#### KINGSTON INNER HARBOUR SEDIMENT MANAGEMENT PROJECT

Transport Canada | Parks Canada

# The Project

A history of industrial activity in the area surrounding Kingston Inner Harbour (KIH) resulted in contamination of the sediment that lines the harbour bed. Historical uses included a railway, shipyard, fueling, coal gasification, tannery, lead smelter, landfill and other operations.

Studies have concluded that people, fish and wildlife may experience negative health effects (risks) if exposed to this contaminated sediment. Despite several decades of time for natural recovery, several areas have not recovered enough to be safe for current uses. Therefore, management measures have been recommended to address those risks.

Transport Canada and Parks Canada are

planning to work together to manage contaminated sediment within federal water lots at KIH. The proposed management area is bound by Highway 2 (LaSalle Causeway Bridge) to the south and Belle Island/Cataraqui Park to the north, on the western side of the harbour.

A percentage of the proposed management area is under the administration of the City of Kingston. Transport Canada and Parks Canada are exploring opportunities to partner with the City.

The conceptual sediment management plan includes areas of dredging (removal), capping (covering with clean material), engineered shoreline features, and areas that will be left to recover naturally. The goal is to balance protecting sensitive species, habitats, and valued features with reducing risks associated with contamination.

Prior to project implementation, an impact assessment will be completed, and feedback will be requested from Indigenous communities, local stakeholders and members of the public. The impact assessment will determine if any aspect of the project could cause significant adverse environmental effects, and will identify measures required to mitigate potential adverse effects.

## What is the Problem?

- Sediments in Kingston Inner Harbour are contaminated with chemicals released from historical land uses near the harbour.
- The chemicals include metals such as chromium, copper, arsenic, and mercury, as well as polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs).
- Conditions have been evaluated over a number of years and scientific studies concluded that the contaminants are causing risks to humans, fish, and possibly other wildlife.

## What is the Solution?

- The conceptual plan includes removing (e.g., dredging) or containing (e.g., covering with a thin layer of sandy material) some contaminated sediments from near-shore areas where contamination is more locally concentrated and poses a higher risk.
- Large areas that are less contaminated will be left to recover naturally.
- This approach will reduce impacts of chemicals on the environment and people, while respecting natural habitats.
- The Project will help to make a safer, cleaner harbour.

View of Kingston Inner Harbour from Douglas Fluhrer Park. The Woolen Mill can be seen in the distance





#### Studies Completed and Conceptual Plan

- Many studies have been conducted in the harbour to identify and map out areas of contamination.
- An ecological and human health risk assessment was completed to estimate the likelihood and severity of potentially dangerous health effects that may occur due to contaminants in the sediment.
- The assessment identified potential risks to humans through recreational activities (like wading and walking along the shoreline) and eating fish. It also identified the potential risks to invertebrates living in the sediment, fish that live in the harbour, and wildlife (birds and mammals) that live in the harbour and eat the invertebrates and fish.
- Results of the risk assessment were used to develop a conceptual sediment management plan.
- The goal of the sediment management plan is to reduce the overall risks to humans, invertebrates, fish, and wildlife, while allowing the less contaminated areas to recover naturally.
- The plan will also focus on protecting sensitive habits, and areas with archaeological, recreational, and aesthetic value.
- Transport Canada and Parks Canada will also complete an Impact Assessment that will be used to determine if the proposed sediment management plan will cause any significant negative environmental effects, and identify ways to reduce or eliminate that harm, including environmental controls (e.g., turbidity curtains and environmental monitoring of sediment and water quality).





We are committed to providing Indigenous communities, stakeholders and the public with information regarding the proposed work, and creating meaningful opportunities to share knowledge and provide input on project plans, potential impacts, and suggested improvements/ mitigation measures.

Opportunities to learn about the project and provide input will be provided throughout the planning stage, including through a public website (<u>www.KIHproject-projetPIK.ca</u>) which will host project documents and updates, virtual information sessions, comment forms and public comment periods as well as an email address accepting questions and feedback.

# What's Next?

Timelines for project implementation will be refined as project planning continues. It is tentatively estimated that detailed design for the project will begin in 2023, and physical works could begin in 2025; however, this is subject to change as planning progresses.











Ecological health mammalian wildlife





Ecological health benthic community



Ecological health—fish





GOLDER MEMBER OF WSP