

2022 Environmental Assessment Report

Portrait of the Quality of Montréal's Water Bodies

Service de l'environnement





QUALO Program: Shoreline Water Quality

In 2022, the Réseau de suivi du milieu aquatique (RSMA) sampled, on a weekly basis, 103 monitoring stations as part of the QUALO program in order to measure the bacteriological quality of Montréal's shoreline waters. The QUALO program was implemented over a 20-week period, from May 24th to October 6th.



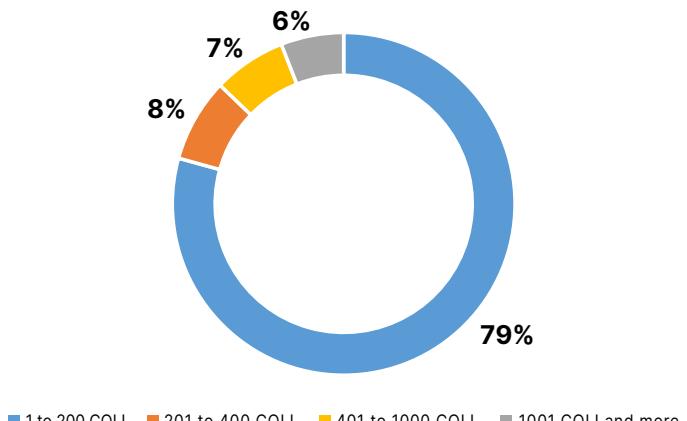
Bois-de-L'Île-Bizard Nature Park
© Mathieu Sparks - Ville de Montréal

The sampling method used consists in taking water samples at a distance of approximately one to two metres from the shoreline, using a pole equipped with a bottle holder and a sterile bottle. Samples are taken at a depth of about 30 cm below the water surface.

The samples are then placed on a bed of ice and kept at about 4°C, until they are delivered to the laboratory for analysis.

Of the 2,058 bacteriological analyses that were conducted, 79% of the samples satisfied the MELCCFP's¹ criteria of 200 COLI² allowing the practice of recreational activities involving a direct contact with water, whereas 6% of the samples exceeded the 1000 COLI criteria, thereby compromising any recreational activity.

Distribution of COLI results in 2022



Since 1999, the overall results of the QUALO program indicate that the bacteriological quality of shoreline waters is strongly impacted by precipitation levels.

In 2022, despite record temperatures registered for early heat waves, i.e. from May 11 to 14, the months of May and June were the雨iest ever since 1940.

Total precipitations of 504 mm of rainshowers were recorded during the sampling season. This value, much greater than the average of 395 mm over the past 10 years, resulted in the QUALO 2022 season ranking first among the雨iest seasons since 2012. Moreover, on September 13, 2022, Montreal suffered a deluge with 93 mm of rain falling in just 12 hrs, thus exceeding the average precipitations of 83 mm for the whole month. Also noteworthy is the fact that 40 of the 93 mm of rain showers fell in only 30 minutes.

¹ Ministère de l'Environnement et de la Lutte contre les changements climatiques, de la Faune et des Parcs

² Fecal coliforms, in colony forming units (CFUs) per 100 mL

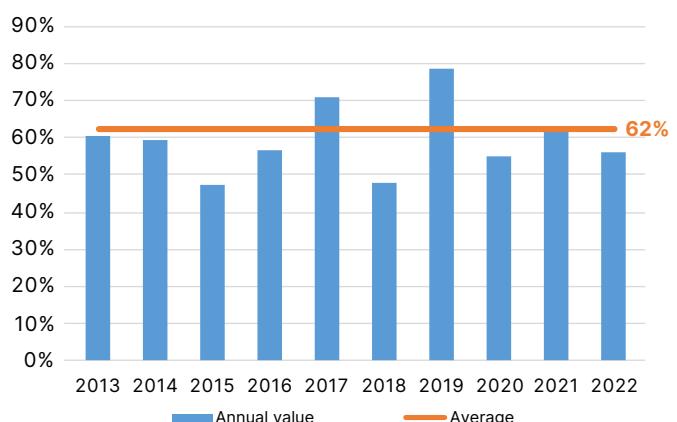
QUALO Certification

In 2022, 58% of monitoring stations earned their QUALO certification, compared to an average of 62% over the past 10 years.

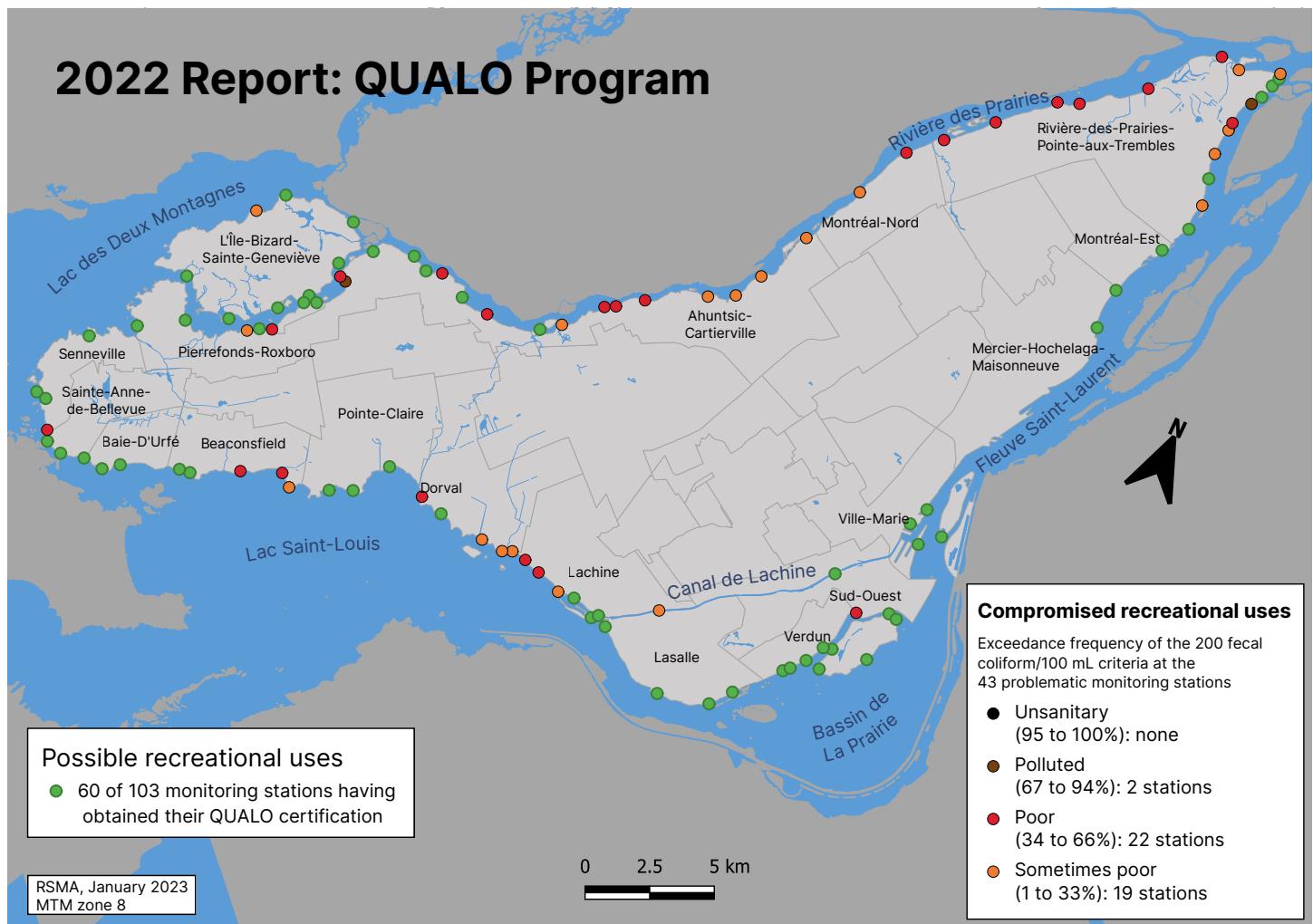
For a monitoring station to obtain the QUALO certification, it must fulfill the following two conditions:

- the geometric mean of all results must not exceed 200 COLI;
- no more than 10% of its samples may exceed 400 COLI, the equivalent of two authorized exceedances during the season.

Percentage of QUALO stations from 2013 to 2022



2022 Report: QUALO Program



Analysis by Water Body

Rivière des Prairies

In 2022, 13 of the 37 monitoring stations (i.e. 35%) were QUAZO certified. This percentage is lower than the result obtained in 2021 (43%) and the average over the past 10 years (44%). The decline in quality is attributable to the increase in water samples taken under the influence of rain showers of 8 mm and more in the 24-hour period preceding the sampling activities (26% of samples in 2022 versus 9% in 2021). Moreover, during the September 13 deluge, the samples of 11 monitoring stations were taken in rainy conditions, from the Île-de-la-Visitation Nature Park to the Bout-de-l'Île Park. Consequently, all of these stations obtained fecal coliform counts exceeding 200.



Île Bizard—Sainte-Geneviève

Since the inception of the QUAZO program, the bacteriological quality of the shoreline waters in this sector has generally proven to be good. In 2022, seven of the eight monitoring stations earned their QUAZO certification and all of the results obtained for the samples taken at the Terrasse-Sacré-Cœur Park were lower than the 200 COLI criteria, thus allowing all recreational water uses, including swimming. The only monitoring station that failed to obtain its QUAZO certification was the one located at the tip of Terrasse Martin owing to five exceedances of the 400 COLI criteria in 20 samples.



Lac Saint-Louis

Only 14 of the 25 monitoring stations obtained their QUAZO certification in 2022, or 56% of all stations compared to 88% in 2021. This percentage is lower than the 73% average observed over the past 10 years. The decline in water quality is mainly due to the increased frequency of samples taken under the influence of heavy rain showers. Indeed, in 2022, 30% of these samples were taken in the



Des Cageux Park, Rivière des Prairies

24-hour period following rain showers of 8 mm and more, compared to only 4% in 2021, for a sevenfold increase in frequency. A total of 30 results of 1,000 COLI and more were measured at 12 of the 25 Lac Saint-Louis stations during the season. However, all of the samples taken at the Kelso Park station located in Sainte-Anne-de-Bellevue and at the Edgewater Park station in Beaconsfield were lower than the 200 COLI threshold.

Bassin de La Prairie

Although the percentage of stations having obtained their QUAZO certification in 2022 slightly decreased in 2022 compared to the value of 94% obtained in 2021, it still exceeded the average of 85% computed for the past 10 years. Furthermore, 314 of the 340 samples taken in this water body, or 92%, obtained test results lower than the 200 COLI threshold. However, two of the monitoring stations failed to obtain their QUAZO certification. Indeed, six exceedances of the 400 COLI criteria were observed at the station located downstream of the wastewater control structure of the Saint-Pierre collector. As for the station located in Canal de Lachine less than 1 km downstream from the Rockfield overflow outlet, results exceeding 1000 COLI were recorded. These results relate to the samples taken less than 24 hours after the wastewater spills observed at the Rockfield overflow on June 8, July 18 and September 13. The commissioning in the Fall of 2023 of a new catch basin intended to limit combined sewer system spills in the Rockfield overflow will certainly improve and maintain the water quality of the Canal de Lachine.

88%
QUALO

Fleuve Saint-Laurent

In 2022, 11 of the 16 stations or 69% of them were QUAZO certified. This percentage is far superior to the 44% result obtained in the previous year and the average of 48% recorded for the past 10 years. During the 2022 season, no samples were taken from this water body in the 24-hour period following a rainfall of 8 mm or more, which certainly contributed to the improved water quality observed. Remarkably, over the past 23 years, and this despite the impact of rainfalls, the station located in Jean Drapeau Park on Île Sainte-Hélène always maintained its QUAZO certification.

69%
QUALO

"GUY'S WAVE"

The eternal wave, commonly known as "Guy's wave" and located in the Fleuve Saint-Laurent near the Des Rapides Park in the borough of LaSalle, is a popular attraction for surfers, kayakers and paddle board enthusiasts.

The city of Montréal recently renovated the site to make it safer for users thanks to more accessible equipment launching and hauling facilities, while limiting their impacts on the natural environment. In order to ensure that the bacteriological quality of the water allowed for the practice of recreational activities without impairing the health of users, the RSMA was mandated to sample the water weekly and conduct fecal coliform counts and the confirmation of their belonging to the Escherichia coli species throughout the opening period of the site, from May to October 15, 2022. All of the results for the samples taken were lower than the MELCCFP's criteria, thus confirming the water's suitability for all recreational uses, including swimming.



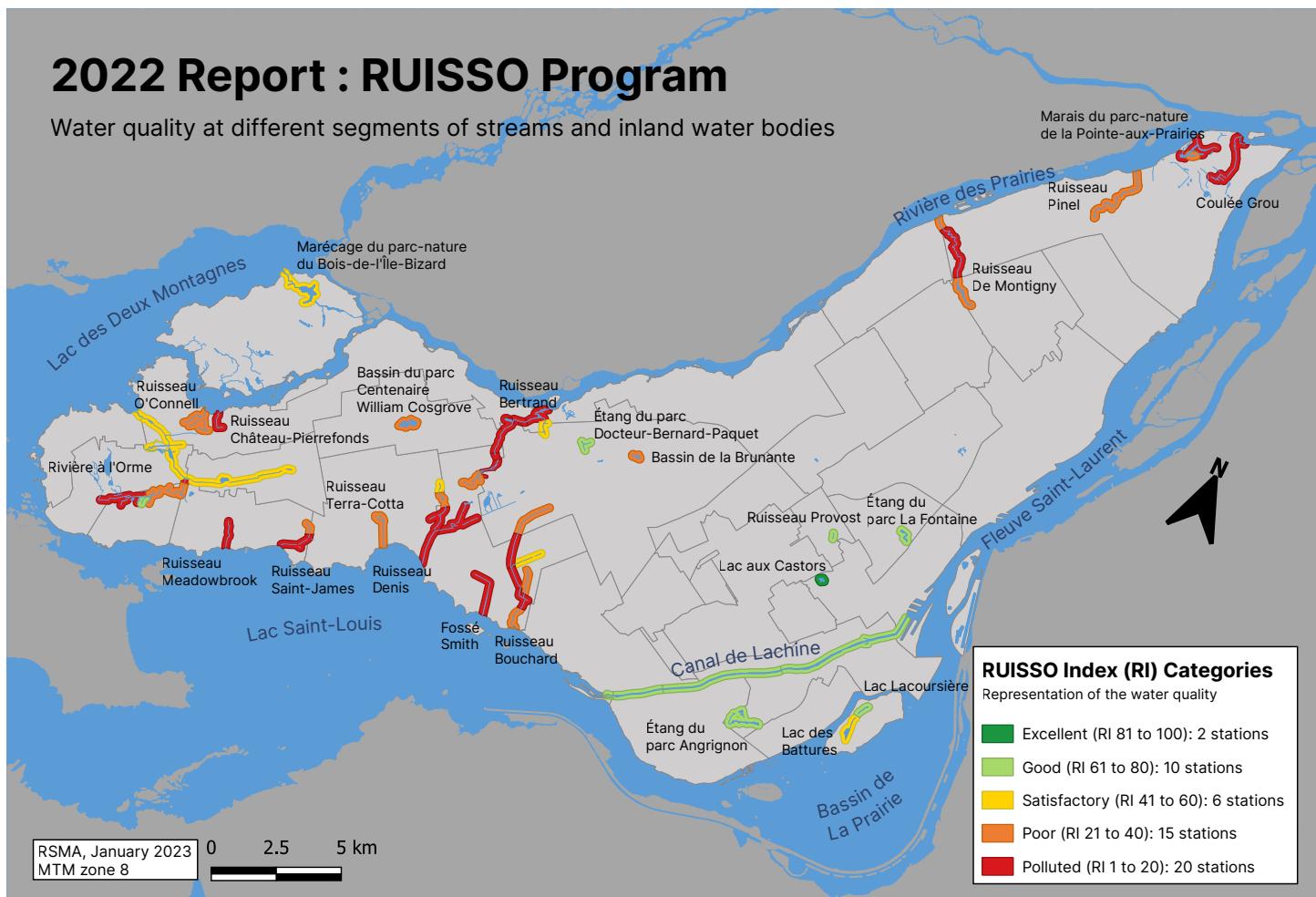
Des Rapides Park, LaSalle



RUISSO Program: Water Quality of Streams and Inland Waterways

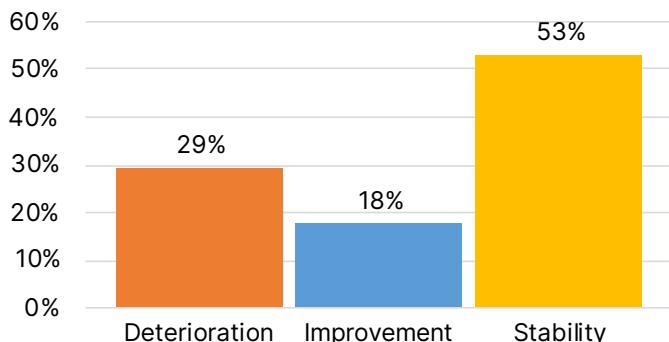
The RUISSO program, launched by the RSMA in 2002, is intended to monitor changes in the bacteriological and physicochemical quality of streams and inland water bodies in urban areas. In 2022, the program covered 25 streams and inland water bodies and relied on a total of 53 monitoring stations, which were sampled seven times between May 30 and October 26. The quality of these

streams and water bodies is assessed using the RUISSO (RI) calculated on the basis of the results of the 24 parameters measured. More than 8,700 measurements and results of physicochemical and bacteriological analyses, obtained from the 369 water samples collected during the season, were used in the calculation of the RUISSO Index (RI).



Overall, the water quality improved at nine of the 51* stations (18%) relative to 2021. However, it deteriorated at 15 stations (29%) and remained stable at the 27 others (53%).

Evolution of the water quality at the 51 stations compared to 2021



* In 2021, there were only 51 stations vs. 53 in 2022

Analysis of water bodies according to their RUISSO index

For a third consecutive year, the water quality of **Lac aux Castors** obtained a RI of 86, earning it the first rank overall in the "excellent" category. However, this result is unsurprising given that it is fed by the aqueduct network.

The waters of **Ruisseau Provost** and **Canal de Lachine**, fed respectively by subterranean sources and by the Fleuve Saint-Laurent, both obtained RIs greater than 70, a guarantee of good quality water.

Lac Lacoursière and the urban ponds of the **Dr-Bernard-Paquet, Lafontaine and Angrignon** parks are mainly fed by the aqueduct network and are also categorized as being of "good" water quality with RIs greater than 60.

Lac des Battures' water quality is rated as being "satisfactory". Since its initial monitoring in 2002, the key limiting factor for this water body is total phosphorus. Lac des Battures underwent restoration work in 2020 in order to create new wildlife habitats and restore its damaged shoreline due to the presence of an exotic invasive plant, phragmites.

Parameters for the calculation of the RUISSO Index (RI)

Main heavy metals: This nomenclature regroups the principal heavy metals found in industrial waters (silver, antimony, arsenic, barium, beryllium, cadmium, cobalt, chromium, copper, iron, manganese, molybdenum, nickel, lead, selenium, uranium, vanadium and zinc). Given that many of these metals are not present naturally in great concentrations in water bodies, their presence is mainly due to other sources.

Suspended matters (SM): In strong concentrations, they impede the penetration of light and are harmful to living organisms, including fish.

pH: A scale of 1 to 14 indicating a water's acidity or alkalinity. The lower the value, the more acid the water. The pH of a natural water body has a pH close to 7, more often than not between 6 and 8.

Dissolved oxygen (DO): A good oxygenation fosters the presence of a greater variety of living organisms in a water body.

Ammoniacal nitrogen (NH₃): A crucial nutrient for aquatic plants. An excessive quantity enhances their proliferation whereas too small a quantity may hinder their growth. Above a certain threshold, it is toxic.

Total phosphorus (TP): Too great a quantity fosters the excessive proliferation of plants and results in an eutrophication of water bodies. In small concentrations, it is a limiting factor.

Fecal coliforms (COLI): Bacteria indicative of a fecal contamination, that may be accompanied by disease-causing pathogenic organisms.

The completion of the reconstruction of the walkway in the **Bois-de-l'Île-Bizard Nature Park** allowed for the resumption of the sampling done at the station located in the marsh. The quality of the waters assessed for the marsh of the Bois-de-l'Île-Bizard Nature Park, according to their RI, remained in the "satisfactory" category, as evidenced by the last monitoring done in 2016.

Classification according to the RUISSO index

| Streams and inland water | RI 2022 | RI 2021 | Evolution of the RI** |
|---|------------|------------|--------------------------|
| Lac aux Castors | 86 | 86 | = |
| Ruisseau Provost | 80 | 80 | = |
| Étang du parc Dr-Bernard-Paquet | 73 | 78 | - |
| Canal de Lachine | 71 | 79 | - |
| Lac Lacoursière | 69 | 73 | = |
| Étang du parc Lafontaine | 63 | 61 | = |
| Étang du parc Angrignon | 61 | 58 | = |
| Marécage du parc-nature du Bois-de-l'Île-Bizard | 60 | 53* | + |
| Lac des Battures | 53 | 58 | - |
| Rivière à l'Orme | 39 | 28 | + |
| Ruisseau Terra-Cotta | 39 | 47 | - |
| Bassin de La Brunante | 38 | 45 | - |
| Bassin du parc Centenaire William Cosgrove | 34 | 38 | = |
| Ruisseau Denis | 30 | 27 | = |
| Ruisseau O'Connell | 30 | 29 | = |
| Ruisseau Pinel | 30 | 56 | - |
| Ruisseau Bouchard | 28 | 28 | = |
| Ruisseau Bertrand | 25 | 30 | - |
| Ruisseau De Montigny | 22 | 23 | = |
| Fossé Smith | 20 | 36 | - |
| Ruisseau Meadowbrook | 19 | 19 | = |
| Marais du parc-nature de la Pointe-aux-Prairies | 19 | 20 | = |
| Coulée Grou | 18 | 35 | - |
| Ruisseau Saint-James | 18 | 30 | - |
| Ruisseau Château-Pierrefonds | 16 | 18 | = |

* 2016 RI

** The evolution was characterized as stable when the reading of the RI from one year to another revealed a variance of less than 5 points.

■ Excellent (RI 81 to 100)
 ■ Good (RI 61 to 80)
 ■ Satisfactory (RI 41 to 60)

■ Poor (RI 21 to 40)
 ■ Polluted (RI 1 to 20)

Did you know that?

Île Bizard is one of the very few locations on the territory of the Agglomeration of Montréal that has an important network of unchanneled water bodies.

The reconstruction of the walkway and of the belvedere of the small bittern were completed in 2022 in the Bois-de-l'Île-Bizard Nature Park, thus allowing visitors to access natural areas rich in biodiversity in order to appreciate their fauna and flora.

The MELCCFP officially enacted a temporary status for the protection of a territory leading to a projected humanized landscape for Île Bizard. This status is the result of a long participative process involving citizens and the city of Montréal in collaboration with the MELCCFP, in order to ensure the protection and highlight the biodiversity found in the western end of Île Bizard.



Walkway to the Bois-de-l'Île-Bizard Nature Park

For the most part, streams and inland water bodies with RI values below 40 ("poor" or "polluted" quality) were affected by pollution problems of an anthropogenic and animal origin. The pollutants released in the environment may find their way into water bodies through various paths, such as water runoffs, wastewater discharges, accidental and illegal spills as well as deposits of airborne pollutants.

In 2022, the RI of **Rivière à l'Orme** located in the west end of the Island increased by more than 10 points, revealing an improvement in water quality compared to the preceding year. Nevertheless, the RI obtained (39) is lower than the average of 43 observed over the past 15 years and remains in the "poor" category. As in previous years, dissolved oxygen, total phosphorus and COLI were the limiting factors in this body of water.

The water quality of **Ruisseau Terra-Cotta**, located in the City of Pointe-Claire, deteriorated and the reduction of its RI to 39, due to high levels of phosphorus, resulted in a downgrading of its categorization, from the "satisfactory" category to the "poor" category. The bacteriological quality of this stream whose role is to evacuate stormwaters was also impacted by the strong precipitations of September 13. As a result, a high COLI count of 25,000 COLI was obtained.

As a result of a 7-point reduction in the RI of the **Basin of La Brunante** located in the borough of Saint-Laurent, the quality of its waters was downgraded to the "poor" category. The limiting parameters for this catch basin of runoff waters are suspended matters (SM), total phosphorus and COLI.

Built in Dollard-Des-Ormeaux in the 1970s, the **Basin of the Centenaire William Cosgrove Park** is fed by the stormwater runoffs of neighboring streets. Its water quality remained stable in the "poor" category due to high levels of phosphorus and COLI. This water body is also affected by wastewaters from illicit connections awaiting a correction.



SM laden waters at Ruisseau Denis

The water quality of **Ruisseau Denis** which, amongst others, drains the airport area, remained stable in the "poor" category. The limiting factors for this water body are SM and COLI. Furthermore, a complaint, received October 25 by the Division du contrôle des rejets et suivi environnemental (CRSE), reported the presence of a significant quantity of SM at the mouth of Ruisseau Denis. A follow-up resulted in the identification of the source of SM in the stream, namely the pumping of excavation water during emergency work to repair a break in the aqueduct network by the City of Pointe-Claire. The on-site responders were informed of the impacts of these releases on the pluvial network.



Iridescence related to the presence of hydrocarbons in Ruisseau Bouchard

The RI of **Ruisseau O'Connell**, located in a residential district of the borough of Pierrefonds-Roxboro, remained in the “poor” category. The main degrading parameter for this stream is phosphorus. Concentrations of total phosphorus greater than the threshold of 30 µg/L for the “poor” category were obtained for all samples collected during the seven sampling tours.

The water quality of **Ruisseau Pinel**, located in a residential district of the borough of Rivière-des-Prairies—Pointe-aux-Trembles, worsened. Its RI decreased by 26 points and the quality of its waters was downgraded from “satisfactory” to “poor” due to the excessive presence of phosphorus.

As far as **Ruisseau Bouchard** whose mouth neighbors Montréal-Trudeau Airport is concerned, the overall quality of its waters remained stable in the “poor” quality. The principal parameters responsible for its poor quality are a deficit in dissolved oxygen, fecal coliforms and phosphorus. Given that there are presently no overflow structures nor any illicit connections that may release any wastewaters into the stream, the bacteriological contamination observed is likely of animal origin. The industrial sectors, the airport zone and the road network all adversely impact Ruisseau Bouchard. In 2022, a few events affected the water quality of the stream.

During the first, which occurred September 30th, hydrocarbons were observed in Ruisseau Bouchard, following an accidental spill of some 300 litres of diesel on the property of an industrial establishment. Absorbent pads were placed in order to contain the spill and the hydrocarbons were recovered through pumping in order to reduce any environmental impact on the stream.

Then on December 6th, a new complaint was received signaling the presence of hydrocarbons in Ruisseau Bouchard. A follow-up determined that the contamination originated from an industrial property which included non compliant mechanical workshops with the storing of used oils outdoors. Absorbent pads were again placed in the stream in order to absorb the contaminants released; the facilities’ yard was cleansed and the waters contaminated with oil that had accumulated on the unloading dock were pumped. The non compliant mechanical workshops were then dismantled.

Finally, on December 30th, a complaint involving an iridescent sheen on the water flowing into a sump pit was received by the CRSE. The origin of the contamination was revealed to be a container of used oils stored inadequately in the exterior courtyard of a garage. The container was sealed and moved indoors for storing in the building. Absorbent pads were installed on Ruisseau Bouchard in order to absorb the contaminants released and a decontamination of the soils was then conducted.

Despite a decline in the RI of **Ruisseau Bertrand** located in the heart of the Bois-de-Liesse Nature Park, its water quality remained in the “poor” category. COLI and phosphorus are the stream’s primary degrading parameters. On October 25th, the RSMA team observed the presence of an orange colored matter accompanied by fat plates on the surface of the stream. The substance was then confined and extracted from the stream using absorbent pads. The source of the contamination was not found, but an investigation by the CRSE identified and eliminated another source of contamination of Ruisseau Bertrand. Indeed, a broken lifting pump in the wastewater network was observed and measures were implemented to replace the pump and stop the spillage of wastewaters into a catch basin located near Ruisseau Bertrand.

The overall water quality of **Ruisseau De Montigny**, located in Anjou, remained in the “poor” category with a RI of 22. This stream receives the stormwaters from a collector that drains a large industrial area which is a significant source of pollution. The stream’s water quality is also affected by the release of wastewaters from illicit connections awaiting a correction.



Floating materials at Ruisseau Bertrand



Ruisseau De Montigny

Ruisseau De Montigny Screening Program

In 2022, the CRSE launched a screening program to detect the origin of contaminants observed at the outlet of an important stormwater drainage pipe releasing its waters into the spillway of Lac d’Anjou, upstream of Ruisseau De Montigny.

More than 640 observations over 59 days as well as 37 inspections in 27 different establishments resulted in the detection of the sources of many contaminant releases of hydrocarbons, butchers’ waste, plastic pellets, de-icing salt, vegetables and leguminous plants. The dye tracing of the water pipes of eight establishments confirmed the presence of illicit connections channeling wastewaters into the pluvial network. Correction notices were sent to the various non compliant companies. In addition, the borough of Anjou removed on 27 occasions floating matters contained by booms installed in the spillway of Lac d’Anjou, in order to prevent the release of contaminants into Ruisseau De Montigny.

The CRSE continues its actions intended to improve the water quality of the Montréal Island’s streams and inland waterways.

Should you witness a situation having an adverse impact on the environment, please contact the CRSE division at 514-280-4330. You can also write us at the following address: environnement@montreal.ca.

Channeled over almost all of its length, the source of **Fossé Smith** is found in lands neighboring the Montréal-Trudeau Airport. In 2022, its water quality deteriorated and its rating was downgraded from the “poor” category to the “polluted” category, due to high levels of COLI and SM. The contamination measured may be due to animal and anthropogenic activities. Indeed, a beaver dam was observed near the monitoring station. Also, an alert received March 14th by the CRSE led to the discovery of a sheen on the surface of the waters of Fossé Smith. Following an investigation, it was determined that the hydrocarbons responsible for this sheen came from the melted snow accumulated on a rental property. Absorbent pads were quickly installed to collect and remove the contaminant from the ditch. Also, the snow was eliminated, and a cleanup and recovery operation of the contaminants in the drains was done in order to prevent the release of more pollutants into the ditch.

The quality of the water in the **marsh of the Pointe-aux-Prairies Nature Park** remained stable in the “polluted” category. The decomposition of organic matter and animal droppings adversely impact the quality of these waters. Phosphorus, the low rates of dissolved oxygen and COLI are the main limiting parameters for this water body.

Ruisseau Meadowbrook is fed by the drainage stormwaters of the cities of Beaconsfield and Kirkland. The open-sky stream crosses Brookside Park before flowing into Lac Saint-Louis. Since the very beginning of the monitoring of this stream back in 2002, the quality of its waters has always been characterized as “polluted”. High levels of COLI and phosphorus reveal a contamination by wastewaters that may compromise any shoreline uses.

Coulée Grou, located at the eastern end of the island, has been affected for many years now by a chronic water deficiency. However, an increase in water levels and flows was observed during three of the seven sampling tours conducted in 2022. Nevertheless, this increase could not prevent a 17-point drop in its RI. Accordingly, the quality of its waters was downgraded from the “poor” to the “polluted” category, mainly due to the high levels of phosphorus and COLI measured.

Located in Beaconsfield, **Ruisseau Saint-James**, is channeled along most of its length except for its outlet adjacent to Saint-James Park into Lac Saint-Louis. The water quality of this stream, in the “polluted” category in 2022, and fed by stormwaters is affected by the influx of wastewaters from illicit connections. The strong levels of COLI and phosphorus measured at the two stations of this water body bear witness to the impact of this contamination.

Ruisseau Château-Pierrefonds located in the west end of Montréal allows for the evacuation of stormwaters into Rivière des Prairies. For over 10 years now, the quality of its waters is found in the “polluted” category owing to the presence of wastewaters in the main pluvial network feeding this stream. The high values of COLI and phosphorus found in all of the samples collected confirm its contamination by wastewaters.



Ruisseau Meadowbrook

A Citizen Science Project

The RSMA joined the "CrowdWater" community in order to participate in the collection of hydrological data.

The "CrowdWater" mobile app facilitates the collection of data intended to improve the predictions of hydrological events such as floods and low water flows. The concept is simple: it consists in regularly taking pictures of a specific location on a water body in order to document variations in water levels. A monitoring station was established by the RSMA for each of these streams: De Montigny, Bertrand and Meadowbrook. We now invite residents wishing to volunteer in a citizen project to download and install the CrowdWater app and add new pictures to expand our data base.

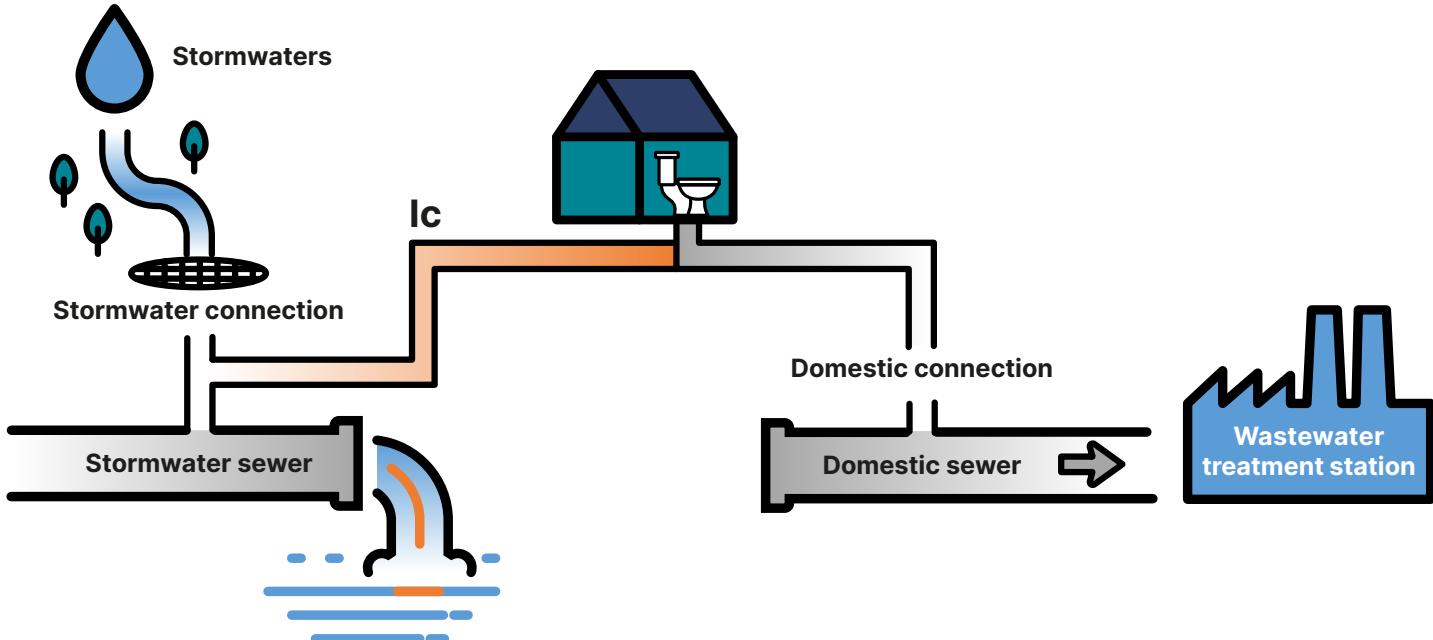
For further information, please consult the Web site at the following address: <https://crowdwater.ch/fr/bienvenue/>





PLUVIO Program: Screening and Correction of Illicit Connections (Ic)

Illicit connections (Ic)



Ic: A connection or flaw that allows wastewaters to be released into a stormwater sewer network, into soil, a ditch or a water body rather than into the domestic sewer network.

Two-thirds of the Urban Agglomeration of Montréal are served by a combined sewer system that channels stormwaters and wastewaters to the Jean-R. Marcotte wastewater treatment plant. The remainder of the territory (mainly the two extremities of the Island of Montréal, as well as Île-des-Sœurs and Île Bizard) is served by separate sewer systems comprised of two distinct networks. The stormwater network that evacuates stormwater runoffs directly to water bodies and the wastewater network that collects and directs wastewater from residences, businesses or industries to the wastewater treatment plant. It's in the sectors served by separate sewer systems that can be found illicit connections (Ic) that discharge untreated wastewaters into the natural environment through the storm sewer network.

The PLUVIO program was launched in 2007 to locate and correct problems related to illicit connections (Ic) on the Montréal Agglomeration territory.

The sampling of stormwater networks in dry conditions led to the detection of 194 problematic networks out of a total of 585 networks.

Of the 194 networks deemed problematic, 84 were found to be exempt from Ic following more detailed studies that revealed a contamination of a diffuse or animal origin. However, the Ic found in 20 networks were corrected. As far as the remaining 90 networks are concerned, our screening and correction initiatives are ongoing.

Status of the Stormwater Networks in 2022

| | |
|--|-----|
| Non problematic networks | 391 |
| Problematic networks | 194 |
| Details of the problematic networks | |
| No illicit connections (Ic) | 84 |
| Corrected | 20 |
| Awaiting corrections | 62 |
| Awaiting screening or validation | 28 |
| Total | 194 |

Validation by the RSMA of the screening and correction initiatives

In 2022, the RSMA conducted verifications in eight stormwater networks located in the boroughs of Rivière-des-Prairies—Pointe-aux-Trembles, Île-Bizard—Saint-Geneviève and Saint-Laurent in order to ensure that they were free of any contamination, following the screening and correction activities undertaken for that purpose.

Before the work was conducted, 16 problematic areas had been circumscribed. Following the study, seven sectors were identified as being problematic. As far as the remaining nine sectors were concerned, they revealed themselves to be free of any indication of a wastewater contamination.

Progress of the PLUVIO program

In 2022, 11 new Ic were confirmed and 91 corrections were carried out. Since the beginning of the PLUVIO program, 1309 Ic were confirmed and of this number, 714 Ic were corrected, representing 55% of the total number.

Progress in the correction of Ic (at December 31, 2022)

| | Cities | Boroughs | Total |
|------------------|--------|----------|-------|
| Corrected Ic | 314 | 400 | 714 |
| Non corrected Ic | 63 | 532 | 595 |
| Confirmed Ic | 377 | 932 | 1309 |

Optimal Ic correction

In 2022, in a sector comprised of 55 single family homes, whose connections were non compliant, a single intervention was sufficient to correct these Ic. The work done in an adjacent park led to the correction of all Ic, thus minimizing any inconveniences for the residents.

Thank you to all the intervenors from the Direction des réseaux d'eau (DRE) for carrying out the correction so efficiently.

How to detect an Ic?

The sampling of stormwater sewer networks in dry conditions allows for the detection of the presence of wastewater contamination in a sector that is then characterized as being problematic.



The delimitation of a problematic sector circumscribes the buildings likely to have an Ic in that part of a stormwater sewer network where a contamination has been detected.

A detailed screening of private piping using a dye and a video or other form of inspection is then required to accurately detect the building or buildings responsible for the contamination.



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