



June 11, 2021

**To:** House of Commons Standing Committee  
Environment and Sustainable Development Environment and Climate Change Canada

**From:** Francois Bouchart, Director, Water Resources, The City of Calgary

**RE: Brief on freshwater study**

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Dear Committee members,

The City of Calgary ("The City") appreciates the opportunity to submit a brief to inform House of Commons Standing Committee on Environment and Sustainable Development study on freshwater. The City is committed to ensuring a healthy and resilient watershed to make life better for current and future generations of Calgarians.

Increasing growth in the region and climate change pressure make water management one of Calgary's most critical resiliency challenges. Calgary's water resources are shared with other municipalities, First Nations, rural users, agriculture, industry, and recreation. This requires a collective, flexible approach to water management. Working collaboratively, The City aims to protect water supply, use water wisely, keep rivers healthy and build resiliency to flooding. Some key focus areas for The City include:

- **Future water security** - This will be impacted by climate change, regional growth, and water licence limits. In our drought-prone region, these challenges are expected to increase pressures on water supply and demand. Calgary's Water Security Framework addresses these risks, which impact both water quality and quantity.
- **Infrastructure and operations investments** – To continue to meet or exceed regulations, we protect source water, ensure high quality drinking water, and invest and innovate in infrastructure to limit impacts of Calgary's stormwater and wastewater on downstream users and aquatic ecosystems.
- **Flood resilience** – Through collaborative action with all orders of government and citizens, we protect public safety, reduce flood damage to property and infrastructure, and build more resilient communities. Stormwater and river flooding are two of the largest disaster risks to Calgary, and more intense storm events are expected with climate change.
- **Science-based water management** – This is done by developing and exchanging knowledge with other orders of government, regional stakeholders, and academia to inform actions on water security, flood and drought management, and reducing urban impacts on aquatic health. We also need to start considering traditional knowledge in planning and decision making.

The City strongly values intergovernmental collaboration and transparency and we look forward to participating in your study and the development of a new Canada Water Agency. The guiding questions from the Committee are addressed below:

### **1. Introductory information**

a) Which issues related to protecting and managing freshwater does your organization work on?

The City of Calgary provides drinking water, wastewater, and stormwater services to over 1.3 million people. Therefore, watershed management, water security, source water protection, flood

and drought mitigation, stormwater and wastewater water quality - as well as climate impacts on all of these areas - are key freshwater issues we work to manage.

## **2. Interaction and collaboration with federal departments and agencies**

a) Does your organization interact with federal departments and/or agencies on freshwater issues? If so, on which issues and with which departments and/or agencies?

The City of Calgary interacts with a number of federal departments on freshwater issues. Currently we work with:

1. Environment and Climate Change Canada (ECCC) with the administration of:
  - a. Canadian Environmental Protection Act
  - b. Section 36 of the Fisheries Act release of deleterious substances that could impact fish or fish habitat
  - c. Migratory Bird Convention Act as there are many birds that nest beside or in water that are protected under the Act, and we seek guidance from ECCC in regards to complying with this Act.
  - d. Species at Risk Act (SARA), because Bull Trout are identified as SARA and they are found in the Bow watershed including the Bow River in Calgary.
2. Fisheries and Oceans Canada: The Fisheries Act applies to our in-river work, for example: bank protection, work on gravel bars, flood barriers, bridges, and fish compensation projects within Calgary.
3. Transport Canada: Canadian Navigable Waters Act and rights to navigation on Calgary waterways, which has implications on recreation or management of other impacts on Calgary's drinking water reservoirs.
4. Canadian Environmental Assessment Act – This has not been triggered within Calgary but could potentially with a major project. The City is participating as a key stakeholder in the regulatory proceedings of the Provincial Springbank Off-Stream Reservoir project (Calgary is the main benefactor of this project).
5. Federal Policy on Wetlands Conservation – as it aligns with The City's Wetland Conservation Plan and actions to preserve and restore wetlands.

b) Do the specific freshwater issues targeted by your organization fit within the mandate of a given federal department and/or agency or do they relate to more than one department and/or agency? If more than one, have you been able to identify a lead department and/or agency with which to engage?

The City of Calgary's freshwater issues relate to more than one department and there are various lead agencies on specific issues – see above. In some cases there seems to be limited coordination between the federal departments and sometimes there is contradictory guidance given on different pieces of federal legislation. Recent federal efforts to put all multiple departments' approvals on a common registry have been helpful.

c) Have you encountered notable successes in engaging with the federal government on freshwater issues? If so, please specify. If you have not had success in doing so, what in your opinion is the reason (e.g., no program available tailored to your needs, no identifiable service or unit within a department and/or agency with which to engage)?

The City of Calgary participated in the federal government's extensive public engagement on the 2018 changes to the Fisheries Act, Canadian Environmental Assessment Act and the Canadian Navigable Waters Act. The Acts have been changed but policy and processes are slow to be rolled out, notably with Fisheries and Oceans Canada, so we look forward to the implementation of changes.

d) Do you foresee engaging with the new Canada Water Agency? If so, in what way? What are your organization's expectations with respect to the Agency?

A new Canada Water Agency could support collaborative intergovernmental river basin planning with provinces, territories, and Indigenous communities and strengthened transboundary water management. The Agency could also coordinate administration of federal legislation to provide more consistency and improve understanding of trans-boundary watershed issues, including alignment of freshwater concerns and federal protected area targets.

A new Water Agency could help facilitate coordination and dissemination of water information (e.g. precipitation data, surface water quality and quantity, groundwater, soil moisture, stream flow, climate change modelling) to support decision making, and help build better flood and drought forecasting models, for example.

Other areas a new Water Agency could support include funding for infrastructure (including natural infrastructure) and for protection of freshwater quantity and quality. Support could include funding for leading edge research and guidelines and support for emerging issues (e.g. emerging substances of concern in freshwater).

### **3. Federal water legislation, policies and regulations**

a) Does your organization interact with federal departments and/or agencies on policies, legislation, regulations, or funding programs related to freshwater? If so, please specify.

The City of Calgary actively participates in opportunities for stakeholder input on legislation. For example, we were involved in engagement on changes to federal legislation in 2018 and in 2020 and 2021 (see above) have been involved in input into procedural changes for Transport Canada and Fisheries and Oceans Canada (i.e. TalkFishHabitat)

The City is currently working on the Inglewood Bird Sanctuary Channel Reconnection Project with support from Environment Canada's Nature Fund for Aquatic Species and Aquatic Habitat. The City also applied unsuccessfully for Infrastructure Canada's Disaster Mitigation Adaptation Fund (DMAF) which could support climate adaptation on freshwater (e.g. flood mitigation and stormwater improvement infrastructure). We have not received details on any future DMAF funding opportunities.

b) Can you identify any current gaps in federal water legislation, policies, regulations, and/or initiatives, or in general across jurisdictions? If so, please specify.

There is a lack of understanding and governance of groundwater in Alberta. This could be an inter-provincial concern, and ideally a new Water Agency could use resources to study and better understand groundwater to the benefit of all provinces. There is also an opportunity to align understanding of trans-boundary watershed issues, including transboundary freshwater concerns, climate impacts to freshwater and federal protected area targets.

c) Do you feel the federal government could play a more effective role in protecting watersheds in Canada? If so, which watersheds and how?

Yes, the federal government could play a more effective role in focusing on nationally relevant research as well as watersheds that cross interprovincial or international boundaries.

d) Are there areas of freshwater policy, legislation and/or regulation where you feel the federal government should play a greater role?

The federal government could play a larger role in water security, drinking source water protection, and groundwater. The federal government could also contribute to improved understanding of and addressing climate change impacts on water resources across Canada, which vary regionally. Climate impacts include drought, floods and associated water quality issues for example.

e) Are there areas of freshwater policy, legislation and/or regulation that you feel the federal government should vacate and leave to another level of government or to the private sector?

No, as this could result in inconsistency across the country and between industries.

f) Are you aware of instances where federal freshwater policy, legislation, regulations, and/or initiatives have clearly benefitted from your organization's input?

We have not seen direct evidence of The City of Calgary's input clearly influencing policy, legislation and regulations, however we have seen some general values reflected in legislative changes. One of the challenges is that the time between engagement and rollout can be years and so the messages can get lost, and follow up may not happen.

#### **4. Collection of information and data**

a) Do you believe that there is sufficient data collected and made available publicly about freshwater in Canada?

Data is often scattered across multiple jurisdictions, agencies, and institutions (including Universities). Even in cases where plentiful data exists, access and transparency can be challenging, and there is uncertainty whether data is comparable across the country and over time.

b) Do you believe there should be improvement in freshwater-related data-sharing?

Improved data sharing would be welcomed, along with standardization of data collection.

c) Is there any specific type of data or information you would like the federal government to provide to freshwater stakeholders?

Ideally a new Water Agency would help facilitate centralizing of water data from across Canada (e.g. precipitation data, surface water quality and quantity, groundwater, soil moisture, stream flow, climate change modelling, aquatic species, invasive freshwater species, emerging substances of concern, and more). This could to support watershed management decision making, and help build better understanding of climate change impacts for flood and drought forecasting models, for example.

d) Has your organization experienced challenges obtaining well-organized data from the federal government on issues relating to freshwater?

Yes, and we have heavily invested into collecting our own data.



e) Is the lack of standardized data or information across government jurisdictions a problem or challenge for your organization in accomplishing its objectives with respect to protecting and managing freshwater?

Yes, and we have heavily invested into collecting our own data.

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Should you require further information, please feel free to contact us.

Sincerely,

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