remains vulnerable to pollution and issues related to climate change. Water is subject to protective measures to ensure quality before it can be used. After use, it must be adequately treated before being released into the environment. Efforts to improve wastewater treatment and drinking water protection, production, and distribution are and must remain top priorities to ensure the health of the population and protect aquatic environments.

MEASURE OBJECTIVE 1 :	LEAD MINISTRY 2018–2023 BUDGET:	
PROTECT COMMUNITY DRINKING WATER SOURCES 1.1.1 Enhanced drinking water source protection program	\$32,000,000 MDDELCC	
OBJECTIVE 2 : ENSURE ACCESS TO WATER OF SUFFICIENT QUALITY AND QUANTITY	2018–2023 BUDGET: \$2,637,000	
1.2.1 Conduct groundwater knowledge acquisition projects	MDDELCC	
1.2.2 Improve the quality of recreational waters in Québec by raising stakeholder awareness	MDDELCC	
1.2.3 Educate the public about the importance of having their well water tested	MDDELCC	
1.2.4 Encourage ongoing municipal efforts to improve drinking water quality	MDDELCC	
OBJECTIVE 3 : CONTINUE TO UPGRADE INFRASTRUCTURE AND FOSTER BEST PRACTICES ACROSS QUÉBEC	2018–2023 BUDGET: \$73,560,500	
1.3.1 Modernize municipal and residential wastewater management	MFQ	
1.3.2 Develop tools to support the modernization of wastewater management	MDDELCC	
1.3.3 Ensure the adoption of best practices in water and sewer infrastructure design	MDDELCC	
OBJECTIVE 4 : PROMOTE THE TRANSITION TOWARD ENVIRONMENTAL SUSTAINABILITY AND RESPONSIBILITY WITHIN AGRICULTURE	2018–2023 BUDGET: \$15,908,800	
1.4.1 Demonstrate the benefits of improved agricultural and agri-environmental practices	MDDELCC	
1.4.2 Analyze the economic impacts of implementing certain agri-environmental best practices and develop reward programs	MDDELCC	
1.4.3 Develop and evaluate economic tools to support pesticide reduction	MDDELCC	
1.4.4 Evaluate the adoption of different integrated crop pest management practices	MAPAQ	
PRIORITY 1 TOTAL	\$124,106,300	

Protect and restore aquatic environments

Aquatic environments-which include wetland, water, and marine environments - provide valuable services to Quebecers. They also support economic and traditional Indigenous activities such as fishing, aquaculture, and recreational tourism. They contribute to the quality of living environments by maintaining biodiversity and health through water quality, and safety through flood control. Aquatic environments thus fulfill valuable ecological functions. It always costs more to restore or compensate for the loss of aquatic environments and their functions than it does to protect them. It is important to look beyond the short term: The protection of aquatic environments is both a necessity and a long-term investment for Québec.

MEASURE	LEAD MINISTRY	
OBJECTIVE 1 : CONSERVE AND RESTORE AQUATIC ENVIRONMENTS	2018–2023 BUDGET: \$31,671,300	
2.1.1 Support municipalities in conserving and restoring aquatic environments	MDDELCC	
2.1.2 Continue efforts under the Intervention Strategy for the Conservation of Lac Saint-Pierre	MDDELCC	
2.1.3 Physically monitor aquatic environment restoration projects	MDDELCC	
2.1.4 Protect aquatic environments on forest lands in the domain of the State	MFFP	
OBJECTIVE 2 : PROTECT SPECIES AT RISK	2018–2023 BUDGET: \$20,712,000	
2.2.1 Ensure the conservation of at-risk aquatic plant species	MDDELCC	
2.2.2 Protect wildlife at risk	MFFP	
OBJECTIVE 3 : EXPAND THE NETWORK OF AQUATIC PROTECTED AREAS	2018–2023 BUDGET: \$40,760,000	
2.3.1 Meet government objectives for protected areas and ensure their sustainability	MDDELCC	
OBJECTIVE 4 : PROMOTE THE CONTROL OF INVASIVE ALIEN SPECIES	2018–2023 BUDGET: \$12,076,500	
2.4.1 Effectively control invasive alien plants	MDDELCC	
2.4.2 Implement new analytical approaches to environmental issues	MDDELCC	
2.4.3 Enhance the Québec Program to Fight Asian Carp	MFFP	
PRIORITY 2 TOTAL	\$105,219,800	

Better prevent and manage water-related risks

Like other societies around the world, Québec is already feeling the impacts of climate change on its water resources. Changes in the hydrologic regime due to climate change increase the risk of flooding, erosion, and surface water contamination from stormwater runoff (e.g., sewer overflows), pose a threat to public health and safety, and generate significant costs. These risks must therefore be prevented and managed. Lakes, rivers, and other waterways such as the St. Lawrence River also drive various industries and are critical to economic development. Climate change and the increased frequency and intensity of extreme weather events are likely to have a negative impact on these sectors.

MEASURE	LEAD MINISTRY	
OBJECTIVE 1 : INTEGRATE CLIMATE CHANGE MORE EFFECTIVELY INTO WATER-RELATED RISK MANAGEMENT	2018–2023 BUDGET: \$9,834,000	
3.1.1 Update the Protection Policy for Lakeshores, Riverbanks, Littoral Zones, and Floodplains	MDDELCC	
3.1.2 Encourage municipalities to adopt sustainable stormwater management practices	MDDELCC	
3.1.3 Roll out a program to help municipalities establish sustainable stormwater management facilities at the source	МАМОТ	
OBJECTIVE 2 : IMPROVE TOOLS FOR FORECASTING AND PREVENTING WATER-RELATED RISKS	2018–2023 BUDGET: \$52,949,000	
3.2.1 Map areas vulnerable to flooding and shoreline erosion along the St. Lawrence River	MDDELCC	
3.2.2 Produce a new floodplain map that takes climate change into account	MDDELCC	
3.2.3 Update the floodplain map of eight areas particularly vulnerable to flooding	МАМОТ	
OBJECTIVE 3 : MODERNIZE DAM MANAGEMENT	2018–2023 BUDGET: \$45,700,000	
3.3.1 Ensure the safe operation of public and municipal dams	MDDELCC	
PRIORITY 3 TOTAL	\$108,483,000	

Harness the economic potential of water

With its water resources and expertise, Québec is well positioned to develop water-related activities, products, markets, and technologies. It must promote a cleaner, greener economy that fosters job creation, innovation, and regional growth while at the same time safeguarding the well-being of the population and aquatic environments. Partnerships between water research centers and entrepreneurs in Québec should also be promoted to develop innovations capitalizing on this renewable but fragile resource.

MEASURE	LEAD MINISTRY	
OBJECTIVE 1 : DEVELOP SUSTAINABLE ECONOMIC ACTIVITY RELATED TO WATER	2018–2023 BUDGET: \$12,180,000	
4.1.1 Support the development of sustainable aquaculture	MDDELCC	
4.1.2 Implement the salmon and sport fishing development plan	MFFP	
OBJECTIVE 2 : ENCOURAGE APPLICATION OF THE HIGHEST ENVIRONMENTAL STANDARDS IN COMMERCIAL SHIPPING	2018–2023 BUDGET: \$109,958,080	
4.2.1 Assistance program for improving the efficiency of marine, air, and rail transportation in reducing GHG emissions	MTMDET	
4.2.2 Program to reduce GHG emissions through the development of intermodal transportation	MTMDET	
OBJECTIVE 3 : SUPPORT THE DEVELOPMENT OF WATER-RELATED TECHNOLOGIES	2018–2023 BUDGET: \$4,000,000	
4.3.1 Support marine biotechnology research	MESI	
OBJECTIVE 4 : PROMOTE ACCESS TO WATER BODIES AND WATERCOURSES	2018–2023 BUDGET: \$1,961,782	
4.4.1 Implement the tourism component of the Maritime Strategy	МТО	
4.4.2 Roll out the program for access to water for recreational fishing	MFFP	
PRIORITY 4 TOTAL	\$128,099,862	

Promote sustainable water use

The availability of water poses a challenge even in Québec, where it is unevenly distributed across the province. The apparent abundance of water can be misleading. Water is a fragile resource that must be protected and conserved. Changes in behavior and the adoption of best practices in sustainable water use will prevent shortages, reduce pollution, and cut

costs associated with water treatment, as well as preserve aquatic environments.

MEASURE	LEAD MINISTRY	
OBJECTIVE 1 : ENCOURAGE THE DEVELOPMENT AND ADOPTION OF SUSTAINABLE WATER USE AND CONSERVATION PRACTICES	2018–2023 BUDGET: \$1,745,000	
5.1.1 Develop and implement awareness measures for Water Month (June)	MDDELCC	
5.1.2 Adopt the next phase of the 2018–2025 Québec Strategy for Drinking Water Conservation	MAMOT	
5.1.3 Support the use of innovative technologies and techniques to improve businesses' environmental performance	MAPAQ	
5.1.4 Raise public awareness about the protection and sustainable use of water	MDDELCC	
OBJECTIVE 2 : PROMOTE THE REDUCED USE AND ELIMINATION OF SINGLE-USE PLASTICS	2018–2023 BUDGET: \$3,100,000	
5.2.1 Promote the use of water fountains	MDDELCC	
 5.2.2 Implement a program to reduce water pollution from plastics (e.g. limit the use of straws and other plastics) Youth component Community engagement component 	MDDELCC	
PRIORITY 5 TOTAL	\$4,845,000	

Acquire and share the best knowledge on water

Integrated water resources management and protection requires us to hone our knowledge and share it effectively to serve stakeholders and the public. There is a solid data acquisition network in place to monitor water quality and quantity and the status of aquatic environments. The data is essential for making informed decisions related to public health and safety and ecosystem protection.

MEASURE	LEAD MINISTRY	
OBJECTIVE 1 : EXPAND AND STRENGTHEN THE ACQUISITION OF KNOWLEDGE ESSENTIAL FOR THE PROTECTION AND MANAGEMENT OF WATER AND AQUATIC ENVIRONMENTS, INCLUDING FOR INTERGOVERNMENTAL AND INTERNATIONAL COOPERATION	2018–2023 BUDGET: \$9,066,810	
6.1.1 Improve general knowledge on lake and river water and groundwater	MDDELCC/MFFP	
6.1.2 Measure the impact of human activities on water quality and aquatic environments (e.g., from pesticides, microplastics, phosphorus, emerging contaminants)	MDDELCC	
6.1.3 Expand the Volunteer Lake-Monitoring Program (VLMP) and increase the knowledge gained	MDDELCC	
OBJECTIVE 2 : DEVELOP TOOLS ADAPTED FOR INTEGRATED WATER RESOURCES MANAGEMENT AND CONDUCIVE TO SHARING AND DISSEMINATING KNOWLEDGE	2018–2023 BUDGET: \$21,139,900	
6.2.1 Develop tools to manage and analyze data from the Groundwater Monitoring Network	MDDELCC	
6.2.2 Deploy the Water Knowledge Portal	MDDELCC	
6.2.3 Acquire and transfer scientific knowledge on the marine environment through the Odyssée Saint-Laurent project	MESI	
6.2.4 Disseminate knowledge on flood risks and best practices	MSP	
6.2.5 Develop and improve tools to support decision-making and monitoring during flood events	MSP	
6.2.6 Improve knowledge dissemination and partner support	MDDELCC	
OBJECTIVE 3 : STRENGTHEN RESEARCH AND THE SHARING OF EXPERTISE IN THE WATER SECTOR	2018–2023 BUDGET: \$1,200,000	
6.3.1 Set up a research consortium dedicated to water	MDDELCC	
6.3.2 Support decision-making through water research and development projects	MDDELCC	
PRIORITY 6 TOTAL	\$31,406,710	

Ensure and strengthen integrated water resources management

Québec has adopted an integrated water resources management model that enables all stakeholders to participate in decision-making at both the watershed and St. Lawrence levels. Québec can build on this model thanks to a comprehensive perspective, participation by different users, and greater cohesion between the actions of ministries and local communities. Since Québec's water crosses borders, collaboration and dialogue with neighboring governments and states will help us better manage this collective resource in a sustainable manner.

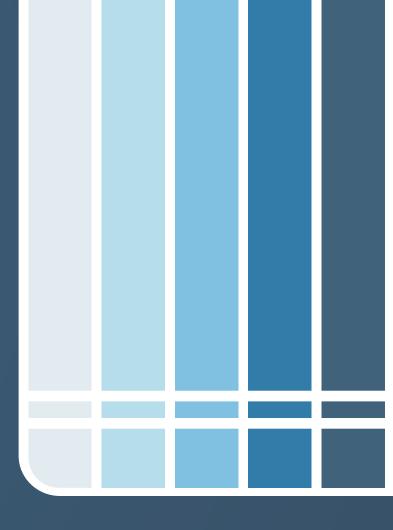
MEASURE	LEAD MINISTRY	
OBJECTIVE 1 : STRENGTHEN INTEGRATED WATER RESOURCES MANAGEMENT IN QUÉBEC	2018–2023 BUDGET: \$34,402,500	
7.1.1 Expand integrated water management	MDDELCC	
7.1.2 Provide more support to watershed organizations and improve monitoring of integrated water resources management	MDDELCC	
7.1.3 Establish the Québec Water Council	MDDELCC	
OBJECTIVE 2 : MAINTAIN AND STRENGTHEN INTERGOVERNMENTAL AND INTERNATIONAL COOPERATION TO PROMOTE QUÉBEC'S INTERESTS AND FOSTER INTEGRATED WATER MANAGEMENT	2018–2023 BUDGET: \$1,462,590	
7.2.1 Support Québec-Vermont-New York cooperation for the integrated management of Lake Champlain, Lake Memphremagog, and the Richelieu River	MDDELCC	
7.2.2 Ensure Québec's participation in regional groups and forums dealing with the management of cross-border watersheds and the Great Lakes-St. Lawrence River Basin	MRIF	
7.2.3 Ramp up Québec's participation in international forums, monitor the work of multilateral organizations, and support international cooperation in sustainable water management	MRIF	
7.2.4 Cultivate strategic partnerships	MDDELCC	
OBJECTIVE 3 : PROMOTE LAND USE PLANNING WITH A VIEW TO INTEGRATED REGIONAL WATER AND WATERSHED MANAGEMENT	2018–2023 BUDGET: \$9,000,000	
7.3.1 Establish a regional support program on water issues (PDE-PGIR))	MDDELCC	
7.3.2 Implement measures for the protection of the maritime territory and its ecosystems within the framework of the Fonds Bleu (Blue Fund)	SAM	
7.3.3 Develop government land use planning guidelines for integrated water resource management	MAMOT	
PRIORITY 7 TOTAL	\$44,865,090	

Implementation, Monitoring, and Reporting

The objectives and measures of the Action Plan will be monitored in a transparent, structured way. Oversight will be handled by a coordination office under the purview of MDDELCC, working closely with the Action Plan's lead ministries and partners.

	2018–2023 BUDGET	LEAD MINISTRY
COORDINATION, MONITORING, AND REPORTING	\$5,000,000	MDDELCC





Développement durable, Environnement et Lutte contre les changements climatiques QUÉDEC