

State of contaminated sites in the St-Lawrence River

Prepared by Ambioterra for the Great Lakes Ecoregion Network

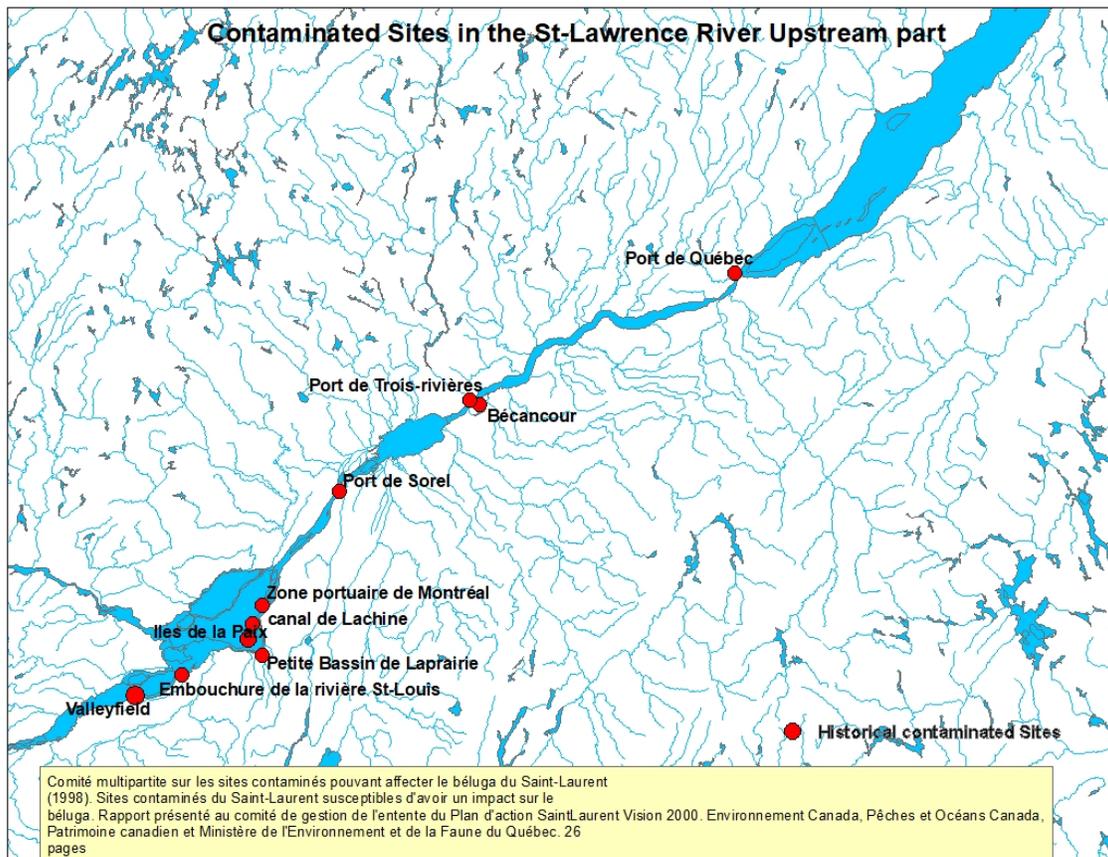
September 2022

Historical contamination:

Map 1 below shows most of the well known contaminated sites in the St-Lawrence River/ Historical contamination is still present in most of those sites. Those sites have been identified as major sources of contamination that threatens the Beluga Whales in the estuary of the River.

No actions were carried out to clean those heavily contaminated sites beyond creating the ZIP (Zone d'Intervention Prioritaire) and preparing a remedial action Plan for those sites. Approximately thirty years later, when writing this report, we are still waiting for the Quebec Government to respond to our request to obtain a copy of the action plan and the progress under it in cleaning up the contaminated sites in the River.

Five out of the eleven contaminated sites are federally owned. The Canadian Federal government owns the harbor facilities at Canal Lachine, port de Montréal, Québec, Sorel, Trois-Rivière, and Bécancour.



Map 1: Source: Ambioterra

Contaminated fish in the St-Lawrence River (only mercury is monitored)

The Quebec Government is still publishing fish consumption advisories all along the River. From a human health perspective, mercury still pose a major health problem from consumption of most of the fish caught in the River. This is even more true when you fish near those contaminated sites identified on map 1. Mercury goes into the food chain of the river, and ends up in fish. Mercury cannot be destroyed. Therefore, it keeps coming back in the food chain. The level of mercury found in the food chain never really goes down. The only way to remove mercury from the food chain is to remove the mercury contaminated sediments in the River.

Please note that mercury in fish, seems to be the only contaminant that is monitored by both governments (Quebec and Canada). You can go to the following web site to find out more about fish contamination

<https://www.quebec.ca/en/health/nutrition/healthy-eating-habits/fish-consumption-and-health/recommendations>

<https://www.environnement.gouv.qc.ca/eau/guide/localisation.asp>

Citizen watch has been abolished!

We translated into French a survey on Areas of Concern prepared by the Great Lakes Ecoregion Network. We then sent it to the twelve ZIP Committees spread out along the River (see map 3 below). Following that we received a phone call from the director of Strategy Saint-Laurent, an umbrella organisation that oversees the work of the ZIPs.



Map 3 : Source : Stratégie Saint-Laurent, web site

The director was upset with us for not going through him to gather the responses for the survey. We then organised a call with him to see what was the problem? During that

call, we learned that the ZIP committees do not work on contaminated sediments anymore! In 2011, the Quebec Government and the federal government signed a new agreement in which the ZIPs are no longer responsible for monitoring the work on contaminated sites in the River.

So citizen watch on those sites is gone! It seems that there is no plan to clean those sites. We tried to get a copy of the action plan to clean up the River. It doesn't seem to exist. The only thing we could find on the St-Lawrence River Action Plan is Cost Guard monitoring of the dredging of the St-Lawrence River waterway. We did not find any updated map of the contaminated sites in the River.

It seems likely that the Strategy Saint-Laurent director instructed the ZIP Committees not to fill out our survey because we received no response what so ever. Our survey was very simple and straight forward. A lot of Areas of Concern in the US and Ontario filled in the survey.

Overall contamination seems to go down:

Apparently, overall contamination is going down according to the Plan d'Action Saint-Laurent. But it stays pretty stable in the identified hot spots on the previous map. This situation might be due to the sediments movement in the river. There are thousands of tons of sediments that are carried by the River every day. Some of those sediment accumulate on top of the contaminated sediments. This could make the level of contamination go down since a layer of sediment comes on top every year covering the contaminated sites. On the other hand, the bottom of the St-Lawrence river is moving everyday with the current which is very strong in some places. As a result, historical contamination can be removed by the river current and disseminated elsewhere in the River.

The new agreement signed in 2011 (2012-2026) has changed the work of the ZIP Committees. They now focus on biodiversity issues and invading species issues. Those are very important issues, but contaminated sediments are and will be an important issue as well for years to come!

Under the new agreement (Quebec and Canada) follow-up on contaminated sediment is done in the 3 fluvial Lakes (Lac Saint-Louis, Lac Saint-Francois et Lac St-Pierre) every 10 years. For the other contaminated sediment sites in the river, there is no monitoring by the governments. At the least they could not provide us with any updated data for the sites we are showing on the map. There is an overall water monitoring effort that is done every month by environment Canada.

In conclusion, we are witnessing a situation that we can refer to as the 3 monkeys! We do not see anything; we do not hear anything; we do not say anything! This behavior of our Governments towards contamination of the St-Lawrence River is not acceptable! We will not abdicate our right to a clean environment.