

**Séminaire jeudi le 06 février 2020 11:00 / Seminar Thursday February 6<sup>th</sup> 2020 11:00h**

**Sujet/Subject 1:** Rôle et fonctionnement de la Commission Mixte Internationale (CMI)

**Langue/language :** Français / French

**Conférenciers/Lecturers:** **Dr. Pierre Béland (CMI)**

### **Résumé / Abstract**

Monsieur Pierre Béland est président et commissaire canadien de la Commission mixte internationale, une organisation binationale établie lors d'un Traité signé en 1909 entre le Canada et les Etats-Unis. Indépendante des deux gouvernements, la CMI répond à leurs demandes concernant la gestion des eaux et de l'environnement limitrophes d'un océan à l'autre.

M. Béland est détenteur d'un doctorat (1974) de l'Université Dalhousie (Halifax). Il a travaillé comme chercheur scientifique et chef du Centre de recherche sur l'écologie des pêches au ministère des Pêches et des Océans du Canada, et (1975-1981) au Musée national de la nature en tant que paléo-écologue étudiant les dinosaures.

Expert de renommée mondiale sur la conservation des bélugas, le Dr Beland a publié trois livres, de nombreux articles scientifiques et de vulgarisation, et a animé une série télévisée sur l'environnement. Il a été chercheur principal à l'Institut national d'écotoxicologie du Saint-Laurent, un organisme sans but lucratif voué à la recherche et à l'éducation sur les mammifères marins et les composés toxiques dans les écosystèmes estuariens.

Béland is the Canadian Chair & Commissioner of the International Joint Commission, a binational organization originating from a 1909 Treaty between Canada and the USA. As an independent body, the IJC responds to references from these two countries relative to boundary issues and waters from coast to coast. Beland completed a PhD (1974) at Dalhousie University (Halifax). He worked as a research scientist and head of the Fisheries Ecology Research Center with the Department of Fisheries and Oceans Canada, and (1975-1981) with the National Museum of Nature as a paleo-ecologist studying dinosaurs.

A world-renowned expert on conservation of beluga whales, Dr Beland has published three books, numerous scientific and popular articles, and has hosted a TV series on the environment. He was senior research scientist with the St. Lawrence National Institute

of Ecotoxicology, a non-profit organization dedicated to research and education on marine mammals and toxic compounds in estuarine ecosystems.

**Sujet/Subject 2:** Record-levels in the Great Lakes – St. Lawrence River system

**Langue/language :** Anglais / English

**Conférenciers/Lecturers:** **Jacob Bruxer**

Senior Water Resources Engineer

Ingénieur principal en ressources d'eaux

Bureau de la Régularisation des Grands Lacs et du Saint-Laurent

### **Résumé / Abstract**

Record-high water levels were recorded across the Great Lakes - St. Lawrence River system in 2019, resulting in unprecedented flooding, shoreline erosion and other high water impacts. For Lake Ontario and the St. Lawrence River, this was the second such high-water event in the past three years, raising questions in both Canada and the U.S. about the causes of such events, concerns that they may occur again in the future, and a search for potential solutions. National Hydrologic Service (NHS) staff provide engineering and technical support to the International Joint Commission and its bi-national Boards, including those responsible for regulating outflows from Lake Superior and Lake Ontario. In that context, this presentation will describe the hydrological drivers of recent high water events in the Great Lakes basin, and the role of outflow regulation. As part of these responsibilities, NHS staff also produce bi-nationally coordinated Great Lakes water level forecasts extending tending out 6-months. While in the past these have largely been based on climatology, since 2017, improvements have been made using 1-4 week deterministic and ensemble forecasts of water supplies thanks to collaborative efforts with colleagues at the Canadian Centre for Meteorological and Environmental Prediction (CCMEP), Atmospheric Science and Technology Directorate. Water level outlooks for the spring of 2020 – and potentially beyond – will be presented