Great Lakes-St. Lawrence River Water Resources Regional Body

RESOLUTION NO. 2015-10

ADOPTING DECLARATION OF FINDING
For the Water Management Program Review and
Water Conservation and Efficiency Program Review
Government of Québec

I. BACKGROUND AND PURPOSE

A. The Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement ("Agreement") is by, between and among the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, and Wisconsin, the Commonwealth of Pennsylvania, the Province of Ontario, and the Government of Québec, and certain provisions of the Agreement began to more fully come into force on March 8, 2015.

B. Article 300 of the Agreement requires each Party State and Province to submit a report to the Regional Body on actions taken by the State or Province to meet the provisions of the Agreement regarding that State's or Province's Water management and conservation and efficiency programs.

C. Following the Regional Body's review of such reports pursuant to Article 300 of the Agreement, the Regional Body shall determine if that State or Province's programs: (1) meet or exceed the provisions of the Agreement; (2) do not meet the provisions of the Agreement; or (3) would meet the provisions of the Agreement if certain modifications were made and what options may exist to assist the jurisdiction in meeting the provisions of the Agreement.

D. Because Article 300 of the Agreement came into force as of March 8, 2015, the first report will be due March 8, 2016 and the five-year report will be due March 8, 2021. Therefore, all such reports submitted prior to March 8, 2016, as well as the Declaration Of Finding issued thereon, are recognized as voluntary, and the submission of such reports and the issuance of Declaration Of Finding shall not be interpreted to indicate that Article 300 of the Agreement requires such reports at this time.

E. Article 304, Paragraph 1 of the Agreement requires the Regional Body to identify Basin-wide Water conservation and efficiency objectives to assist the Parties in developing their Water conservation and efficiency programs by December 13, 2007, which were adopted by the Regional Body on December 13, 2007. Article 304, Paragraph 2 of the Agreement requires each Party State and Province to develop its own water conservation and efficiency goals and objectives consistent with the Basin-wide goals and objectives, and develop and implement a water conservation and efficiency program, either voluntary or mandatory, within its jurisdiction based on the Party State's or Province's goals and objectives.

II. SUBMISSIONS BY GOVERNMENT OF QUÉBEC

The Regional Body has received the Government of Québec's voluntary report on its Water management and conservation and efficiency programs under the Agreement, which is attached to this Resolution as Attachment A.

III. DECLARATION OF FINDING

Upon review of the submissions of the Government of Québec and the terms of the Agreement, the Regional Body finds that:

A. Based on the report submitted by the Government of Québec, the Water Management Program presented by the Government of Québec meets or exceeds the current requirements of the Agreement.

B. Based on the report submitted by the Government of Québec, the Water Conservation and Efficiency Program presented by the Government of Québec meets or exceeds the current requirements the Agreement.

Adopted and approved on December 3, 2015 by
the Great Lakes-St. Lawrence River Water Resources Regional Body

ATTACHMENT A

Water Management Program Review
Government of Québec
2014 Report

Great Lakes - St. Lawrence River Basin Sustainable Water Resources Agreement

Québec Water Management Program Review

This Questionnaire is provided as a guide to assist the States and Provinces in gathering the information necessary to prepare their Five-Year Reports and to enable the Compact Council and Regional Body to undertake their required review, declaration of findings and recommendations under the Compact and the Agreement.

General Information

1. Lead agency/agencies and contact person(s) and contact information.

   Marcel Gaucher
   Directeur général des politiques de l'eau
   Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC)
   and Representative designated by the Premier of Québec to the Great Lakes–St. Lawrence River Water Resources Regional Body ("Regional Body")

2. Identify all laws, statutes, rules, regulations, executive orders, administrative orders or other similarly enforceable documents (collectively, "Laws") that establish or implement programs meeting the requirements of the following provisions of the Compact or Agreement. Please note that the Secretariat has previously compiled (in 2012) a matrix of those Laws that are believed to be in effect for the States and Provinces. If you would like a copy, please contact Peter Johnson (pjohnson@cglg.org; 312-407-0177). In particular, ensure that all such citations address the following sections and articles of the Compact and Agreement.

   The laws and regulations listed below are available at the following address:
   English: http://www.mddefp.gouv.qc.ca/publications/lois-reglem-en.htm
   French: http://www.mddefp.gouv.qc.ca/publications/lois_reglem.htm

   a. Compact Section 3.4/Agreement Article 300

   b. Compact Section 4.1/Agreement Article 301

      - *Regulation respecting the declaration of water withdrawals* (CQLR c Q-2, r 14)
      - [*Règlement sur la déclaration des prélèvements d'eau* (RLRQ c Q-2, r 14)]

        http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R14_A.HTM

   c. Compact Sections 4.2(2), 4.2(4) and 4.2(5)/Agreement Article 304

      - See section h. below.

d. Compact Section 4.3/Agreement Article 200

Article 200 1.:

- Art. 31.90 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.90 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

Article 200 2.:

- Sec. 31.92-31.94 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.92-31.94 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

- *Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin* (CQLR c Q-2, r 5.1)
  [*Règlement concernant le cadre d'autorisation de certains projets de transfert d'eau hors du bassin du fleuve Saint-Laurent* (RLRQ c Q-2, r 5.1)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R5_1_A.HTM

Article 200 3.:

- Sec. 31.95 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.95 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

e. Compact Section 4.8, 4.9 and 4.13/Agreement Articles 200, 201 and 208

Article 201:

- Sec. 31.92-31.94 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.92-31.94 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

- *Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin* (CQLR c Q-2, r 5.1)

[*Règlement concernant le cadre d'autorisation de certains projets de transfert d'eau hors du bassin du fleuve Saint-Laurent* (RLRQ c Q-2, r 5.1)]

http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R5_1_A.HTM

Article 208:

- Sec. 31.75 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.75 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

f. Compact Section 4.10/Agreement Article 206

Sec. 31.95 *Environment Quality Act* (CQLR c Q-2)
[Art. 31.95 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

The *Water Withdrawal and Protection Regulation* (WWPR) (CQLR c Q-r, r 35.2) enables the application of section 31.95 and specifies application thresholds.

http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R35_2_A.HTM

g. Compact Section 4.11/Agreement Article 207

207.1:

- *Regulation respecting the declaration of water withdrawals* (CQLR c Q-2, r 14)
  [*Règlement sur la déclaration des prélèvements d'eau* (RLRQ c Q-2, r 14)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R14_A.HTM

  Withdrawals authorized between September 1, 2011 and the coming into force of section 31.95 of the EQA will be considered as existing withdrawals. They will be added to the list of withdrawals existing on September 1, 2011.

207.2:

- Sec. 31.96 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.96 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

207.5:

- The *Water Withdrawal and Protection Regulation* (WWPR) (CQLR c Q-r, r 35.2) elaborates on this concept in section 3.

http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R35_2_A.HTM

207.9:

- Sec. 31.90 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.90 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

h. Agreement Article 304

- Sec. 31.101 *Environment Quality Act* (CQLR c Q-2)
  [Art. 31.101 *Loi sur la qualité de l'Environnement* (RLRQ c Q-2)]

  http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm

Water Management Program Report

1. Summary description of the State's or Province's Water management program scope and thresholds, including the current status of program implementation and a description of which New or Increased Withdrawals, Consumptive Uses and Diversions are subject to the program. The summary should include information on registration (if applicable), management and regulation, and reporting elements of the program.

   The *Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection* ("Water Act") amended the *Environment Quality Act* (EQA) to include the provisions of the Agreement.

   Diversions:

   For the application of Article 201 of the Agreement (exceptions to the prohibition of diversions), EQA sections 31.90 to 31.94 concerning transfers of water outside the Basin are in force. The *Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin* was adopted in 2011, enabling the application of EQA sections with which withdrawers must comply to obtain authorization to transfer water out of the Basin, in accordance with standards for exceptions to the Agreement.

New or increased withdrawals:

Additionally, the Water Act added to the EQA a new authorization regime applying to all withdrawals of 75 m^3 or more per day throughout the territory of Québec. The new regime came into force with the enactment of the *Water Withdrawal and Protection Regulation* (WWPR) in July 2014. For the application of Article 203 of the Agreement (Decision-Making Standard for management of withdrawals and consumptive uses), particular provisions apply to withdrawals on the territory of the Agreement. These are in EQA section 31.95, which specifically concerns withdrawals on the territory of the Agreement and applies the Decision-Making Standard for management of withdrawals and consumptive uses. The application threshold for the standard is 379,000 litres or more per day, averaged over a period of 90 days.

Reporting:

In 2011 Québec adopted the *Regulation amending the Regulation respecting the declaration of water withdrawals*. The amended regulation allows Québec to collect information on withdrawals and consumption in the St. Lawrence River Basin, and on volumes of water transferred out of the Basin. It enables Québec to meet its commitments under Article 301 of the Agreement, while supporting the application of EQA provisions on water transfers and the authorization framework for water withdrawals, notably by setting the threshold for determining new or increased withdrawals in the St. Lawrence River Basin.

2. Describe specifically how Water Withdrawals in the State or Province are managed by:

   a. Sector (public water supply, self-supply commercial and institutional, self-supply irrigation, self-supply livestock, self-supply industrial, self supply thermoelectric power production (once-through cooling), self-supply thermoelectric power production (recirculated cooling), off-stream hydroelectric power production, in-stream hydroelectric power production (voluntary), and other self-supply;

      Authorization of water withdrawals:

      Section 31.75 of the *Environment Quality Act (EQA)* specifies that in general, withdrawals of 75,000 litres or more per day are subject to authorization, renewable every 10 years.

      Declaration of water withdrawals (Reporting):

      Since 2011, under the *Regulation respecting the declaration of water withdrawals*, all existing withdrawers (379 m^3 or more) must declare the volumes of water withdrawn, consumed on the territory of the Agreement, or transferred outside the territory.

      Section 18.7 of the Regulation states that agricultural and fish-farming businesses must produce their first annual declaration in 2016 (for withdrawals performed in 2015).

   b. Water source (groundwater, surface water (Great Lakes-St. Lawrence River), surface water other than Great Lakes-St. Lawrence River);

The authorization regime specific to water withdrawals applies to both surface water and groundwater throughout Québec.

When declaring the volumes of water withdrawn, withdrawers must provide information on, among other things, the source of withdrawals (underground, surface).

c. Quantity (regulatory thresholds, volumes, rates, and reporting requirements);

Authorization of water withdrawals:

Section 31.75 of the EQA provides the application thresholds for the authorization regime for water withdrawals across Québec. In general, withdrawals of 75,000 litres or more per day are subject to authorization. The same section also states that certain withdrawals are subject to authorization even if their volume is less than 75,000 litres per day.

Section 31.95 of the EQA sets the application threshold as an average of 379,000 litres per day for new or increased withdrawals on the territory of the Agreement.

Section 31.92 specifies the application threshold for standards applying to transfers that supply a municipality located partly within the St. Lawrence River Basin and partly outside of the Basin.

Section 3 of the *Water Withdrawal and Protection Regulation* (WWPR) specifies the method for applying these calculations.

Section 7 (10) of the WWPR stipulates that an application for a water withdrawal authorization must describe the scenario for the planned withdrawal, including the withdrawal periods and the volumes to be withdrawn, consumed and discharged.

Declaration of water withdrawals (Reporting):

Withdrawers (75,000 litres or more) must submit a declaration of the volume withdrawn.

Withdrawers (379,000 litres or more) on the territory of the Agreement must also submit a declaration of the volumes of water withdrawn, consumed on the territory of the Agreement, and transferred outside of the territory as the case may be.

d. Location (Statewide/Province-wide or Great Lakes-St. Lawrence River Basin); and

Authorization and declaration of water withdrawals:

Withdrawers must provide information on, among other things, the geolocation of withdrawals.

e. Any specific exemptions as allowed in the Agreement and the Compact.

Section 31.75 specifies that a temporary, non-recurring withdrawal for emergency-response, humanitarian or civil protection purposes is exempted from authorization.

Also, section 6 of the *Water Withdrawal and Protection Regulation* (WWPR) lists other types of water withdrawals that are exempted from authorization.

Note: Address all sectors and sources in your descriptions even if one or more sector or source is not currently managed by your State or Province.

3. Description of how the provisions of the Standard of Review and Decision are applied. The description should include information on how each criterion of the Decision Making Standard and Exception Standard is addressed.

    a. Decision Making Standard for Withdrawals, Consumptive Uses.

    Section 31.95 of the EQA sets out conditions for authorization corresponding to the Decision-Making Standard for management of withdrawals and consumptive uses. Thus:

    EQA section 31.95

    1° all water withdrawn is to be returned to the Basin, with preference to the direct St. Lawrence River tributary stream watershed from which it was derived, if applicable, less an allowance for consumptive use;

    2° the quantity of water withdrawn or consumed would result in no significant individual or cumulative adverse impacts on the quantity or quality of the waters of the Basin or on water-dependent natural resources in the Basin;

    3° the withdrawal or consumptive use is subject to water conservation measures determined by regulation of the Government, or by the Minister under other provisions of this Act; and

    4° the quantity of water withdrawn or consumed is reasonable having regard, among other things, to
    a) the water's intended use;
    b) the measures implemented for the conservation and efficient use of water, including water from existing water supplies;
    c) the balance between economic, social and environmental development;
    d) the foreseeable impacts on the environment and on other uses, and the measures for avoidance or mitigation of such impacts; and
    e) the supply potential of the water source and other interconnected water sources.

    b. Exception Standard for Diversions.

    The *Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection* (“Water Act”) was adopted in 2009. It introduced into Québec legislation (through the *Environment Quality Act*) the provisions of the Agreement on the regulation of transfers of water outside the St. Lawrence River Basin. The exception criteria are consistent with those set forth in the Agreement. More precisely:

EQA section 31.90:

No water withdrawn from the St. Lawrence River Basin may be transferred out of the Basin, except as set out below and in section 31.91.

This prohibition does not apply to water withdrawals, from the outset made for purposes of transfer out of the Basin, that were authorized before 1 September 2011 or, if not authorized, were lawfully commenced before that date. Unless it is increased under the conditions defined by sections 31.91 to 31.93, the quantity of water derived from such a withdrawal must not, however, exceed the quantity authorized at that date or, if there is no authorization or the authorization does not determine a maximum quantity, the capacity of the withdrawal system at that date.

Nor does this prohibition apply to water withdrawn

1° to be marketed for human consumption, if packaged within the Basin in containers of 20 litres or less;
2° to be used within the Basin in the manufacture, preservation or processing of products;
3° to supply vehicles, including vessels and aircraft, whether for the needs of persons or animals being transported or for ballast or other needs related to the operation of the vehicles; or
4° for humanitarian, civil protection or emergency-response purposes provided the withdrawal is temporary and non-recurrent.

EQA section 31.91:

In addition to the conditions prescribed by sections 31.92 and 31.93 and those the Government or the Minister may prescribe under other provisions of this Act, a transfer out of the St. Lawrence River Basin resulting from a new withdrawal from the Basin, or an increased transfer out of the Basin resulting from such a withdrawal or a withdrawal existing on 1 September 2011, may be authorized under the following conditions:

1° all water transferred out of the Basin is intended to supply a waterworks system serving all or part of the population of a local municipality whose territory is either

a) partly within the Basin; or

b) both wholly outside the Basin and wholly within a regional county municipality whose territory is partly within the Basin; and

2° all water transferred out of the Basin is to be returned to the Basin, with preference to the direct St. Lawrence River tributary stream watershed from which it was withdrawn, if applicable, less an allowance for consumptive use. No water from outside the Basin may be added to complete the quantity of water returned to the Basin unless

a) it is part of a water supply or waste water treatment system that combines water from inside and outside the Basin;
b) it is treated to meet applicable water quality or discharge standards and to prevent the introduction of invasive species into the Basin; and
c) it maximizes the portion of water from within the Basin and minimizes the portion from outside the Basin.

For the purposes of this section, "new withdrawal" means any water withdrawal authorized after 1 September 2011.

The Minister shall publish in the Gazette officielle du Québec *a list of the local municipalities and regional county municipalities whose territory is partly within the Basin for the purposes of subparagraphs* a *and* b *of subparagraph 1 of the first paragraph.*

EQA section 31.92

If it involves an average of 379,000 litres or more per day, or a lesser quantity determined by regulation of the Government, that is intended to supply a waterworks system serving a municipality described in subparagraph a *of subparagraph 1 of the first paragraph of section 31.91, a transfer out of the St. Lawrence River Basin resulting from a new or increased water withdrawal described in that section may be authorized only if it meets the following conditions:*

1° the transfer cannot be reasonably avoided or diminished through the conservation and efficient use of existing water supplies;
2° the quantity of water to be transferred is reasonable having regard to the water's intended use;
3° the transfer would result in no significant individual or cumulative adverse impacts on the quantity or quality of the waters and water-dependent natural resources of the Basin; and
4° the transfer is subject to water conservation measures determined by regulation of the Government, or by the Minister under other provisions of this Act.

If a transfer out of the Basin under the first paragraph would result in a consumptive use of an average of 19 million litres or more per day, it is also subject to review by the Great Lakes-St. Lawrence River Water Resources Regional Body established by the Agreement.

EQA section 31.93

A transfer out of the St. Lawrence River Basin resulting from a new or increased water withdrawal described in section 31.91 that is intended to supply a waterworks system serving a municipality described in subparagraph b *of subparagraph 1 of the first paragraph of that section may be authorized only if it meets the conditions set out below and the conditions prescribed in subparagraphs 1 to 4 of the first paragraph of section 31.92:*

1° there is no water supply alternative within the watershed in which the local municipality concerned is situated that is reasonably accessible and able to satisfy its drinking water needs;
2° the quantity of water transferred will not endanger the integrity of the Basin ecosystem; and
3° the transfer was reviewed by the Great Lakes-St. Lawrence River Water Resources Regional Body.

EQA section 31.94

If, under section 31.92 or 31.93, an application for authorization is subject to review by the Great Lakes-St. Lawrence River Water Resources Regional Body, the Minister must, after so informing the applicant,

1° notify the Regional Body and each of the parties to the Agreement;
2° send the Regional Body the application record containing all the documents or information provided by the applicant as well as the Minister's opinion on the compliance

of the application with the conditions prescribed by sections 31.91 to 31.93 and those set out in the Agreement; and

3° at the request of the Regional Body or one of the parties to the Agreement, provide any additional document or information the Regional Board or the party may consider necessary for review of the application for authorization.

The Minister must also inform the public that the application for authorization is subject to review by the Regional Body.

After reviewing the application for authorization as set out in the Agreement and its own rules of procedure, the Regional Body shall issue a declaration on the compliance of the application with the conditions set out in the Agreement. The declaration is sent to the Minister and made available to the public in the manner the Regional Body determines.

In making a decision with respect to the application for authorization, the Minister or the Government, as the case may be, shall take into account the Regional Body's declaration.

The *Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin* was adopted in 2011, specifying the provisions with which withdrawers must comply to obtain authorization to transfer water outside of the St. Lawrence River Basin. Sections 3, 4 and 5 of this regulation specify the information and studies that must accompany an application for such authorization.

Section 7 of the *Water Withdrawal and Protection Regulation* (WWPR) (CQLR c Q-r, r 35.2) specifies the information and studies that must accompany an application for a water withdrawal authorization. Furthermore, section 31.82 of the EQA states that the Minister may require the applicant to provide any additional study or expert evaluation the Minister considers necessary to make a decision.

4. Overview of State/Provincial reporting and database of Withdrawals, Consumptive Uses and Diversions including implementation status and database elements and capabilities, and reporting mechanisms (*e.g.*, electronic submission, etc.). The overview should include methods of measurement (*e.g.*, flow volume or rate meters, flow gauging, timing devices, etc.) approved by the State/Province for measuring Water volumes.

   The *Regulation respecting the declaration of water withdrawals* ("RDWW") was adopted in 2009 and amended in 2011 to incorporate provisions reflecting the Agreement. The purpose of the Regulation is to allow Québec to collect information on the volumes of water withdrawn and consumed in the St. Lawrence River Basin and on the volumes of water transferred out of the Basin.

   Section 9 of the RDWW indicates the basic information to be provided by all withdrawers of more than 75 m^3 of water per day, throughout the territory of Québec, in their annual declaration of water withdrawals.

   Section 18.7 of the RDWW indicates the supplementary information regarding water consumption and transfers out of the St. Lawrence River Basin that must be provided by withdrawers on the territory of the Agreement with a withdrawal capacity of 379 m^3 or more per day (100,000 gallons). This information allows Québec to meet its commitment under Article 301 of the Agreement.

   Québec employs the definition of "consumptive use" specified in the Agreement. The same definition is set forth in EQA section 31.89: "that portion of water withdrawn or impounded

from the St. Lawrence River Basin that is lost or otherwise not returned to the Basin due to evaporation, incorporation into a product, or other processes."

Subparagraphs (1) and (2) of section 18.7 of the RDWW specify the information that must be provided by all withdrawers regarding water transfers. It includes: the volumes of water transferred out of the Basin, expressed in litres, indicating for each withdrawal site the georeferenced data of sites where the transferred water is used; and the volumes of water discharged or returned to the St. Lawrence River Basin, expressed in litres, with the georeferenced data of sites where the water was discharged or returned as the case may be.

In accordance with Article 207 of the Agreement, section 18.4 of the RDWW specifies the information that withdrawers on the territory of the Agreement had to provide by March 31, 2012 to establish a baseline for Québec. This baseline will serve in setting the application threshold for the authorization regime for water withdrawals.

All sectors concerned by the Agreement and Resolution No.13 of the Regional Body are covered by Title II of the RDWW regarding withdrawals on the territory of the Agreement, with the exception of run-of-river hydroelectric production. The latter is optional in Resolution No.13 of the Regional Body regarding the collection and transmission of data on water use.

All withdrawers concerned by the RDWW must submit an annual declaration of water withdrawals by March 31 of the current year, for withdrawals performed at any time during the previous year (January 1 to December 31).

Québec has allowed additional time to the agricultural and fish-farming sectors before they must begin declaring water withdrawals. Paragraph 5 of section 18.7 of the RDWW states that agricultural and fish-farming businesses on the territory of the Agreement must produce their first annual declaration by March 31, 2016 (for withdrawals performed in 2015).

Paragraph 2 of section 9 of the RDWW states that annual declarations must be transmitted electronically. However, withdrawers without access to Internet service may use a paper form.

Section 5 of the RDWW states that withdrawals must be calculated on the basis of direct measurement, using measuring equipment, in accordance with the provisions of section 6 of the RDWW (section 6 refers to Chapter IV of the same regulation). However, a withdrawer who does not have measuring equipment may estimate the volumes of water withdrawn based on indirect or spot measurements. Such estimates of the volumes of water withdrawn must be performed in accordance with section 7, and must be certified by a professional (RDWW section 7, par. 3). Section 8 of the RDWW stipulates that a withdrawer who establishes or alters a withdrawal site must fit the site with measuring equipment.

As for determining volumes of water consumed, in all sectors this may be done by either direct measurement or estimation. Direct measurement with measuring equipment must comply with the provisions applying to the calculation of volumes of water withdrawn (RDWW section 6). Withdrawers in all sectors may estimate the volumes of water consumed. However, the estimate must be performed by a professional (RDWW section 18.7 par. 4 and section 18.4 par. 3). This contrasts with estimated withdrawals, which need only be certified by a professional. If the water is withdrawn to supply a waterworks system,

the person making the declaration may indicate a consumptive use equal to 15% of the withdrawals, as stated in section 18.4 par. 3.

In section 2 par. 8 of the RDWW, a “professional” is defined as a professional within the meaning of section 1 of the Professional Code of Québec whose professional order governs the exercise of a professional activity referred to in the Regulation.

Information on the methods of calculation and estimation approved by Québec is provided in the *Guide de soutien technique pour la clientèle* (technical support guide for those concerned by the RDWW).

The regulatory provisions on determining the volumes of water withdrawn and consumed also apply to water transferred out of the St. Lawrence River Basin and water returned to the Basin.

The information collected is stored in the province’s water withdrawal management database, *Gestion des prélèvements d’eau* (GPE).

5. Attach a copy of the State or Province’s Withdrawal application form(s). Copies of related regulations, policies, and manuals with the application form may be included to provide a more complete program description.

   Authorization of water withdrawals:

   The water withdrawal application form is provided (in French) at the following address:

   http://www.mddelcc.gouv.qc.ca/eau/prelevements/reglement-prelevement-protection/index.htm

   Declaration of water withdrawals:

   Regulation respecting the declaration of water withdrawals:

   http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R14_A.HTM

   Paper form for the declaration of water withdrawals:

   See attached.

   The electronic form is available through the portal for the water withdrawal management database, GPE:

   http://www.mddefp.gouv.qc.ca/eau/prelevements/enligne.htm

   The electronic form corresponds to the paper form.

   A step-by-step guide (in French) explains the electronic form and how to enter information into the water withdrawal management system:

http://www.mddefp.gouv.qc.ca/eau/prelevements/demarche-pasapas.pdf

Support guide – Regulation respecting the declaration of water withdrawals (in French) [Guide de soutien technique pour la clientèle - Règlement sur la déclaration des prélèvements d'eau]:

http://www.mddep.gouv.qc.ca/eau/prelevements/Guide-soutien-clientele.pdf

6. Summary description of the State's or Province's initiatives to support an improved scientific understanding of the Waters of the Basin and an improved understanding of the groundwater of the Basin and the role of groundwater in Basin water resource management. A description of State or Provincial initiatives or mechanisms to support an improved understanding of individual or cumulative impacts of Withdrawals, Consumptive Uses and Diversions on the Basin ecosystem should also be provided.

   EQA section 31.102 reflects Article 209 of the Agreement. It states in part: "*The Minister must conduct an assessment of the cumulative impacts of water withdrawals and consumptive uses in the St. Lawrence River Basin on the Basin ecosystem, particularly on the waters and water-dependent natural resources of the Basin, in accordance with the requirements of the Agreement.*" The assessment must be done at least every five years. The resulting information will provide a better understanding of the cumulative impacts of withdrawals, which in turn will enable informed decision-making.

   To support this work, and in line with the science component of the Agreement, Québec is collaborating with the Ouranos consortium, the federal government and the university institute INRS-ETE (*Institut national de la recherche scientifique – Eau Terre Environnement*) on an *evaluation of the impacts of global warming on the hydrologic cycle at the watershed level*. The project is focused on characterizing changes in water supply in the Great Lakes–St. Lawrence system, based on climate change scenarios at different spatio-temporal scales. A progress report is available at the following address:

   http://www.ouranos.ca/media/publication/269_GreatLakes_ScientificNote_Music2012.pdf

   Additionally, Québec is developing a method and management tools for assessing the individual and cumulative impacts of water withdrawals, for use in studying applications for authorization. To that end, Québec intends to enhance the criteria for assessing the impacts of water withdrawals relative to environmental flows. Québec is thus an active member of the working group on environmental flows of the Canadian Council of Ministers of the Environment (CCME). The group has engaged a third party to examine how best to approach the application of this concept, using four case studies on methods for measuring cumulative impacts and the use of environmental flows in different jurisdictions. The working group's members will use the recommendations in the final report as a guide in selecting the most appropriate method for their respective province.

   Under the Government of Québec's 2006-2012 Climate Change Action Plan, a variety of projects received funding to improve scientific knowledge about the impact of climate change and to develop adaptation strategies. Projects related to water include:

   - Programming to meet the need for precise governmental research on climate change adaptation. The funded projects will result in a series of deliverables (literature reviews, reports, maps, computer programs) to be made available to the relevant ministries and agencies of the Government of Québec.

- A hydrologic modeling platform was created for the watersheds of tributaries of the St. Lawrence, and pilot projects on water withdrawal management, dam management and crop irrigation were conducted or are underway in the Saint-François and Châteauguay rivers. Their results will inform the reflection process on adapting water management in populated Québec.

A more detailed description of these projects (in French) is provided in the sixth annual report on the implementation of the 2006-2012 Climate Change Action Plan, at:

http://www.mddefp.gouv.qc.ca/changements/plan_action/bilans/bilan6.pdf

Work is currently underway on science projects to be conducted under the 2013-2020 Climate Change Action Plan.

Lastly, in 2008 the Government decided to extend its knowledge of the groundwater resource by creating the *Programme d'acquisition de connaissances sur les eaux souterraines du Québec* [Québec groundwater knowledge acquisition program]. The purpose of the program is to develop a realistic and concrete portrait of the groundwater resources of municipalized territories in southern Québec, with the ultimate goal of protecting them and ensuring their sustainability. For more information on this program (in French), see:

http://www.mddefp.gouv.qc.ca/eau/souterraines/programmes/acquisition-connaissance.htm

7. Additional information.

   N/A

Water Conservation and Efficiency Program Report

1. Status of the State or Province's Water conservation and efficiency goals and objectives consistent with the Basin-wide goals and objectives. If developed, include State or Provincial goals and objectives or link to electronic version.

   In 2011 the Government of Québec adopted the goals and objectives set out in the Québec Water Conservation and Efficiency Program. In formulating the Program's guiding principles, Québec drew upon the goals expressed in the first paragraph of Article 304 of the Agreement. It then adapted to Québec realities the five regional objectives adopted on December 4, 2007 by the Regional Body.

   The goals and objectives of the Québec Water Conservation and Efficiency Program were developed in collaboration with all ministries of the Government of Québec that have water-related roles and responsibilities: the Ministère des Affaires municipales et de l'Occupation du territoire (MAMOT), Ministère de l'Énergie et des Ressources naturelles (MERN), Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ), Ministère du Conseil exécutif (MCE), Ministère de l'Éducation, du Loisir et du Sport (MELS), Ministère de l'Économie, de l'Innovation et des Exportations (MEIE), Ministère des Transports du Québec (MTQ), Ministère des Relations internationales et de la Francophonie (MRIF), and the Ministère de l'Enseignement supérieur, de la Recherche

et de la Science (MESRS) through the Interdepartmental Agreement Implementation Committee.

The goals and objectives of the Québec Water Conservation and Efficiency Program are presented in section 3.2 of that document, whose Attachment B provides greater detail:

http://www.mddelcc.gouv.qc.ca/programmes/conservation-utilisation-efficace-eau/programme-en.pdf

2. Water Conservation and Efficiency Program Overview.

   a. Citations to State/Provincial Water Conservation and Efficiency Program implementing laws, regulations and policies.

      Article 304 of the Agreement concerning the implementation of a water conservation and efficiency program came into force in Québec legislation with section 31.101 of the *Environment Quality Act* (EQA).

      EQA section 31.75 indicates that "withdrawals are subject to the authorization of the Minister or (…) the Government." The *Water Withdrawal and Protection Regulation* (WWPR) specifies that the applicant for an authorization must demonstrate the reasonableness of the water withdrawal. That assessment will take into account any existing or planned conservation and efficiency measures to reduce the water withdrawal.

      EQA section 31.78 indicates that when authorizing a water withdrawal, the Government may, "if it considers it necessary for greater protection of the environment, including aquatic ecosystems and wetlands, (...) prescribe requirements different from those prescribed by regulation of the Government." For example, specific conservation and efficiency measures could be required.

      Similarly, EQA section 31.79 states in part: "When issuing, renewing or amending a water withdrawal authorization, the Minister may (…) prescribe any condition, restriction or prohibition the Minister considers appropriate [, which] may be different from what is prescribed by regulation of the Government."

      EQA section 31.80 indicates that "a condition, restriction or prohibition imposed under section 31.79 may concern (…) (6) measures to ensure the conservation and efficient use of the water withdrawn and to reduce the quantity of water consumed, lost or not returned to the environment after use (…)."

      EQA section 31.92 states in part: "if it involves an average of 379,000 litres or more per day, (…) a transfer out of the St. Lawrence River Basin resulting from a new or increased water withdrawal described in that section may be authorized only if it meets the following conditions: (1) the transfer cannot be reasonably avoided or diminished through the conservation and efficient use of existing water supplies; (2) the quantity of water to be transferred is reasonable having regard to the water's intended use; (…) (4) the transfer is subject to water conservation measures determined by regulation of the Government, or by the Minister under other provisions of this Act."

The *Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin* enables the application of EQA section 31.92. Section 4 of the Regulation states in part: "If the proposed water transfer involves an average quantity of water of 379,000 litres or more per day that is intended to supply a waterworks system serving a municipality (…), the application must (…) be accompanied by the following documents and information: (1) a description of the measures for the preservation and efficient use of the water that the applicant undertakes to carry out, including timetables; (2) a description of the follow-up indicators that will be used to monitor those measures for preservation and efficient use; (3) a narrative description explaining why the water transfer is necessary. The description must also include an analysis of the efficiency of the current uses of water, including the application of preservation measures that are judicious in terms of environment protection and economically feasible with regard to existing water supplies so as to reduce as much as possible the volume of water to be transferred; (4) a narrative description explaining why the volumes of water whose transfer is proposed are reasonable in relation to the proposed use. To that end, the application must also include a water use plan. The plan must include: (…) (c) an evaluation of the savings resulting from an efficient use of water (…)."

The Regulation may be consulted at the following address:

http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R5_1_A.HTM

EQA section 31.95 states in part: "If it involves an average quantity or consumptive use of 379,000 litres or more per day, (…) a new withdrawal from the Basin, an increase in a new withdrawal or an increase in an existing withdrawal (…) may be authorized only if it meets the conditions set out below (…): (3) the withdrawal or consumptive use is subject to water conservation measures determined by regulation of the Government (…); (4) the quantity of water withdrawn or consumed is reasonable having regard, among other things, to: (…) (b) the measures implemented for the conservation and efficient use of water, including water from existing water supplies (…)." The *Water Withdrawal and Protection Regulation*, which enables the implementation of section 31.95, specifies that when studying an application for authorization, the ministry will consider the reasonableness of the water withdrawal. That assessment will take into account any existing or planned conservation and efficiency measures to reduce the water withdrawal.

The authorization process is a means of promoting the implementation of water conservation and efficiency measures. To that end, model measures specific to each sector of activity are currently being developed.

b. Summary description of the State's or Province's Water Conservation and Efficiency Program including what elements are voluntary and mandatory.

The Québec Water Conservation and Efficiency Program is described in the following document, whose Attachment C is a list of the Program's measures:

http://www.mddelcc.gouv.qc.ca/programmes/conservation-utilisation-efficace-eau/programme-en.pdf

Most of the measures are implemented on a voluntary basis by the ministries listed in section 7.1 of the present report, for application throughout the territory of Québec. Laws and regulations are mandatory.

3. For each of the regional objectives, identify how the State/Provincial program is consistent with the regional objective, and a description of how the State or Province promotes Environmentally Sound and Economically Feasible Water Conservation Measures. More details for each objective are available at http://www.glslregionalbody.org/Docs/Resolutions/GLSLRWRRB_Resolution_6-Conservation-Efficiency.pdf and can be provided in the table below.

OBJECTIVES	LEGISLATIVE OR PROGRAM CITATION
➢ Guide programs toward long-term sustainable water use.	The first goal, *Foster long-term sustainable water use that takes ecosystem health and water needs into account*, directly concerns those government actions that can help make water withdrawals in Québec sustainable. The actions are grouped under three objectives: legal issues, reduced water use in various activity sectors, and ecosystem protection.
➢ Adopt and implement supply and demand management to promote efficient use and conservation of water resources.	The second goal, *Adopt and implement a supply and demand management approach that takes into account the expected impacts of climate change*, concerns the new clearance system for water withdrawals that now incorporates sound management principles. The goal has two objectives: determine how much water is withdrawn, consumed, and disposed of and learn more about how climate change affects supply and demand.
➢ Improve monitoring and standardize data reporting among State and Provincial water conservation and efficiency programs.	The third goal, *Implement monitoring measures for the Water Conservation and Efficiency Program*, specifically identifies MDDELCC as Program coordinator and monitor. This goal has two objectives: develop a Program assessment process and make Program assessment a source of ongoing knowledge acquisition.
➢ Develop science, technology and research.	The fourth goal, *Promote scientific research, technological development, and knowledge acquisition*, concerns the development of knowledge on water conservation and efficiency. The three objectives under this goal are to strengthen research efforts, encourage partnerships, and foster the development of new technology.
➢ Develop education programs and information sharing for all water users.	The fifth goal, *Educate, inform, equip, and motivate water stakeholders and users*, groups together concrete means to guide, support, and empower water stakeholders and users in their approach to water conservation and efficiency. This goal involves four objectives: raising awareness of the

	value of water, sharing information, developing concrete tools, and recognizing efforts.

4. Description of the State or Provincial Water conservation and efficiency program implementation timeline and status.

   To facilitate coordination of ministries' activities under the Agreement, MDDELCC has set up an Interdepartmental Agreement Implementation Committee[1] (hereinafter referred to as the "Committee"). The Committee coordinates and integrates the work of the ministries under the Program and strengthens their water conservation and efficiency initiatives in their respective areas of responsibility. Since 2012, the Committee has been under the umbrella of the Interdepartmental Committee on Integrated Water Management of the MDDELCC.

   The Program is intended to be introduced gradually, as water conservation and efficiency is a new field in which knowledge is still in the early development stage in Québec, given the relative abundance of water. Effective water demand management will require new knowledge to ensure the right decisions are made. As knowledge improves and we gain a better understanding of water quantity issues, ministries will have the latitude they need to introduce new measures under the Program.

   It should be noted that Program measures will depend to a great extent on the initiatives and work of each ministry. The ministries must therefore adopt and execute five-year plans for each Program measure under their responsibility and set annual, measurable targets using benchmarks. It will then be up to each ministry to develop new water conservation and efficiency measures in its area of expertise.

   As Program coordinator, MDDELCC provides Program assessments and reports in compliance with Article 304 of the Agreement. Each measure is assessed annually, and the results are released in a public report. For measures under development, assessment consists of determining progress based on the ministry's action plan. For measures already being applied, the ministry's five-year targets are examined using the corresponding benchmarks to determine to what extent the targets have been attained.

   A progress report on Program objectives and goals is prepared every five years, submitted to the Regional Body, and made public. Given that Program objectives are long term and complex, five-year targets are set that are more specific and measurable to aid in drawing up the report and provide structure. The five-year review is also an opportunity to reassess the five-year targets based on new knowledge and include new measures that have been implemented or are under development.

   To encourage ministries to adopt new measures in their areas of responsibility, MDDELCC will work with the ministries to ensure that new five-year targets are set for Program objectives. Targets will be added as knowledge of water supply and demand improves and issues become clearer.

[1] The Interdepartmental Agreement Implementation Committee was set up before the Agreement was signed in 2005 to define Québec's position vis-à-vis commitments and requirements under the Agreement. Professionals from the various ministry departments involved sit on the committee.

Appendix 1. Description of how the State or Province promotes Environmentally Sound and Economically Feasible Water Conservation Measures

Goal 1: Foster long-term sustainable water use that takes ecosystems health and varied water uses into account

Objective 1: Review existing laws and enact new legislation as needed

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 1.1: Include the provisions of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement in Québec legislation							
1	Entry into force of the Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection (Water Act)	Adopted on June 11, 2009; fully in force on August 14, 2014	The Act includes the provisions of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement in the Environment Quality Act (sections 31.88 to 31.104) and introducing section 31.101 which presents considerations on water conservation and efficiency programs.	Include the requirements of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement in Québec legislation by implementing all the provisions of the Water Act. (Adopted in 2009, only the subdivision concerning the "management of water resources" remained to be implemented.)	Entry into force of regulations implementing the Agreement - Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin (adoption June 11, 2011, entry into force September 1, 2011) - Regulation to amend the Regulation respecting the declaration of water withdrawals (provisions of the Agreement), (adoption June 11, 2011, entry into force September 1, 2011) - Water Withdrawal and Protection Regulation (adoption July 16, 2014, entry into force August 14, 2014)	All regulations have come into force, including the Water Withdrawal and Protection Regulation, which was adopted in July 2014 and came into force on August 14, 2014.	All requirements of the Agreement are included in Québec legislation through the coming into force of all provisions of the Water Act.
Target 1.2: Enact the regulations required to control water withdrawals							
2	Entry into force of the Regulation respecting the declaration of water withdrawals (RDWW)	Adopted on August 12, 2009, implemented on September 10, 2009 and amended on June 22, 2011	*Also meets objective 4.* The entry into force of this regulation provides a framework for water withdrawals by enabling us to know the volumes of water withdrawn and consumed in Québec. The regulation concerns withdrawals of 75 000 litres or more per day, with exceptions. This information will provide knowledge about water uses that will serve in determining the potential impact of new or increased withdrawals and the need for water conservation and efficiency.	Implementation of all provisions of the Regulation respecting the declaration of water withdrawals. (The regulation entered fully into force in 2011.)	Measure completed	Measure completed	
3	Entry into force of the Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin	Adopted on June 22, 2011 and implemented on September 1, 2011	The entry into force of this regulation provides a framework for certain cases that are exempt from the prohibition against water transfers in order to supply municipal water systems. Section 3 of the regulation indicates that an application for authorization must be filed with the MDDELCC for any new or increased transfer of water out of the St. Lawrence River Basin. For a transfer to be authorized, the withdrawer must implement water conservation and efficiency measures.	Implementation of all provisions of the Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin. (The regulation entered fully into force in 2011.)	Measure completed	Measure completed	All provisions of the Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin have been implemented.
4	Entry into force of the Water Withdrawal and Protection Regulation (WWPR)	Adopted on July 17, 2014 and implemented on August 14, 2014	*Also meets objective 12.* The entry into force of this regulation provides a framework for water withdrawals. It sets terms and conditions for the authorization of water withdrawals, and administrative and penal provisions to ensure that it is respected. To be authorized, withdrawals of 379 000 litres or more per day that are subject to section 31.95 of the Environment Quality Act must respect certain conditions, notably the putting in place of water conservation and efficiency measures. Authorization of withdrawals of 75 000 to 379 000 litres per day could be conditional on the implementation of water conservation and efficiency measures consistent with the vulnerability of the environment.	Entry into force of the Water Withdrawal and Protection Regulation (WWPR). (The WWPR came into force on August 14, 2014, except for sections 11 to 30, which enter into force on March 2, 2015, and sections 68 and 75, which enter into force on April 1, 2015.)	Entry into force of the WWPR except for sections 11 to 30 and sections 68 and 75	The WWPR came into force on August 14, 2014 except for sections 11 to 30 and sections 68 and 75	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 2: Promote reduced water use in all sectors							
Target 2.1: Set up policy frameworks to promote reduced water use in institutional and municipal sectors							
6	Drinking water economy strategy (SEEP)	April 1, 2012	This strategy requires municipalities to establish an action plan to reduce the consumption of drinking water; to put in place, if necessary, a leak detection and repair program; to adopt a municipal by-law on the use of drinking water; and to produce an annual report on water management. This MAMOT measure will lead to reduced water use in all sectors of activity that obtain water from municipal systems.	Support Québec municipalities that have drinking water distribution systems in their water economy efforts.	Analysis and approval of the water use forms submitted by municipalities for 2012.	As of November 29, 2013 a total of 564 municipalities, representing 94% of the population served by water distribution systems in Québec, had submitted the form to MAMOT.	
7	Amendment of the Québec Construction Code (Plumbing and Building chapters) prohibiting the sale or installation of water-wasteful equipment (part of the drinking water economy strategy [SEEP])	Underway; amendments planned for 2013	For the clientele concerned, the construction code will prohibit the installation of toilets that use more than 6 litres/flush, urinals that use more than 1.9 litre/flush, and automatic flush urinals, along with cooling and air conditioning systems that use non-recirculating drinking water. This measure will reduce the use of drinking water in the residential and institutional sectors.	Through amendments to the construction code, prohibit the installation of toilets that use more than 6 litres/flush, urinals that use more than 1.9 litre/flush, and automatic flush urinals, along with cooling and air conditioning systems that use non-recirculating drinking water.	Amend the construction code to prohibit, for the clientele concerned, the installation of toilets using more than 6 litres/flush, urinals using more than 1.9 litre/flush, and automatic flush urinals.	Construction code revised on April 29, 2014.	
44	Québec Water Strategy 2016-2030	In development/ launch expected in 2016	The Québec Water Strategy 2016-2030 (in development) should include an objective for sustainable water quantity management. The Strategy will take the form of five-year action plans including measures to promote a reduction in water use in all sectors of activity.	With the adoption of a Québec Water Strategy and five-year action plans, put in place an action framework to promote a reduction in water use in all sectors of activity.	Preparation of a draft strategy	A draft strategy is being drawn up.	
8	Continue the implementation of drinking water economy policies in government buildings and those of the health and education systems	Ongoing	This measure enables the adoption of action plans and the implementation of targeted corrective measures in government buildings to reduce drinking water use in the institutional sector.	Adoption of action plans and implementation of targeted corrective measures in government buildings to reduce the use of drinking water in the institutional sector.	Adoption of action plans in the health system, cégeps and universities.	Action plans adopted.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 2.2: Put in place economic incentives that encourage water users to reduce the volume of their water withdrawals							
9	Entry into force of the Regulation respecting the charges payable for the use of water	Adopted on December1, 2010 and implemented on January 1, 2011	*Also meets objective 11.* This regulation obliges all water withdrawers of 75 000 litres or more per day to pay a charge (sections 1 to 15) based on the volume of water withdrawn. It is an economic incentive that promotes a reduction in water use in all sectors of activity.	Put in place economic incentives to encourage water users to reduce the volume of their water withdrawals. The objective for the next 5 years is to monitor annual variations in the volumes of water withdrawn by withdrawers who have paid water use charges.	Total volume of water (m3) on which a charge was paid on October 1, 2014 (for 2013).	869 755 238 m3	
Target 2.3: Determine effective water conservation and efficiency measures applicable to every sector within the withdrawal authorization system							
10	Development of water conservation and efficiency measures applicable to each sector of activity within the framework for the authorization of new or increased water withdrawals	Underway. First version expected for autumn 2013, with ongoing updates.	This measure is part of the new authorization regime for water withdrawals planned in the draft Water Withdrawal and Protection Regulation. For new or increased withdrawals, water withdrawers of 75 000 litres or more per day must demonstrate the acceptability of their application and, among other things, may propose water conservation and efficiency measures to reduce their withdrawals. Also, withdrawers of 379 000 litres or more per day who are subject to sec. 31.95 of the Environment Quality Act must implement water conservation and efficiency measures in order to apply for authorization. Production of a reference list of suggested water conservation and efficiency measures adapted to each sector will facilitate the adoption of such measures by those concerned.	Existence of a reference document on water conservation and efficiency measures appropriate for each sector of activity, containing current knowledge and available to promoters and analysts.	Perform documentary research on each sector of activity. Obtain a preliminary version of the document.	Research carried out in summer 2013. Preliminary version obtained in autumn 2013.	
<u>Objective 3: Promote efforts to maintain adequate water quantity and quality to ensure ecosystem integrity</u>							
Target 3.1: Develop and apply methods to take into account the cumulative impacts of withdrawals on the carrying capacity of ecosystems and the vulnerability of drinking water withdrawals							
11	Evaluation of cumulative impacts when analyzing applications for withdrawals, consumption and transfers of water (water withdrawal impact analysis [AIPE])	Underway	*Also meets objective 5.* The method developed for analyzing the cumulative impacts of water withdrawals makes it possible to ensure that sufficient quantities of water are available to maintain the integrity of ecosystems. Under the new authorization regime in the draft Water Withdrawal and Protection Regulation, withdrawers must implement water conservation and efficiency measures that are consistent with the potential impact of their withdrawals on the integrity of ecosystems.	Establish a process/methodology that accounts for the cumulative impacts of withdrawals, to form part of the MDDELCC's authorization process.	Participate in the work of the subcommittee of the Canadian Council of Ministers of the Environment (CCME) on environmental flows and examples from other jurisdictions. Participate in the development of research projects with the Centre d'expertise hydrique du Québec and Ouranos. Projects will be chosen in autumn 2014.	Final report with four case studies delivered to the CCME in June 2014. No project have been choose in 2014.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 3.2: Adapt water quantity management to take into account the carrying capacity of ecosystems							
12	Adaptation of the management of public dams	Ongoing	The management plans of works managed by the Centre d'expertise hydrique du Québec (CEHQ) contain operating parameters that take into account high- and low-runoff periods. Where necessary, management plans are adapted to respect the support capacity of ecosystems.	Provide ongoing ecosystemic management of government-owned dams, to optimize the support capacity of ecosystems in high-water and low-water periods.	Continuous monitoring of the 39 public dams of the Government of Québec.	The 39 public dams of the Government of Québec have been constantly monitored.	
13	Ottawa River Regulation Planning Board (ORRPB)	Underway	The Board consists of representatives from Canada, Ontario and Québec and provides integrated management of the main reservoirs of the Ottawa River watershed. It attempts to prevent flooding along the Ottawa River and its tributaries as well as in the Montréal region, taking into account the interests of different users. The reservoirs provide supplementary water in low-water periods, helping to maintain the integrity of ecosystems. The Board sets common objectives to optimize integrated management in low-water periods.	In high-water periods, continuous ecosystemic management of dams in accordance with the ORRPB Agreement to optimize the support capacity of ecosystems. In low-water periods, continuous ecosystemic management of dams in accordance with the ORRPB Agreement to optimize the support capacity of ecosystems.	Submission of the 2013 annual report of the ORRPB on the management plans in low-level periods, for dams included in the ORRPB Agreement. Renewal of the verbal agreement to ensure the support capacity of ecosystems in low-level periods, for dams included in the ORRPB Agreement.	The 2013 annual report of the ORRPB has been presented. In 2014, minutes of the March and/or June meeting indicating that the verbal agreement on the support capacity of ecosystems in low-level periods, for dams included in the ORRPB Agreement, was adopted.	

Goal 2: Adopt and implement a supply and demand management approach that takes into account the expected impact of climate change

Objective 4: Accurately measure the amount of water withdrawn, consumed, and disposed of in Quebec

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 4.1: Establish a water withdrawal management system							
14	Launch of the Québec water withdrawal management database (GPE)	March 2010	The system provides a way to collect, in a database, all of the information on water withdrawals obtained under the Regulation respecting the declaration of water withdrawals and the Regulation respecting the charges payable for the use of water. This data gives a portrait of the quantities of water withdrawn in Québec (volumes of 75 000 litres or more per day), presented in a structured way thanks to the GPE system.	By March 2009, to have developed and put online a water withdrawal management system for the purposes of the Regulation respecting the declaration of water withdrawals.	GPE online and in operation.	GPE went online in 2009 and is 100% operational.	The water withdrawal management database has been developed and brought online. The system is 100% operational and allows the collection of data on water withdrawals in Québec.
Target 4.2: Develop and strengthen knowledge on withdrawn water quantities for all activity sectors							
15	MAPAQ-MDDELCC administrative agreement on the declaration of water withdrawals for agricultural and fish-farming purposes	Dec. 7, 2011; terminates on Sept. 30, 2016 with tacit renewal	This agreement facilitates the declaration of water withdrawals by agricultural and fish-farming producers. It provides for the setting up of a project to monitor water withdrawals by typical fish-farming businesses. This information served in establishing standards to facilitate the annual declaration of withdrawals by such businesses under the Regulation respecting the declaration of water withdrawals (adopted June 22, 2011). This measure contributes to improving knowledge about the volumes of water withdrawn and consumed in agriculture and fish-farming.	Consolidate knowledge about water use by the agricultural and fish-farming sectors.	MAPAQ has sent MDDELCC the 2013 data on agricultural and fish-farming water withdrawals throughout the territory of Québec. Draft guide produced for agricultural and fish-farming producers on the application of the Regulation respecting the declaration of water withdrawals.	2013 data obtained by MAPAQ. Draft application guide produced.	
2	Entry into force of the Regulation respecting the declaration of water withdrawals (RDWW)	Adopted on August 12, 2009, implemented on September 10, 2009 and amended on June 22, 2011	*Also meets objective 1.* Section 9 of the Regulation obliges withdrawers of 75 000 litres or more per day, across Québec, to declare their water withdrawals. For withdrawers on the territory of the Great Lakes St-Lawrence River Basin Sustainable Water Resources Agreement, and that are able to withdraw 379 000 litres or more per day, section 18.7 makes it mandatory to declare the volumes withdrawn, consumed and transferred out of the St. Lawrence River Basin. This measure will increase knowledge about the quantities of water withdrawn in each sector of activity across Québec.	Know the quantities of water withdrawn throughout the territory of Québec by all sectors of activity.	Receive the annual declarations of all water withdrawers concerned by the regulation and implement the quality assurance protocol for data.	Annual declarations received from all water withdrawers concerned by the regulation. The quality assurance protocol, to ensure the quality of data transmitted, was put into application.	

Objective 5: Take into account the impact of climate change on water supply and demand

Target 5.1: Develop and strengthen knowledge on groundwater supply

16	Knowledge acquisition program on groundwater (PACES)	First official announcements of funding in spring 2009	The knowledge acquisition program was designed to accumulate knowledge about the volume and recharging of groundwater aquifers. The measure increases knowledge about the groundwater supply.	Over the next 5 years, pursue the knowledge acquisition program on groundwater (PACES) for southern Québec	Area covered for municipalized southern Québec (in %)	54%	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 5.2: Develop and strengthen knowledge on the effects of climate change on surface water supply							
17	Production of the Atlas hydroclimatique du Québec méridional (hydroclimatic atlas of southern Québec) for 2050	March 2013	The atlas illustrates the impacts of climate change on the water regime of tributaries of the St. Lawrence River projected to 2050. It also suggests how the surface water supply will evolve in response to climate change, which can be used to determine the need for water conservation and efficiency measures in vulnerable watersheds.	By 2020, produce a series of hydroclimatic atlases (3) with iterative improvements on the content and underlying methodology.	Perform 50% of the work toward production of the 2015 atlas.	Work done. A hydrologic modelling platform has been implemented for southern Québec. This platform will be used to produce the hydrologic simulations necessary for the atlas.	
18	Implementation of the St. Lawrence Action Plan (SLAP) 2011-2026	November 29, 2011	*Also meets objectives 9 and 12.* The Numerical Environmental Prediction Program in SLAP 2011-2026 provides a better understanding of the ecosystem of the St. Lawrence, notably with regard to water levels and flows. It serves in assessing the impact of climate change on water resources and determining the need for water conservation and efficiency measures in vulnerable watersheds. The work of the Climate Change Coordination Committee will provide an overall portrait of the issues surrounding the impact of climate change on the St. Lawrence, and of needs for knowledge development about impacts and adaptation needs. Climate change adaptation could include putting in place water conservation and efficiency measures. Project 7.2.1 in the Sustainable Use issue, entitled "Study the impact of climate change on water flows", will produce knowledge about the effects of climate change on water supplies.	In the next 5 years, implement the activities in SLAP that concern more specifically the impacts of climate change on water supply and demand: - By 2016, complete project 7.2.1 "Study the impacts of climate change on water supplies". - By 2016, complete project 7.2.3 "Set up a Climate Change Coordination Committee". In the program of activities for 2016-2021, develop projects on the impact of climate change on water supply and demand. For the next 5 years, continue the work of the Numerical Environmental Prediction Working Group.	2013-2014: monitor project 7.2.1 "Study the impacts of climate change on water flow". 2013-2014: monitor project 7.2.3 "Set up a Climate Change Coordination Committee". Monitor work by the Numerical Environmental Prediction Working Group.	Project 7.2.1 "Study the impacts of climate change on water flows" is proceeding as planned. Project 7.2.3 "Set up a Climate Change Coordination Committee" is proceeding as planned. The work of the Numerical Environmental Prediction Working Group is proceeding as planned.	
Target 5.3: Set up a climate change policy framework that takes into account water resources							
19	Implementation of the 2013–2020 Government Strategy for Climate Change Adaptation	April 2013	The Government Strategy for Climate Change Adaptation is aimed at strengthening society's resilience to the impacts of climate change. It accords great importance to water resources. The sixteenth objective of the Strategy is to prioritize the conservation and protection of water resources, with a view toward conserving biodiversity and the benefits offered by ecosystems. Climate change adaptation and the protection of water resources can include the adoption of water conservation and efficiency measures.	Implementation of the climate change adaptation strategy.	Launch of the climate change adaptation strategy, which includes an objective that prioritizes the conservation of water resources.	Climate change adaptation strategy, including an objective (#16) that prioritizes the conservation of water resources; launched in June 2012.	The Climate Change Adaptation Strategy was launched in 2012 and includes an objective on water conservation.
20	Support for research projects by the Ouranos consortium on climate change and water conservation and efficiency, as part of the implementation of the 2013-2020 action plan (PACC 2013-2020) on climate change.	April 2013	Priority 6 of PACC 2013-2020 is to support research in climate change adaptation. This includes funding research by the Ouranos consortium to improve knowledge about water resources. This in turn will increase knowledge about the relationship between climate change and water conservation and efficiency, and will aid in developing adaptation solutions.	Increase knowledge about the impact of climate change on water conservation and efficiency , and on adaptation solutions, as part of PACC 2013-2020.	Number of Ouranos research projects funded under PACC 2013-2020 concerning climate change and water conservation and efficiency .	1 project funded: Probable maximum precipitation and probable maximum flood under changing climate conditions.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 5.4: Develop and apply a method to take into account cumulative impacts (including climate change impacts) on water resources							
11	Evaluation of cumulative impacts when analyzing applications for withdrawals, consumption and transfers of water (water withdrawal impact analysis [AIPE])	Underway	*Also meets objective 3.* *The impact of climate change on the water regime (hydrologic indicators) is taken into account in the evaluation of cumulative impacts on sensitive components of the basin (ecosystems and uses). This measure takes into account the impact of climate change on the vulnerability of watersheds, and will aid in planning water conservation and efficiency measures to reduce that vulnerability.*	Establish a process/methodology that takes into account the cumulative impacts of withdrawals, to form part of the MDDELCC's authorization process.	Participate in the work of the subcommittee of the Canadian Council of Ministers of the Environment (CCME) on environmental flows and examples from other jurisdictions. Participate in the development of research projects with the Centre d'expertise hydrique du Québec and Ouranos. Projects will be chosen in autumn 2014.	Final report with four case studies delivered to the CCME in June 2014. No project have been choose in 2014.	

Goal 3: Set up monitoring measures for the Water Conservation and Efficiency Program

Objective 6: Develop and implement a process to evaluate whether the objectives are being met

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 6.1: Determine and apply the annual assessment process and the five-year review of the Program							
E1	Determine five-year targets for each objective of the program	Underway	To facilitate evaluation of the progress of the program in terms of the achievement of each objective, we must be able to determine the different facets of the objectives. These facets are determined within five-year targets. The first targets are established on the basis of measures contained in the inventory when the first version of the program was tabled.	Define five-year targets for each objective to facilitate monitoring and the five-year evaluation of the program.	Define five-year targets for each objective of the program tabled in September 2013.	Five-year targets have been defined.	
E2	Determine indicators for each measure of the program	Underway	In collaboration with those responsible for measures in each ministry concerned, determine annual targets that will be measured with the different indicators.	Define, in collaboration with measure officers, five-year objectives and annual monitoring indicators for each measure.	Define five-year objectives for each measure of the program filed in September 2013. Define annual monitoring indicators for each measure of the program filed in September 2013.	Five-year objectives have been defined for each measure. Annual monitoring indicators have been defined for each measure.	
E3	Carry out annual monitoring of program measures	Underway	Annually, the MDDELCC must monitor measure indicators as defined in collaboration with the ministries concerned. This annual evaluation must be made public.	Annually, monitor the measure indicators in collaboration with the officers for each measure in the ministries concerned. Prepare the annual report of the program and send it to the Conseil régional (regional council). The latter will publish the report.	Monitoring of the 2014 indicators for each measure is performed in collaboration with the ministries concerned. The 2014 annual report of the program is prepared. The 2014 annual report is sent to the Conseil régional. The 2014 report is made public by the Conseil régional.	Monitoring of the 2014 indicators for each measure was performed in collaboration with the ministries concerned. The 2014 annual report of the program has been prepared. The 2014 annual report has been sent to the Conseil régional. The 2014 report was made public by the Conseil régional.	
E4	Perform the five-year evaluation of targets	Underway	Every five years, the MDDELCC must perform an assessment of the conservation program. This will consist of evaluating the achievement of objectives relative to progress within the five-year targets.	In 2018, conduct a five-year evaluation of the targets.	N/A	N/A	
E5	Identify new measures being developed and integrate them into the program	Underway	During annual monitoring, new measures being developed in each ministry concerned will be identified in order to add them to the program.	Enrich the program with the addition of new measures.	Identify new measures being developed and integrate them into the program. Number of measures added.	Each ministry was queried for the purpose of identifying new measures being developed. No new measures were added.	
Target 6.2: Use acquired knowledge to adapt the Water Conservation and Efficiency Program							
E6	Make changes to the program to take new knowledge into account	Underway	The Québec program must take into account the modifications made to regional objectives. The latter are revised every 5 years on the basis of new knowledge about the cumulative impacts of water withdrawals.	Adapt the program based on the modifications made to regional objectives.	Modify the program based on the new regional objectives.	No modification of regional objectives.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 7: Make monitoring a source of new knowledge and know-how for Agreement signatories and all other water stakeholders and users							
Target 7.1: Disseminate the results of the annual assessment and the five-year review of the Water Conservation and Efficiency Program							
E7	Publish results from the annual monitoring of measures on the water knowledge portal	Annually	Annually, the MDDELCC must monitor the progress of measures and make its report public. Publication will be on the water knowledge portal.	Once the water knowledge portal is online and accessible (measure 38), publish results from the annual monitoring of measures.	Publication of results from the annual monitoring of measures on the water knowledge portal.	The water knowledge portal is in development. In the meantime, results are published on the website of the MDDELCC.	
E8	Present the five-year evaluation report to the Conseil régional and publish it on the water knowledge portal	Every 5 years starting 2013 (2018)	Every five years, the MDDELCC must evaluate the achievement of program objectives. The report must be submitted to the Conseil régional and made public via publication on the water knowledge portal.	In 2018, send the five-year evaluation report to the Conseil régional and publish it on the water knowledge portal.	N/A	N/A	

Goal 4: Promote scientific research, technological development and knowledge acquisition

Objective 8: Strengthen research efforts on water conservation and efficiency measures

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 8.1: Develop and strengthen knowledge on water conservation and efficiency in the municipal, mining and agricultural sectors							
21	Participation in events and committees that bring together experts in the field to improve knowledge in MAMOT about concepts related to water economy (part of the Drinking water economy strategy)	Ongoing	MAMOT participates in training offered by the American Water Works Association (AWWA) and in the Canadian committee on water economy. This measure will develop and consolidate knowledge on water conservation and efficiency in the municipal sector.	Participation in events and committees that bring together experts in the field to improve knowledge in MAMOT on concepts surrounding water economy.	Participation in the conference of the International Water Association (IWA). Participation in Canadian and Québec committees on water economy.	Presentation given at, and participation in, an IWA training session. Participation in Canadian and Québec committees on water economy.	
22	Organize and prepare training sessions in water economy to support municipalities (part of the Drinking water economy strategy)	Ongoing	The 18 training sessions offered in the regions and the 2 web conferences organized by MAMOT benefited more than 700 representatives from municipal circles to support them in their efforts. An annual 2-day training course on the Drinking water economy strategy (SEEP), prepared in collaboration with Réseau Environnement, reached over 250 stakeholders. A web conference on SEEP monitoring and the new form is now available for free on the Québec Municipal website. The Strategy will be presented at twenty conventions and conferences per year. This measure will foster the consolidation and sharing of knowledge about water conservation and efficiency for stakeholders in the municipal sector.	Consolidate and share knowledge about water conservation and efficiency for stakeholders in the municipal sector by organizing training sessions on water economy.	Organize and prepare training sessions on water economy.	Session on the cost of water services and infrastructure management with the City of Hamilton at the INFRA conference of the Centre d'expertise et de recherche en infrastructures urbaines (CERIU). A training day on water meters and backup systems with North American specialists, organized by Réseau Environnement. Training on water and watering organized by the Fédération interdisciplinaire de l'horticulture ornementale du Québec (FIHOQ - interdisciplinary federation for ornamental horticulture). Sections and videos on best practices in water economy, and on outstanding municipalities, in collaboration with Source magazine.	
23	Annual production of municipal reports on water use to evaluate the quantities of water distributed and water losses in distribution systems (part of the Drinking water economy strategy)	June 8, 2012	Under SEEP, municipalities must produce an annual report on their water use. A central database collects the data sent in by municipalities (about 200 data items per municipality). This measure consolidates knowledge about the quantities of water distributed and water system losses in the municipal sector.	Consolidate knowledge on the quantities of water distributed and on water system losses for the municipal sector, through updates of the annual reports on drinking water.	Update of the annual report on drinking water management with 2012 data.	Report updated on November 29, 2013 with 2012 data.	
24	Partnership research program on sustainable development of the mining sector	Decree approved on March 27, 2013/ 2012-2013 to 2016-2017	In this program, a number of research priorities have to do with water: water infiltration control, acid mine drainage, management of mine tailings in water, passive water treatment, reduction of water consumption. This measure will develop knowledge on water use in the mining sector (industrial).	Acquire knowledge about water conservation and efficiency by funding research projects in partnership with the mining sector, under the partnership research program on sustainable development of the mining sector, promoted by the Fonds de Recherche du Québec - Nature et Technologie (FRQNT). Over the next 5 years, three calls for proposals will be launched for a total of $15 million.	Number of projects funded on water conservation and efficiency during the first call of proposals	First call for proposals made in June 2013: 1 project funded on water conservation and efficiency	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
25	Research and technology transfer projects concerning the conservation and optimal use of water in agriculture, under the action framework to develop water management and conservation strategies in the 2013-2020 action plan on climate change	Underway	This measure promotes research and technology transfer projects on the conservation and optimal use of water in agriculture. Project results contribute to knowledge about water use in the agricultural sector, and will aid in finding effective ways to reduce water use in this sector.	Completion of 5 research projects on water conservation and efficiency by 2018.	Number of research projects completed	No research projects completed	
26	Characterization project on water use in irrigation	Underway from April 2013 to March 2016	This project's objectives are to quantify irrigation doses and the water storage capacity of soils, to test methods of estimating water withdrawals, and to produce a seasonal report on water inputs, with a view toward estimating the extent to which irrigation inputs are insufficient or excessive. The results of these projects will increase knowledge on the topic, and could aid in efforts to optimize the use of irrigation in agriculture.	Completion of the characterization project on water use in irrigation by 2016	Percentage by which the research project has progressed (%)	Research project 33% complete.	

Objective 9: Foster research partnerships, multidisciplinary studies and collaborative activities

Target 9.1: Develop and set up a collaboration work space for water researchers

27	Collaboration space on the water knowledge portal	Underway	The collaboration space is intended as a place for exchanging knowledge and know-how by a range of actors and users (governments, municipalities, businesses, associations, watershed committees, etc.) along with university researchers. This measure will encourage research partnerships and collaborative activities.	In the next 5 years, creation of a pilot project with researchers in the field of water.	Start-up of the detailed architecture of the collaborative portal (see measure 38).	The objectives for 2014 have been achieved: the detailed architecture of the platform is being created.	

Target 9.2: Include the notions of partnership, multidisciplinarity and collaboration in the definition of government's water research projects

18	Implementation of the St. Lawrence Action Plan 2011-2026 (SLAP)	November 29, 2011	*Also meets objectives 5 and 12.* Projects included under SLAP must be designed and conducted in collaboration with at least one department of the provincial and federal governments. One objective of the Climate Change Coordination Committee is to determine research projects in collaboration with local stakeholders. The implementation of integrated management of the St. Lawrence by holding an annual forum, and the creation of regional collaboration tables (RCTs) will encourage participation by communities.	Programmation of joint activities for 2011-2016, along with program activities for monitoring the status of the St. Lawrence and for numerical environmental prediction are done. Integrated management of the St. Lawrence achieved by holding an annual forum and by creating 6 RCTs. By 2016, develop and implement the 2016-2021 plan.	Follow up on the 2013-2014 report on projects and activities. Continue the creation of RCTs. Hold an annual forum on the St. Lawrence.	The 2013-2014 report on the projects and activities of SLAP was produced in May 2014. Four RCTs have been designated. The 2014 forum on the St. Lawrence took place.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 10: Encourage the development of innovative water technologies							
Target 10.1: Introduce the water conservation and efficiency component into strategies and programs aimed at supporting technology development							
28	Committee on new technologies for domestic wastewater treatment	Committee created in 1999; Protocol published in 2008	The committee works to safeguard public health and protect the environment by validating the performance claims for water treatment technologies, and provides quality control on projects authorized by the MDDELCC or funded by MAMOT. It also publishes and makes available technical information about these technologies. This measure provides quality control on new water technologies.	Publication of information on new technologies in domestic wastewater treatment and drinking water treatment, with relation to water conservation and efficiency.	Number of technical information sheets on the new technologies published on the website of the MDDELCC in relation to water conservation and efficiency.	8 technical information sheets published.	
29	National policy on research and innovation	In development; schedule to come	One objective of the component to support technological innovation in business, which is part of the innovation support program created under the Strategy, is to support the development and marketing of processes and technologies for limiting and repairing water-related damage. In the national policy on research and innovation, two innovation assistance programs can support projects and centres concerned with water conservation and efficiency. They are: the innovation support program (PAI) (start-up support for new technological businesses), component 1; and the support program for technology enhancement and transfer (PSVT), component 1, envelope for college centres for technology transfer (CCTT). One of the existing centres is dedicated to this area: the Centre des technologies de l'eau (CTE). This measure supports the development of new water technologies.	Support the development of new technologies related to water conservation and efficiency.	Number of technological businesses created (under the PAI and CTE) around water conservation and efficiency. Number of patents issued to small and medium enterprises (SMEs) involving water conservation and efficiency (under the PAI and CTE). Median revenue growth rate of businesses involved with water conservation and efficiency, in business with the CTE.	Under the PAI: Businesses created: 0 Patents issued: 0 Median growth rate: n/a Under the CTE: Businesses created: 1 Patents issued: 0 Median growth rate: n/a	
30	Projects of the agrifood innovation support program (PSIA) / Innov'Action agroalimentaire program (starting 2013)	2009	Some projects funded under the PSIA concern the optimization of water use in agriculture. This measure supports the development of new water technologies in agriculture.	Support the development of processes and technologies in agriculture by funding 15 projects on optimizing water use or improving water quality.	Number of projects terminated.	4 projects terminated.	
31	Canada-Québec Water Supply Expansion Program (CQWSEP)	Program terminated in 2009	The CQWSEP encouraged individual and group projects to optimize irrigation in agriculture. This measure supported the development of new water technologies in agriculture.	Complete the Canada-Québec Water Supply Expansion Program (CQWSEP).	Measure completed	Measure completed	The program was completed in 2009.

Goal 5: Develop education programs, information sharing networks, resources, and tools to mobilize all water stakeholder and users

Objective 11: Make water stakeholders and users more aware of the value of water

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 11.1: Develop and implement awareness tools intended for youth and the general public							
32	Le coin de Rafale	Underway and ongoing	This section of the MDDELCC's website is specifically addressed to youth. This measure contributes to raising the awareness of young people about water conservation and efficiency.	Raise the awareness of young people using "Did you know" information capsules and Rafale adventures on the theme of water conservation and efficiency.	Put online a "Did you know" information capsule on rainwater recovery barrels.	The "Did you know" information capsule on rainwater recovery barrels was put online in May 2014.	
33	Website of the MDDELCC	Page online as of September 1, 2013; annual update on September 1 of each year.	A page on the water conservation and efficiency program is published on the website of the MDDELCC in the Water section. It presents the program and helps to build public awareness of the value of water.	Provide content about the program on the MDDELCC website.	Page on the water conservation and efficiency program put online.	Went online on September 1, 2013.	
34	Educational program for 5th-year students in collaboration with the Centre d'interprétation de l'eau (water interpretation centre) and the Ministère de l'Éducation, des Loisirs et des Sports (under the Drinking water economy strategy)	Development underway / first version expected in 2013	This measure raises youth awareness about water conservation and efficiency.	Raise youth awareness about water conservation and efficiency by setting up an educational program.	Launch of the educational program Fantastiko. "J'aime l'eau, j'en prends soin" - I love water, I look after it.	Program launched on September 29, 2014.	The Fantastiko program was launched on September 29, 2014. It raises youth awareness about water conservation and efficiency.
35	Continue the partnership with Réseau Environnement for the drinking water economy program (PEEP), which raises citizen awareness in collaboration with municipalities (part of the Drinking water economy strategy)	Ongoing	Some 85 municipalities participated in PEEP in 2011. The Facebook page "Je consomme EAUtrement" has nearly 500 friends (from 350 to 1200 visits per week). In early 2012, a radio advertisement was broadcast across Québec. This measure raises public awareness about water conservation and efficiency.	Raise public awareness about water conservation and efficiency through the Facebook page "Je consomme EAUtrement" and encourage municipalities to participate in PEEP.	Participation by municipalities in the drinking water economy program and visits to the Facebook page "Je consomme EAUtrement".	118 municipalities participated in PEEP in 2014. The Facebook page "Je consomme EAUtrement" has 616 friends (around a hundred visits per week).	
36	Adoption of WaterSense certification, which labels equipment that uses 20% less water (part of the Drinking water economy strategy)	June 7, 2012	MAMOT and MDDELCC announced an agreement to promote the voluntary certification and labelling program WaterSense in Québec. The MFQ promotes the program in the business community. This measure raises public awareness about water conservation and efficiency.	Agreement to promote the voluntary certification and labelling program WaterSense in Québec. This measure raises public awareness about water conservation and efficiency. Disseminate information in business circles about WaterSense certification.	Conclusion of an agreement to promote the voluntary certification and labelling program WaterSense in Québec. Number of promotional activities or tools provided to entrepreneurs.	On June 28, 2012 MAMOT and MDDELCC announced an agreement to promote the voluntary certification and labelling program WaterSense in Québec. Hydro-Québec's program for water- and energy-saving products uses WaterSense certified equipment (shower heads and faucet aerators). Publication of two guides on best business practices in water management, mentioning WaterSense certification, in the repertoire of sustainable development tools in the Businesses section of the Québec Portal website.	An agreement was concluded to promote the voluntary certification and labelling program WaterSense in Québec. Two information guides for businesses were published about WaterSense certification.

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
9	Entry into force of the Regulation respecting the charges payable for the use of water	Adopted on December 1, 2010 and implemented on January 1, 2011	*Also meets objective 2.* By obliging water withdrawers of 75 000 litres or more per day to pay a charge based on their water withdrawals, this regulation will have the effect of raising awareness about the value of water and encouraging efficient water use.	Put in place economic incentives to encourage water users to reduce the volume of their water withdrawals. The objective for the next 5 years is to monitor the annual variations in volumes of water withdrawn by withdrawers who have paid charges on water use.	Total volume of water (m3) on which a charge was paid on Octobre 2014 (for 2013).	869 755 238 m3	

Objective 12: Make information on water resources, water quality, aquatic ecosystems and the various uses of water more accessible to all stakeholders

Target 12.1: Develop platforms to make information on water resources public, and promote knowledge-sharing

37	Create a special section about the Drinking water economy strategy (SEEP) on the MAMOT website	Ongoing	A section on SEEP was added to the MAMOT website, providing all the documentation needed by municipalities. New documents are added on a regular basis. This measure makes information accessible to all on a pubic platform, to promote water conservation and efficiency in municipalities.	Create a special section about SEEP on the MAMOT website.	Create a special section about SEEP on the MAMOT website.	A special section about SEEP was added to the MAMOT website.	A special section about SEEP was added to the MAMOT website.
38	Creation of the water knowledge portal	Underway	The portal will foster collaboration, a culture of knowledge sharing about water, the integration of that knowledge, and its dissemination. Social media resources like Facebook and Twitter will also be used as a way of offering scientific and technical information in a manner attractive to the general public.	Creation and launch of the collaborative portal.	Start-up of the detailed architecture of the collaborative portal.	Detailed architecture of the platform now being developed.	
39	Publication of the report on the status of water resources and aquatic ecosystems (*Rapport sur l'état des ressources en eau et des écosystèmes aquatiques*)	Underway: 2014	The five-year report is a way of providing information to all groups and individuals concerned about water and aquatic ecosystems to enrich their knowledge and give them a better understanding of the issues surrounding both topics.	Online publication of the 2014 report and summary. Preparation of the second report for publication in 2019.	Publication online of the 2014 report.	The 2014 report is available online.	
4	Entry into force of the Water Withdrawal and Protection Regulation	Underway; draft regulation published Dec. 28, 2011; new draft regulation published May 29, 2013; adoption and entry into force expected in 2013	*Also meets objective 1.* The WWPR requires that part of the analysis report on the vulnerability of water withdrawals for human consumption be published on the website of the entity responsible for the withdrawal. Elements that must be made public include the location of the withdrawal site, the location of protected areas (at immediate, intermediate and remote distances), and the vulnerability of those areas as determined in accordance with provisions of the WWPR. This measure contributes to making information accessible on the vulnerability of water sources.	Make the publication of information on the vulnerability of water sources mandatory, through the entry into force of sections 68 and 75 of the WWPR.	N/A	N/A	
18	Implementation of the St. Lawrence Action Plan 2011-2026 (SLAP)	November 29, 2011	*Also meets objectives 5 and 10.* The results of work conducted under the Numerical Environmental Prediction Program are published on the SLAP website. Some of these results inform the general public and decision-makers on the evolution of the water regime of the St. Lawrence.	Share knowledge on the evolution of the water regime of the St. Lawrence by putting the results of work by the Numerical Environmental Prediction Program online, on the SLAP website.	Put the results of work by the Numerical Environmental Prediction Program online, on the SLAP website.	No results have been put online.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 13: Ensure that water stakeholders and users have access to water conservation and efficiency tools							
Target 13.1: Develop tools to help municipal and agricultural water stakeholders set up water conservation and efficiency practices							
41	Production of guides and translation of manuals of the American Water Works Association (AWWA) (part of the Drinking water economy strategy)	Ongoing	To equip municipalities, documents have been produced (model municipal by-law on water use, simple form for measuring results, guide on drinking water and municipalities, AWWA manuals translated into French, economic assessment of the Strategy, etc.). Other documents are in preparation (sample specification for leak detection, economic impact study on the use of water counters and fees, etc.). For all government departments, consumption studies are underway in 50 institutional buildings and a guide is in production.	Production of guides and translation of AWWA manuals	Production and updating of guides, and translation of AWWA manuals	A number of documents have been produced or updated: model municipal by-law on water use, updated form on water use, updated guide on drinking water and municipalities, AWWA manuals translated into French, economic assessment of the Strategy, sample specification for leak detection, methodological guide on auditing water in the institutional sector (produced by the Centre des technologies de l'eau).	
42	Information sheet for entrepreneurs on best practices in water management, to be made available on the website of the Ministère de l'Économie, de l'Innovation et des Exportations and on the Québec Portal.	Underway	*To be defined.*	Provide information for small and medium enterprises (SMEs) on best practices in water management by producing an information sheet and publishing it online.	Drafting of an information sheet for SMEs on best practices in water management.	Information sheet completed. Now in proof-reading.	
Objective 14: Recognize exemplary water conservation and efficiency actions by water stakeholders and users in the various sectors							
Target 14.1: Develop a means to recognize exemplary actions in the municipal sector							
43	Create, with the partners concerned, a recognition program for successful municipalities	2013	The efforts of successful municipalities could be highlighted at conventions of municipal associations. This measure will showcase exemplary actions in the municipal sector and encourage the pursuit of efforts toward water conservation and efficiency.	Showcase successful municipalities.	Various means used to showcase successful municipalities.	Articles and videos distributed on best practices in water economy and outstanding municipalities, in collaboration with Source magazine.	

Quebecs Water Conservation and Efficiency Program Review

The following information shall be included in the Water Conservation and Efficiency Program reports submitted by the States and Provinces to the Regional Body and Compact Council pursuant to the requirements in the Agreement Article 304 and the Compact Section 4.2.2.

1. **Lead agency/agencies and contact person(s).**

   The ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) (Sustainable Development, Environment and Fight against climate change) is mandated to implement the Agreement in Québec.

   Representative of Premier Philippe Couillard to the regional body:

   M. Marcel Gaucher
   Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques
   Direction générale des politiques de l'eau
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   675, boulevard René-Lévesque Est, boîte 42
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   Téléphone : 418 521-3885, poste 4035
   Télécopieur : 418 644-2003

2. **Status of the State or Province's Water conservation and efficiency goals and objectives consistent with the Basin-wide goals and objectives. If developed, include State or Provincial goals and objectives or link to electronic version.**

   www.mddelcc.gouv.qc.ca/programmes/conservation-utilisation-efficace-eau/programme-en.pdf

3. Water Conservation and Efficiency Program Overview.

a) Citations to State/Provincial Water Conservation and Efficiency Program implementing laws, regulations and policies.

- The *Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection* (*Water Act*) was adopted on June 11, 2009, http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/C_6_2/C6_2_A.html
- The *Environment Quality Act* [Article 31.101], *http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q_2/Q2_A.htm*
- The *Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin* was adopted on June 22, 2011 and came into force on September 1, 2011, http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R5_1_A.HTM
- The *Regulation respecting water withdrawals and water protection* was adopted on July 16, 2014, and came into force on August 14, 2014, http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2R35_2_A.HTM

b) Summary description of the State's or Province's Water Conservation and Efficiency Program including what elements are voluntary and mandatory.

Quebec has adopted his water conservation and efficiency use goals and objectives consistent with basin wide goals in 2007. Quebec has submitted his final program -including goals, objectives, targets and measures - on September 2013. Appendix 1 contains the annual review of the program, including measures that are voluntary or mandatory and measures timeline and status. For more details on the measures – including the ministry in charge and a description of each measures - the full programm is available here : www.mddelcc.gouv.qc.ca/programmes/conservation-utilisation-efficace-eau/programme-en.pdf or on the Regional body website : http://glslregionalbody.org/Docs/ProgramReports/2013/QE%20Water%20Conservation%20and%20Efficiency%20Program%20Assesment-2013.pdf (2013 Quebec Water Conservation and Efficiency Program Assessments)

4. **For each of the regional objectives identify how the State/Provincial program is consistent with the regional objective, and a description of how the State or Province promotes Environmentally Sound and Economically Feasible Water Conservation Measures. More details for each objective are available at http://www.glslregionalbody.org/Docs/Resolutions/GLSLRWRRB_Resolution_6-Conservation-Efficiency.pdf and can be referenced below.**

Table 2. How the State/Provincial program is consistent with the regional objective

REGIONAL OBJECTIVES	CONSISTENT GOALS AND OBJECTIVES
➢ Guide programs toward long-term sustainable water use.	The first goal, *Foster long-term sustainable water use that takes ecosystem health and water needs into account*, directly concerns those government actions that can help make water withdrawals in Québec sustainable. The actions are grouped under three objectives: legal issues, reduced water use in various activity sectors, and ecosystem protection.
➢ Adopt and implement supply and demand management to promote efficient use and conservation of water resources.	The second goal, *Adopt and implement a supply and demand management approach that takes into account the expected impacts of climate change*, concerns the new clearance system for water withdrawals that now incorporates sound management principles. The goal has two objectives: determine how much water is withdrawn, consumed, and disposed of and learn more about how climate change affects supply and demand.
➢ Improve monitoring and standardize data reporting among State and Provincial water conservation and efficiency programs.	The third goal, *Implement monitoring measures for the Water Conservation and Efficiency Program*, specifically identifies MDDELCC as Program coordinator and monitor. This goal has two objectives: develop a Program assessment process and make Program assessment a source of ongoing knowledge acquisition.
➢ Develop science, technology and research.	The fourth goal, *Promote scientific research, technological development, and knowledge acquisition*, concerns the development of knowledge on water conservation and efficiency. The three objectives under this goal are to strengthen research efforts, encourage partnerships, and foster the development of new technology.
➢ Develop education programs and information sharing for all water users.	The fifth goal, *Educate, inform, equip, and motivate water stakeholders and users*, groups together concrete means to guide, support, and empower water stakeholders and users in their approach to water conservation and efficiency. This goal involves four objectives: raising

	awareness of the value of water, sharing information, developing concrete tools, and recognizing efforts.

5. Description of the State or Provincial Water conservation and efficiency program implementation timeline and status.

   Appendix 1 includes program measures timeline and status.

Appendix 1. Description of how the State or Province promotes Environmentally Sound and Economically Feasible Water Conservation Measures

Goal 1: Foster long-term sustainable water use that takes ecosystems health and varied water uses into account

Objective 1: Review existing laws and enact new legislation as needed

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 1.1: Include the provisions of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement in Québec legislation							
1	Entry into force of the Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection (Water Act)	Adopted on June 11, 2009; fully in force on August 14, 2014	The Act includes the provisions of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement in the Environment Quality Act (sections 31.88 to 31.104) and introducing section 31.101 which presents considerations on water conservation and efficiency programs.	Include the requirements of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement in Québec legislation by implementing all the provisions of the Water Act. (Adopted in 2009, only the subdivision concerning the "management of water resources" remained to be implemented.)	Entry into force of regulations implementing the Agreement - Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin (adoption June 11, 2011, entry into force September 1, 2011) - Regulation to amend the Regulation respecting the declaration of water withdrawals (provisions of the Agreement), (adoption June 11, 2011, entry into force September 1, 2011) - Water Withdrawal and Protection Regulation (adoption July 16, 2014, entry into force August 14, 2014)	All regulations have come into force, including the Water Withdrawal and Protection Regulation, which was adopted in July 2014 and came into force on August 14, 2014.	All requirements of the Agreement are included in Québec legislation through the coming into force of all provisions of the Water Act.
Target 1.2: Enact the regulations required to control water withdrawals							
2	Entry into force of the Regulation respecting the declaration of water withdrawals (RDWW)	Adopted on August 12, 2009, implemented on September 10, 2009 and amended on June 22, 2011	*Also meets objective 4.* The entry into force of this regulation provides a framework for water withdrawals by enabling us to know the volumes of water withdrawn and consumed in Québec. The regulation concerns withdrawals of 75 000 litres or more per day, with exceptions. This information will provide knowledge about water uses that will serve in determining the potential impact of new or increased withdrawals and the need for water conservation and efficiency.	Implementation of all provisions of the Regulation respecting the declaration of water withdrawals. (The regulation entered fully into force in 2011.)	Measure completed	Measure completed	
3	Entry into force of the Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin	Adopted on June 22, 2011 and implemented on September 1, 2011	The entry into force of this regulation provides a framework for certain cases that are exempt from the prohibition against water transfers in order to supply municipal water systems. Section 3 of the regulation indicates that an application for authorization must be filed with the MDDELCC for any new or increased transfer of water out of the St. Lawrence River Basin. For a transfer to be authorized, the withdrawer must implement water conservation and efficiency measures.	Implementation of all provisions of the Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin. (The regulation entered fully into force in 2011.)	Measure completed	Measure completed	All provisions of the Regulation respecting the framework for authorization of certain projects to transfer water out of the St. Lawrence River Basin have been implemented.
4	Entry into force of the Water Withdrawal and Protection Regulation (WWPR)	Adopted on July 17, 2014 and implemented on August 14, 2014	*Also meets objective 12.* The entry into force of this regulation provides a framework for water withdrawals. It sets terms and conditions for the authorization of water withdrawals, and administrative and penal provisions to ensure that it is respected. To be authorized, withdrawals of 379 000 litres or more per day that are subject to section 31.95 of the Environment Quality Act must respect certain conditions, notably the putting in place of water conservation and efficiency measures. Authorization of withdrawals of 75 000 to 379 000 litres per day could be conditional on the implementation of water conservation and efficiency measures consistent with the vulnerability of the environment.	Entry into force of the Water Withdrawal and Protection Regulation (WWPR). (The WWPR came into force on August 14, 2014, except for sections 11 to 30, which enter into force on March 2, 2015, and sections 68 and 75, which enter into force on April 1, 2015.)	Entry into force of the WWPR except for sections 11 to 30 and sections 68 and 75	The WWPR came into force on August 14, 2014 except for sections 11 to 30 and sections 68 and 75	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 2: Promote reduced water use in all sectors							
Target 2.1: Set up policy frameworks to promote reduced water use in institutional and municipal sectors							
6	Drinking water economy strategy (SEEP)	April 1, 2012	This strategy requires municipalities to establish an action plan to reduce the consumption of drinking water; to put in place, if necessary, a leak detection and repair program; to adopt a municipal by-law on the use of drinking water; and to produce an annual report on water management. This MAMOT measure will lead to reduced water use in all sectors of activity that obtain water from municipal systems.	Support Québec municipalities that have drinking water distribution systems in their water economy efforts.	Analysis and approval of the water use forms submitted by municipalities for 2012.	As of November 29, 2013 a total of 564 municipalities, representing 94% of the population served by water distribution systems in Québec, had submitted the form to MAMOT.	
7	Amendment of the Québec Construction Code (Plumbing and Building chapters) prohibiting the sale or installation of water-wasteful equipment (part of the drinking water economy strategy [SEEP])	Underway; amendments planned for 2013	For the clientele concerned, the construction code will prohibit the installation of toilets that use more than 6 litres/flush, urinals that use more than 1.9 litre/flush, and automatic flush urinals, along with cooling and air conditioning systems that use non-recirculating drinking water. This measure will reduce the use of drinking water in the residential and institutional sectors.	Through amendments to the construction code, prohibit the installation of toilets that use more than 6 litres/flush, urinals that use more than 1.9 litre/flush, and automatic flush urinals, along with cooling and air conditioning systems that use non-recirculating drinking water.	Amend the construction code to prohibit, for the clientele concerned, the installation of toilets using more than 6 litres/flush, urinals using more than 1.9 litre/flush, and automatic flush urinals.	Construction code revised on April 29, 2014.	
44	Québec Water Strategy 2016-2030	In development/ launch expected in 2016	The Québec Water Strategy 2016-2030 (in development) should include an objective for sustainable water quantity management. The Strategy will take the form of five-year action plans including measures to promote a reduction in water use in all sectors of activity.	With the adoption of a Québec Water Strategy and five-year action plans, put in place an action framework to promote a reduction in water use in all sectors of activity.	Preparation of a draft strategy	A draft strategy is being drawn up.	
8	Continue the implementation of drinking water economy policies in government buildings and those of the health and education systems	Ongoing	This measure enables the adoption of action plans and the implementation of targeted corrective measures in government buildings to reduce drinking water use in the institutional sector.	Adoption of action plans and implementation of targeted corrective measures in government buildings to reduce the use of drinking water in the institutional sector.	Adoption of action plans in the health system, cégeps and universities.	Action plans adopted.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 2.2: Put in place economic incentives that encourage water users to reduce the volume of their water withdrawals							
9	Entry into force of the Regulation respecting the charges payable for the use of water	Adopted on December1, 2010 and implemented on January 1, 2011	*Also meets objective 11.* This regulation obliges all water withdrawers of 75 000 litres or more per day to pay a charge (sections 1 to 15) based on the volume of water withdrawn. It is an economic incentive that promotes a reduction in water use in all sectors of activity.	Put in place economic incentives to encourage water users to reduce the volume of their water withdrawals. The objective for the next 5 years is to monitor annual variations in the volumes of water withdrawn by withdrawers who have paid water use charges.	Total volume of water (m3) on which a charge was paid on October 1, 2014 (for 2013).	869 755 238 m3	
Target 2.3: Determine effective water conservation and efficiency measures applicable to every sector within the withdrawal authorization system							
10	Development of water conservation and efficiency measures applicable to each sector of activity within the framework for the authorization of new or increased water withdrawals	Underway. First version expected for autumn 2013, with ongoing updates.	This measure is part of the new authorization regime for water withdrawals planned in the draft Water Withdrawal and Protection Regulation. For new or increased withdrawals, water withdrawers of 75 000 litres or more per day must demonstrate the acceptability of their application and, among other things, may propose water conservation and efficiency measures to reduce their withdrawals. Also, withdrawers of 379 000 litres or more per day who are subject to sec. 31.95 of the Environment Quality Act must implement water conservation and efficiency measures in order to apply for authorization. Production of a reference list of suggested water conservation and efficiency measures adapted to each sector will facilitate the adoption of such measures by those concerned.	Existence of a reference document on water conservation and efficiency measures appropriate for each sector of activity, containing current knowledge and available to promoters and analysts.	Perform documentary research on each sector of activity. Obtain a preliminary version of the document.	Research carried out in summer 2013. Preliminary version obtained in autumn 2013.	
<u>Objective 3: Promote efforts to maintain adequate water quantity and quality to ensure ecosystem integrity</u>							
Target 3.1: Develop and apply methods to take into account the cumulative impacts of withdrawals on the carrying capacity of ecosystems and the vulnerability of drinking water withdrawals							
11	Evaluation of cumulative impacts when analyzing applications for withdrawals, consumption and transfers of water (water withdrawal impact analysis [AIPE])	Underway	*Also meets objective 5.* The method developed for analyzing the cumulative impacts of water withdrawals makes it possible to ensure that sufficient quantities of water are available to maintain the integrity of ecosystems. Under the new authorization regime in the draft Water Withdrawal and Protection Regulation, withdrawers must implement water conservation and efficiency measures that are consistent with the potential impact of their withdrawals on the integrity of ecosystems.	Establish a process/methodology that accounts for the cumulative impacts of withdrawals, to form part of the MDDELCC's authorization process.	Participate in the work of the subcommittee of the Canadian Council of Ministers of the Environment (CCME) on environmental flows and examples from other jurisdictions. Participate in the development of research projects with the Centre d'expertise hydrique du Québec and Ouranos. Projects will be chosen in autumn 2014.	Final report with four case studies delivered to the CCME in June 2014. No project have been choose in 2014.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 3.2: Adapt water quantity management to take into account the carrying capacity of ecosystems							
12	Adaptation of the management of public dams	Ongoing	The management plans of works managed by the Centre d'expertise hydrique du Québec (CEHQ) contain operating parameters that take into account high- and low-runoff periods. Where necessary, management plans are adapted to respect the support capacity of ecosystems.	Provide ongoing ecosystemic management of government-owned dams, to optimize the support capacity of ecosystems in high-water and low-water periods.	Continuous monitoring of the 39 public dams of the Government of Québec.	The 39 public dams of the Government of Québec have been constantly monitored.	
13	Ottawa River Regulation Planning Board (ORRPB)	Underway	The Board consists of representatives from Canada, Ontario and Québec and provides integrated management of the main reservoirs of the Ottawa River watershed. It attempts to prevent flooding along the Ottawa River and its tributaries as well as in the Montréal region, taking into account the interests of different users. The reservoirs provide supplementary water in low-water periods, helping to maintain the integrity of ecosystems. The Board sets common objectives to optimize integrated management in low-water periods.	In high-water periods, continuous ecosystemic management of dams in accordance with the ORRPB Agreement to optimize the support capacity of ecosystems. In low-water periods, continuous ecosystemic management of dams in accordance with the ORRPB Agreement to optimize the support capacity of ecosystems.	Submission of the 2013 annual report of the ORRPB on the management plans in low-level periods, for dams included in the ORRPB Agreement. Renewal of the verbal agreement to ensure the support capacity of ecosystems in low-level periods, for dams included in the ORRPB Agreement.	The 2013 annual report of the ORRPB has been presented. In 2014, minutes of the March and/or June meeting indicating that the verbal agreement on the support capacity of ecosystems in low-level periods, for dams included in the ORRPB Agreement, was adopted.	

Goal 2: Adopt and implement a supply and demand management approach that takes into account the expected impact of climate change

Objective 4: Accurately measure the amount of water withdrawn, consumed, and disposed of in Quebec

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 4.1: Establish a water withdrawal management system							
14	Launch of the Québec water withdrawal management database (GPE)	March 2010	The system provides a way to collect, in a database, all of the information on water withdrawals obtained under the Regulation respecting the declaration of water withdrawals and the Regulation respecting the charges payable for the use of water. This data gives a portrait of the quantities of water withdrawn in Québec (volumes of 75 000 litres or more per day), presented in a structured way thanks to the GPE system.	By March 2009, to have developed and put online a water withdrawal management system for the purposes of the Regulation respecting the declaration of water withdrawals.	GPE online and in operation.	GPE went online in 2009 and is 100% operational.	The water withdrawal management database has been developed and brought online. The system is 100% operational and allows the collection of data on water withdrawals in Québec.
Target 4.2: Develop and strengthen knowledge on withdrawn water quantities for all activity sectors							
15	MAPAQ-MDDELCC administrative agreement on the declaration of water withdrawals for agricultural and fish-farming purposes	Dec. 7, 2011; terminates on Sept. 30, 2016 with tacit renewal	This agreement facilitates the declaration of water withdrawals by agricultural and fish-farming producers. It provides for the setting up of a project to monitor water withdrawals by typical fish-farming businesses. This information served in establishing standards to facilitate the annual declaration of withdrawals by such businesses under the Regulation respecting the declaration of water withdrawals (adopted June 22, 2011). This measure contributes to improving knowledge about the volumes of water withdrawn and consumed in agriculture and fish-farming.	Consolidate knowledge about water use by the agricultural and fish-farming sectors.	MAPAQ has sent MDDELCC the 2013 data on agricultural and fish-farming water withdrawals throughout the territory of Québec. Draft guide produced for agricultural and fish-farming producers on the application of the Regulation respecting the declaration of water withdrawals.	2013 data obtained by MAPAQ. Draft application guide produced.	
2	Entry into force of the Regulation respecting the declaration of water withdrawals (RDWW)	Adopted on August 12, 2009, implemented on September 10, 2009 and amended on June 22, 2011	*Also meets objective 1.* Section 9 of the Regulation obliges withdrawers of 75 000 litres or more per day, across Québec, to declare their water withdrawals. For withdrawers on the territory of the Great Lakes St-Lawrence River Basin Sustainable Water Resources Agreement, and that are able to withdraw 379 000 litres or more per day, section 18.7 makes it mandatory to declare the volumes withdrawn, consumed and transferred out of the St. Lawrence River Basin. This measure will increase knowledge about the quantities of water withdrawn in each sector of activity across Québec.	Know the quantities of water withdrawn throughout the territory of Québec by all sectors of activity.	Receive the annual declarations of all water withdrawers concerned by the regulation and implement the quality assurance protocol for data.	Annual declarations received from all water withdrawers concerned by the regulation. The quality assurance protocol, to ensure the quality of data transmitted, was put into application.	

Objective 5: Take into account the impact of climate change on water supply and demand

Target 5.1: Develop and strengthen knowledge on groundwater supply

16	Knowledge acquisition program on groundwater (PACES)	First official announcements of funding in spring 2009	The knowledge acquisition program was designed to accumulate knowledge about the volume and recharging of groundwater aquifers. The measure increases knowledge about the groundwater supply.	Over the next 5 years, pursue the knowledge acquisition program on groundwater (PACES) for southern Québec	Area covered for municipalized southern Québec (in %)	54%	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 5.2: Develop and strengthen knowledge on the effects of climate change on surface water supply							
17	Production of the Atlas hydroclimatique du Québec méridional (hydroclimatic atlas of southern Québec) for 2050	March 2013	The atlas illustrates the impacts of climate change on the water regime of tributaries of the St. Lawrence River projected to 2050. It also suggests how the surface water supply will evolve in response to climate change, which can be used to determine the need for water conservation and efficiency measures in vulnerable watersheds.	By 2020, produce a series of hydroclimatic atlases (3) with iterative improvements on the content and underlying methodology.	Perform 50% of the work toward production of the 2015 atlas.	Work done. A hydrologic modelling platform has been implemented for southern Québec. This platform will be used to produce the hydrologic simulations necessary for the atlas.	
18	Implementation of the St. Lawrence Action Plan (SLAP) 2011-2026	November 29, 2011	*Also meets objectives 9 and 12.* The Numerical Environmental Prediction Program in SLAP 2011-2026 provides a better understanding of the ecosystem of the St. Lawrence, notably with regard to water levels and flows. It serves in assessing the impact of climate change on water resources and determining the need for water conservation and efficiency measures in vulnerable watersheds. The work of the Climate Change Coordination Committee will provide an overall portrait of the issues surrounding the impact of climate change on the St. Lawrence, and of needs for knowledge development about impacts and adaptation needs. Climate change adaptation could include putting in place water conservation and efficiency measures. Project 7.2.1 in the Sustainable Use issue, entitled "Study the impact of climate change on water flows", will produce knowledge about the effects of climate change on water supplies.	In the next 5 years, implement the activities in SLAP that concern more specifically the impacts of climate change on water supply and demand: - By 2016, complete project 7.2.1 "Study the impacts of climate change on water supplies". - By 2016, complete project 7.2.3 "Set up a Climate Change Coordination Committee". In the program of activities for 2016-2021, develop projects on the impact of climate change on water supply and demand. For the next 5 years, continue the work of the Numerical Environmental Prediction Working Group.	2013-2014: monitor project 7.2.1 "Study the impacts of climate change on water flow". 2013-2014: monitor project 7.2.3 "Set up a Climate Change Coordination Committee". Monitor work by the Numerical Environmental Prediction Working Group.	Project 7.2.1 "Study the impacts of climate change on water flows" is proceeding as planned. Project 7.2.3 "Set up a Climate Change Coordination Committee" is proceeding as planned. The work of the Numerical Environmental Prediction Working Group is proceeding as planned.	
Target 5.3: Set up a climate change policy framework that takes into account water resources							
19	Implementation of the 2013–2020 Government Strategy for Climate Change Adaptation	April 2013	The Government Strategy for Climate Change Adaptation is aimed at strengthening society's resilience to the impacts of climate change. It accords great importance to water resources. The sixteenth objective of the Strategy is to prioritize the conservation and protection of water resources, with a view toward conserving biodiversity and the benefits offered by ecosystems. Climate change adaptation and the protection of water resources can include the adoption of water conservation and efficiency measures.	Implementation of the climate change adaptation strategy.	Launch of the climate change adaptation strategy, which includes an objective that prioritizes the conservation of water resources.	Climate change adaptation strategy, including an objective (#16) that prioritizes the conservation of water resources; launched in June 2012.	The Climate Change Adaptation Strategy was launched in 2012 and includes an objective on water conservation.
20	Support for research projects by the Ouranos consortium on climate change and water conservation and efficiency, as part of the implementation of the 2013-2020 action plan (PACC 2013-2020) on climate change.	April 2013	Priority 6 of PACC 2013-2020 is to support research in climate change adaptation. This includes funding research by the Ouranos consortium to improve knowledge about water resources. This in turn will increase knowledge about the relationship between climate change and water conservation and efficiency, and will aid in developing adaptation solutions.	Increase knowledge about the impact of climate change on water conservation and efficiency , and on adaptation solutions, as part of PACC 2013-2020.	Number of Ouranos research projects funded under PACC 2013-2020 concerning climate change and water conservation and efficiency .	1 project funded: Probable maximum precipitation and probable maximum flood under changing climate conditions.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 5.4: Develop and apply a method to take into account cumulative impacts (including climate change impacts) on water resources							
11	Evaluation of cumulative impacts when analyzing applications for withdrawals, consumption and transfers of water (water withdrawal impact analysis [AIPE])	Underway	*Also meets objective 3.* *The impact of climate change on the water regime (hydrologic indicators) is taken into account in the evaluation of cumulative impacts on sensitive components of the basin (ecosystems and uses). This measure takes into account the impact of climate change on the vulnerability of watersheds, and will aid in planning water conservation and efficiency measures to reduce that vulnerability.*	Establish a process/methodology that takes into account the cumulative impacts of withdrawals, to form part of the MDDELCC's authorization process.	Participate in the work of the subcommittee of the Canadian Council of Ministers of the Environment (CCME) on environmental flows and examples from other jurisdictions. Participate in the development of research projects with the Centre d'expertise hydrique du Québec and Ouranos. Projects will be chosen in autumn 2014.	Final report with four case studies delivered to the CCME in June 2014. No project have been choose in 2014.	

Goal 3: Set up monitoring measures for the Water Conservation and Efficiency Program

Objective 6: Develop and implement a process to evaluate whether the objectives are being met

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 6.1: Determine and apply the annual assessment process and the five-year review of the Program							
E1	Determine five-year targets for each objective of the program	Underway	To facilitate evaluation of the progress of the program in terms of the achievement of each objective, we must be able to determine the different facets of the objectives. These facets are determined within five-year targets. The first targets are established on the basis of measures contained in the inventory when the first version of the program was tabled.	Define five-year targets for each objective to facilitate monitoring and the five-year evaluation of the program.	Define five-year targets for each objective of the program tabled in September 2013.	Five-year targets have been defined.	
E2	Determine indicators for each measure of the program	Underway	In collaboration with those responsible for measures in each ministry concerned, determine annual targets that will be measured with the different indicators.	Define, in collaboration with measure officers, five-year objectives and annual monitoring indicators for each measure.	Define five-year objectives for each measure of the program filed in September 2013. Define annual monitoring indicators for each measure of the program filed in September 2013.	Five-year objectives have been defined for each measure. Annual monitoring indicators have been defined for each measure.	
E3	Carry out annual monitoring of program measures	Underway	Annually, the MDDELCC must monitor measure indicators as defined in collaboration with the ministries concerned. This annual evaluation must be made public.	Annually, monitor the measure indicators in collaboration with the officers for each measure in the ministries concerned. Prepare the annual report of the program and send it to the Conseil régional (regional council). The latter will publish the report.	Monitoring of the 2014 indicators for each measure is performed in collaboration with the ministries concerned. The 2014 annual report of the program is prepared. The 2014 annual report is sent to the Conseil régional. The 2014 report is made public by the Conseil régional.	Monitoring of the 2014 indicators for each measure was performed in collaboration with the ministries concerned. The 2014 annual report of the program has been prepared. The 2014 annual report has been sent to the Conseil régional. The 2014 report was made public by the Conseil régional.	
E4	Perform the five-year evaluation of targets	Underway	Every five years, the MDDELCC must perform an assessment of the conservation program. This will consist of evaluating the achievement of objectives relative to progress within the five-year targets.	In 2018, conduct a five-year evaluation of the targets.	N/A	N/A	
E5	Identify new measures being developed and integrate them into the program	Underway	During annual monitoring, new measures being developed in each ministry concerned will be identified in order to add them to the program.	Enrich the program with the addition of new measures.	Identify new measures being developed and integrate them into the program. Number of measures added.	Each ministry was queried for the purpose of identifying new measures being developed. No new measures were added.	
Target 6.2: Use acquired knowledge to adapt the Water Conservation and Efficiency Program							
E6	Make changes to the program to take new knowledge into account	Underway	The Québec program must take into account the modifications made to regional objectives. The latter are revised every 5 years on the basis of new knowledge about the cumulative impacts of water withdrawals.	Adapt the program based on the modifications made to regional objectives.	Modify the program based on the new regional objectives.	No modification of regional objectives.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 7: Make monitoring a source of new knowledge and know-how for Agreement signatories and all other water stakeholders and users							
Target 7.1: Disseminate the results of the annual assessment and the five-year review of the Water Conservation and Efficiency Program							
E7	Publish results from the annual monitoring of measures on the water knowledge portal	Annually	Annually, the MDDELCC must monitor the progress of measures and make its report public. Publication will be on the water knowledge portal.	Once the water knowledge portal is online and accessible (measure 38), publish results from the annual monitoring of measures.	Publication of results from the annual monitoring of measures on the water knowledge portal.	The water knowledge portal is in development. In the meantime, results are published on the website of the MDDELCC.	
E8	Present the five-year evaluation report to the Conseil régional and publish it on the water knowledge portal	Every 5 years starting 2013 (2018)	Every five years, the MDDELCC must evaluate the achievement of program objectives. The report must be submitted to the Conseil régional and made public via publication on the water knowledge portal.	In 2018, send the five-year evaluation report to the Conseil régional and publish it on the water knowledge portal.	N/A	N/A	

Goal 4: Promote scientific research, technological development and knowledge acquisition

Objective 8: Strengthen research efforts on water conservation and efficiency measures

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 8.1: Develop and strengthen knowledge on water conservation and efficiency in the municipal, mining and agricultural sectors							
21	Participation in events and committees that bring together experts in the field to improve knowledge in MAMOT about concepts related to water economy (part of the Drinking water economy strategy)	Ongoing	MAMOT participates in training offered by the American Water Works Association (AWWA) and in the Canadian committee on water economy. This measure will develop and consolidate knowledge on water conservation and efficiency in the municipal sector.	Participation in events and committees that bring together experts in the field to improve knowledge in MAMOT on concepts surrounding water economy.	Participation in the conference of the International Water Association (IWA). Participation in Canadian and Québec committees on water economy.	Presentation given at, and participation in, an IWA training session. Participation in Canadian and Québec committees on water economy.	
22	Organize and prepare training sessions in water economy to support municipalities (part of the Drinking water economy strategy)	Ongoing	The 18 training sessions offered in the regions and the 2 web conferences organized by MAMOT benefited more than 700 representatives from municipal circles to support them in their efforts. An annual 2-day training course on the Drinking water economy strategy (SEEP), prepared in collaboration with Réseau Environnement, reached over 250 stakeholders. A web conference on SEEP monitoring and the new form is now available for free on the Québec Municipal website. The Strategy will be presented at twenty conventions and conferences per year. This measure will foster the consolidation and sharing of knowledge about water conservation and efficiency for stakeholders in the municipal sector.	Consolidate and share knowledge about water conservation and efficiency for stakeholders in the municipal sector by organizing training sessions on water economy.	Organize and prepare training sessions on water economy.	Session on the cost of water services and infrastructure management with the City of Hamilton at the INFRA conference of the Centre d'expertise et de recherche en infrastructures urbaines (CERIU). A training day on water meters and backup systems with North American specialists, organized by Réseau Environnement. Training on water and watering organized by the Fédération interdisciplinaire de l'horticulture ornementale du Québec (FIHOQ - interdisciplinary federation for ornamental horticulture). Sections and videos on best practices in water economy, and on outstanding municipalities, in collaboration with Source magazine.	
23	Annual production of municipal reports on water use to evaluate the quantities of water distributed and water losses in distribution systems (part of the Drinking water economy strategy)	June 8, 2012	Under SEEP, municipalities must produce an annual report on their water use. A central database collects the data sent in by municipalities (about 200 data items per municipality). This measure consolidates knowledge about the quantities of water distributed and water system losses in the municipal sector.	Consolidate knowledge on the quantities of water distributed and on water system losses for the municipal sector, through updates of the annual reports on drinking water.	Update of the annual report on drinking water management with 2012 data.	Report updated on November 29, 2013 with 2012 data.	
24	Partnership research program on sustainable development of the mining sector	Decree approved on March 27, 2013/ 2012-2013 to 2016-2017	In this program, a number of research priorities have to do with water: water infiltration control, acid mine drainage, management of mine tailings in water, passive water treatment, reduction of water consumption. This measure will develop knowledge on water use in the mining sector (industrial).	Acquire knowledge about water conservation and efficiency by funding research projects in partnership with the mining sector, under the partnership research program on sustainable development of the mining sector, promoted by the Fonds de Recherche du Québec - Nature et Technologie (FRQNT). Over the next 5 years, three calls for proposals will be launched for a total of $15 million.	Number of projects funded on water conservation and efficiency during the first call of proposals	First call for proposals made in June 2013: 1 project funded on water conservation and efficiency	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
25	Research and technology transfer projects concerning the conservation and optimal use of water in agriculture, under the action framework to develop water management and conservation strategies in the 2013-2020 action plan on climate change	Underway	This measure promotes research and technology transfer projects on the conservation and optimal use of water in agriculture. Project results contribute to knowledge about water use in the agricultural sector, and will aid in finding effective ways to reduce water use in this sector.	Completion of 5 research projects on water conservation and efficiency by 2018.	Number of research projects completed	No research projects completed	
26	Characterization project on water use in irrigation	Underway from April 2013 to March 2016	This project's objectives are to quantify irrigation doses and the water storage capacity of soils, to test methods of estimating water withdrawals, and to produce a seasonal report on water inputs, with a view toward estimating the extent to which irrigation inputs are insufficient or excessive. The results of these projects will increase knowledge on the topic, and could aid in efforts to optimize the use of irrigation in agriculture.	Completion of the characterization project on water use in irrigation by 2016	Percentage by which the research project has progressed (%)	Research project 33% complete.	

Objective 9: Foster research partnerships, multidisciplinary studies and collaborative activities

Target 9.1: Develop and set up a collaboration work space for water researchers

27	Collaboration space on the water knowledge portal	Underway	The collaboration space is intended as a place for exchanging knowledge and know-how by a range of actors and users (governments, municipalities, businesses, associations, watershed committees, etc.) along with university researchers. This measure will encourage research partnerships and collaborative activities.	In the next 5 years, creation of a pilot project with researchers in the field of water.	Start-up of the detailed architecture of the collaborative portal (see measure 38).	The objectives for 2014 have been achieved: the detailed architecture of the platform is being created.	

Target 9.2: Include the notions of partnership, multidisciplinarity and collaboration in the definition of government's water research projects

18	Implementation of the St. Lawrence Action Plan 2011-2026 (SLAP)	November 29, 2011	*Also meets objectives 5 and 12.* Projects included under SLAP must be designed and conducted in collaboration with at least one department of the provincial and federal governments. One objective of the Climate Change Coordination Committee is to determine research projects in collaboration with local stakeholders. The implementation of integrated management of the St. Lawrence by holding an annual forum, and the creation of regional collaboration tables (RCTs) will encourage participation by communities.	Programmation of joint activities for 2011-2016, along with program activities for monitoring the status of the St. Lawrence and for numerical environmental prediction are done. Integrated management of the St. Lawrence achieved by holding an annual forum and by creating 6 RCTs. By 2016, develop and implement the 2016-2021 plan.	Follow up on the 2013-2014 report on projects and activities. Continue the creation of RCTs. Hold an annual forum on the St. Lawrence.	The 2013-2014 report on the projects and activities of SLAP was produced in May 2014. Four RCTs have been designated. The 2014 forum on the St. Lawrence took place.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 10: Encourage the development of innovative water technologies							
Target 10.1: Introduce the water conservation and efficiency component into strategies and programs aimed at supporting technology development							
28	Committee on new technologies for domestic wastewater treatment	Committee created in 1999; Protocol published in 2008	The committee works to safeguard public health and protect the environment by validating the performance claims for water treatment technologies, and provides quality control on projects authorized by the MDDELCC or funded by MAMOT. It also publishes and makes available technical information about these technologies. This measure provides quality control on new water technologies.	Publication of information on new technologies in domestic wastewater treatment and drinking water treatment, with relation to water conservation and efficiency.	Number of technical information sheets on the new technologies published on the website of the MDDELCC in relation to water conservation and efficiency.	8 technical information sheets published.	
29	National policy on research and innovation	In development; schedule to come	One objective of the component to support technological innovation in business, which is part of the innovation support program created under the Strategy, is to support the development and marketing of processes and technologies for limiting and repairing water-related damage. In the national policy on research and innovation, two innovation assistance programs can support projects and centres concerned with water conservation and efficiency. They are: the innovation support program (PAI) (start-up support for new technological businesses), component 1; and the support program for technology enhancement and transfer (PSVT), component 1, envelope for college centres for technology transfer (CCTT). One of the existing centres is dedicated to this area: the Centre des technologies de l'eau (CTE). This measure supports the development of new water technologies.	Support the development of new technologies related to water conservation and efficiency.	Number of technological businesses created (under the PAI and CTE) around water conservation and efficiency. Number of patents issued to small and medium enterprises (SMEs) involving water conservation and efficiency (under the PAI and CTE). Median revenue growth rate of businesses involved with water conservation and efficiency, in business with the CTE.	Under the PAI: Businesses created: 0 Patents issued: 0 Median growth rate: n/a Under the CTE: Businesses created: 1 Patents issued: 0 Median growth rate: n/a	
30	Projects of the agrifood innovation support program (PSIA) / Innov'Action agroalimentaire program (starting 2013)	2009	Some projects funded under the PSIA concern the optimization of water use in agriculture. This measure supports the development of new water technologies in agriculture.	Support the development of processes and technologies in agriculture by funding 15 projects on optimizing water use or improving water quality.	Number of projects terminated.	4 projects terminated.	
31	Canada-Québec Water Supply Expansion Program (CQWSEP)	Program terminated in 2009	The CQWSEP encouraged individual and group projects to optimize irrigation in agriculture. This measure supported the development of new water technologies in agriculture.	Complete the Canada-Québec Water Supply Expansion Program (CQWSEP).	Measure completed	Measure completed	The program was completed in 2009.

Goal 5: Develop education programs, information sharing networks, resources, and tools to mobilize all water stakeholder and users

Objective 11: Make water stakeholders and users more aware of the value of water

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Target 11.1: Develop and implement awareness tools intended for youth and the general public							
32	Le coin de Rafale	Underway and ongoing	This section of the MDDELCC's website is specifically addressed to youth. This measure contributes to raising the awareness of young people about water conservation and efficiency.	Raise the awareness of young people using "Did you know" information capsules and Rafale adventures on the theme of water conservation and efficiency.	Put online a "Did you know" information capsule on rainwater recovery barrels.	The "Did you know" information capsule on rainwater recovery barrels was put online in May 2014.	
33	Website of the MDDELCC	Page online as of September 1, 2013; annual update on September 1 of each year.	A page on the water conservation and efficiency program is published on the website of the MDDELCC in the Water section. It presents the program and helps to build public awareness of the value of water.	Provide content about the program on the MDDELCC website.	Page on the water conservation and efficiency program put online.	Went online on September 1, 2013.	
34	Educational program for 5th-year students in collaboration with the Centre d'interprétation de l'eau (water interpretation centre) and the Ministère de l'Éducation, des Loisirs et des Sports (under the Drinking water economy strategy)	Development underway / first version expected in 2013	This measure raises youth awareness about water conservation and efficiency.	Raise youth awareness about water conservation and efficiency by setting up an educational program.	Launch of the educational program Fantastiko. "J'aime l'eau, j'en prends soin" - I love water, I look after it.	Program launched on September 29, 2014.	The Fantastiko program was launched on September 29, 2014. It raises youth awareness about water conservation and efficiency.
35	Continue the partnership with Réseau Environnement for the drinking water economy program (PEEP), which raises citizen awareness in collaboration with municipalities (part of the Drinking water economy strategy)	Ongoing	Some 85 municipalities participated in PEEP in 2011. The Facebook page "Je consomme EAUtrement" has nearly 500 friends (from 350 to 1200 visits per week). In early 2012, a radio advertisement was broadcast across Québec. This measure raises public awareness about water conservation and efficiency.	Raise public awareness about water conservation and efficiency through the Facebook page "Je consomme EAUtrement" and encourage municipalities to participate in PEEP.	Participation by municipalities in the drinking water economy program and visits to the Facebook page "Je consomme EAUtrement".	118 municipalities participated in PEEP in 2014. The Facebook page "Je consomme EAUtrement" has 616 friends (around a hundred visits per week).	
36	Adoption of WaterSense certification, which labels equipment that uses 20% less water (part of the Drinking water economy strategy)	June 7, 2012	MAMOT and MDDELCC announced an agreement to promote the voluntary certification and labelling program WaterSense in Québec. The MFQ promotes the program in the business community. This measure raises public awareness about water conservation and efficiency.	Agreement to promote the voluntary certification and labelling program WaterSense in Québec. This measure raises public awareness about water conservation and efficiency. Disseminate information in business circles about WaterSense certification.	Conclusion of an agreement to promote the voluntary certification and labelling program WaterSense in Québec. Number of promotional activities or tools provided to entrepreneurs.	On June 28, 2012 MAMOT and MDDELCC announced an agreement to promote the voluntary certification and labelling program WaterSense in Québec. Hydro-Québec's program for water- and energy-saving products uses WaterSense certified equipment (shower heads and faucet aerators). Publication of two guides on best business practices in water management, mentioning WaterSense certification, in the repertoire of sustainable development tools in the Businesses section of the Québec Portal website.	An agreement was concluded to promote the voluntary certification and labelling program WaterSense in Québec. Two information guides for businesses were published about WaterSense certification.

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
9	Entry into force of the Regulation respecting the charges payable for the use of water	Adopted on December 1, 2010 and implemented on January 1, 2011	*Also meets objective 2.* By obliging water withdrawers of 75 000 litres or more per day to pay a charge based on their water withdrawals, this regulation will have the effect of raising awareness about the value of water and encouraging efficient water use.	Put in place economic incentives to encourage water users to reduce the volume of their water withdrawals. The objective for the next 5 years is to monitor the annual variations in volumes of water withdrawn by withdrawers who have paid charges on water use.	Total volume of water (m3) on which a charge was paid on Octobre 2014 (for 2013).	869 755 238 m3	

Objective 12: Make information on water resources, water quality, aquatic ecosystems and the various uses of water more accessible to all stakeholders

Target 12.1: Develop platforms to make information on water resources public, and promote knowledge-sharing

37	Create a special section about the Drinking water economy strategy (SEEP) on the MAMOT website	Ongoing	A section on SEEP was added to the MAMOT website, providing all the documentation needed by municipalities. New documents are added on a regular basis. This measure makes information accessible to all on a pubic platform, to promote water conservation and efficiency in municipalities.	Create a special section about SEEP on the MAMOT website.	Create a special section about SEEP on the MAMOT website.	A special section about SEEP was added to the MAMOT website.	A special section about SEEP was added to the MAMOT website.
38	Creation of the water knowledge portal	Underway	The portal will foster collaboration, a culture of knowledge sharing about water, the integration of that knowledge, and its dissemination. Social media resources like Facebook and Twitter will also be used as a way of offering scientific and technical information in a manner attractive to the general public.	Creation and launch of the collaborative portal.	Start-up of the detailed architecture of the collaborative portal.	Detailed architecture of the platform now being developed.	
39	Publication of the report on the status of water resources and aquatic ecosystems (*Rapport sur l'état des ressources en eau et des écosystèmes aquatiques*)	Underway: 2014	The five-year report is a way of providing information to all groups and individuals concerned about water and aquatic ecosystems to enrich their knowledge and give them a better understanding of the issues surrounding both topics.	Online publication of the 2014 report and summary. Preparation of the second report for publication in 2019.	Publication online of the 2014 report.	The 2014 report is available online.	
4	Entry into force of the Water Withdrawal and Protection Regulation	Underway; draft regulation published Dec. 28, 2011; new draft regulation published May 29, 2013; adoption and entry into force expected in 2013	*Also meets objective 1.* The WWPR requires that part of the analysis report on the vulnerability of water withdrawals for human consumption be published on the website of the entity responsible for the withdrawal. Elements that must be made public include the location of the withdrawal site, the location of protected areas (at immediate, intermediate and remote distances), and the vulnerability of those areas as determined in accordance with provisions of the WWPR. This measure contributes to making information accessible on the vulnerability of water sources.	Make the publication of information on the vulnerability of water sources mandatory, through the entry into force of sections 68 and 75 of the WWPR.	N/A	N/A	
18	Implementation of the St. Lawrence Action Plan 2011-2026 (SLAP)	November 29, 2011	*Also meets objectives 5 and 10.* The results of work conducted under the Numerical Environmental Prediction Program are published on the SLAP website. Some of these results inform the general public and decision-makers on the evolution of the water regime of the St. Lawrence.	Share knowledge on the evolution of the water regime of the St. Lawrence by putting the results of work by the Numerical Environmental Prediction Program online, on the SLAP website.	Put the results of work by the Numerical Environmental Prediction Program online, on the SLAP website.	No results have been put online.	

No.	Measure in effect or being developed	Date of entry into force/Status	Justification	Five-year objective of measure	Annual indicators for 2014	Status of 2014 indicator	Evaluation of achievement of five-year objective
Objective 13: Ensure that water stakeholders and users have access to water conservation and efficiency tools							
Target 13.1: Develop tools to help municipal and agricultural water stakeholders set up water conservation and efficiency practices							
41	Production of guides and translation of manuals of the American Water Works Association (AWWA) (part of the Drinking water economy strategy)	Ongoing	To equip municipalities, documents have been produced (model municipal by-law on water use, simple form for measuring results, guide on drinking water and municipalities, AWWA manuals translated into French, economic assessment of the Strategy, etc.). Other documents are in preparation (sample specification for leak detection, economic impact study on the use of water counters and fees, etc.). For all government departments, consumption studies are underway in 50 institutional buildings and a guide is in production.	Production of guides and translation of AWWA manuals	Production and updating of guides, and translation of AWWA manuals	A number of documents have been produced or updated: model municipal by-law on water use, updated form on water use, updated guide on drinking water and municipalities, AWWA manuals translated into French, economic assessment of the Strategy, sample specification for leak detection, methodological guide on auditing water in the institutional sector (produced by the Centre des technologies de l'eau).	
42	Information sheet for entrepreneurs on best practices in water management, to be made available on the website of the Ministère de l'Économie, de l'Innovation et des Exportations and on the Québec Portal.	Underway	*To be defined.*	Provide information for small and medium enterprises (SMEs) on best practices in water management by producing an information sheet and publishing it online.	Drafting of an information sheet for SMEs on best practices in water management.	Information sheet completed. Now in proof-reading.	
Objective 14: Recognize exemplary water conservation and efficiency actions by water stakeholders and users in the various sectors							
Target 14.1: Develop a means to recognize exemplary actions in the municipal sector							
43	Create, with the partners concerned, a recognition program for successful municipalities	2013	The efforts of successful municipalities could be highlighted at conventions of municipal associations. This measure will showcase exemplary actions in the municipal sector and encourage the pursuit of efforts toward water conservation and efficiency.	Showcase successful municipalities.	Various means used to showcase successful municipalities.	Articles and videos distributed on best practices in water economy and outstanding municipalities, in collaboration with Source magazine.	