

# Kingston Inner Harbour Sediment Management Project

## What We Heard

Review of Public and Stakeholder Engagement 2021-2022



# Section 1

## Introduction and Project Background

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. Most of these sources are no longer present, but the legacy of these older activities remains.

Despite several decades of natural recovery, several areas of KIH have not recovered enough to be safe for current uses by people (such as wading) or by fish and wildlife (their health and food resources). Studies have concluded that people, fish, and wildlife may experience negative health effects (risks) if exposed to the contaminated sediment that lines the harbour bed. Therefore, management measures have been recommended to address those risks.

The Project is being led by Transport Canada and Parks Canada. Much of the impacted sediment falls in parts of the harbour, called water lots, that are owned and managed by the federal government. The sediment management area is bounded by Highway 2 (LaSalle Causeway Bridge) to the south and Belle Island/Cataraqui Park to the north (on the western side of the harbour). Only a portion of this management area will need physical intervention.

Transport Canada and Parks Canada are exploring opportunities to partner with the City of Kingston as a portion of the sediment management area includes strips of water lots along the western shoreline of the harbour that are administered by the City.

The goal of the Project is to reduce chemical risks to humans and ecological receptors while ensuring the protection of wildlife habitats, archaeological, infrastructure, and recreational values.

### What is the Problem?

- ❑ Sediments in Kingston Inner Harbour are contaminated with chemicals released from historical land uses near the harbour.
- ❑ The chemicals are mostly metals such as chromium, arsenic, and mercury, as well as polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs).
- ❑ The chemicals can be harmful to humans, fish, and possibly other wildlife.

### What is the Solution?

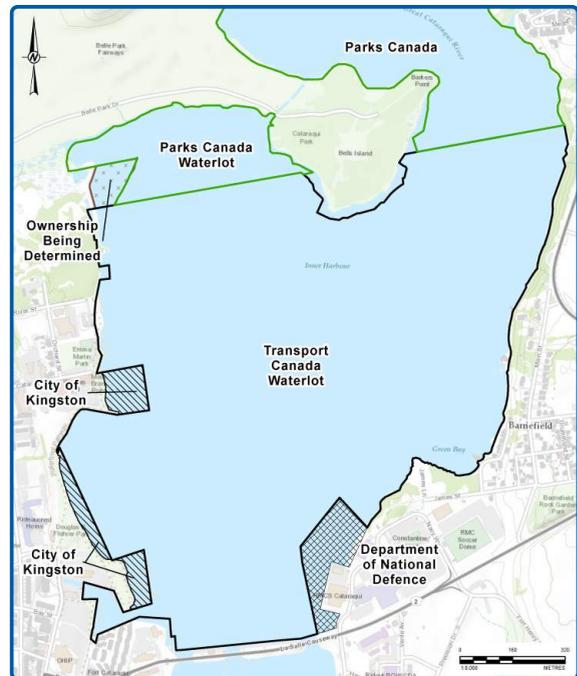
- ❑ Sediments management will include removing (e.g., dredging) or containing (e.g., covering with sand) some contaminated sediments. Large areas that are less contaminated will be left to recover naturally.
- ❑ The goal of the Project is to reduce the impacts of chemicals on the environment, while respecting natural habitats.
- ❑ Sediment management will help to make a safer, cleaner harbour and align with other uses of the shoreline.

## What is the Project?

Historical industrial activity in the area surrounding Kingston Inner Harbour (KIH) resulted in contamination of the sediment that lines the harbour bed. The main historical sources of contamination have since been replaced by newer and cleaner site uses, but their legacy remains in the sediment chemistry. The activity from these sites deposited contaminants including metals and hydrocarbons directly into the harbour, and also washed substances into the harbour with surface water or groundwater. Sediments collect contamination from past inputs, which do not clean up rapidly under natural conditions.

Transport Canada and Parks Canada are working together to manage the contamination in the harbour. The sediment management plan is expected to remove or contain some contaminated sediments and leave much surface sediment with lower contamination levels in place. Sediments removed from the harbour will be disposed of safely off-site. The human and environmental impacts/benefits that have the potential to occur are being considered. Following initial stakeholder consultation, the conceptual sediment management plan (SMP) was updated.

The current management plan includes refined areas of dredging (removal), capping (covering with clean material), shoreline modifications (which entail nature-based solutions), and areas that will be left to recover naturally. The goal is to balance protection of sensitive species, habitats, and valued features with reduction of contamination risks.



## What is the Project?

The Project is currently in the planning stage, but will broadly consist of the following elements as described in the updated conceptual Sediment Management Plan (WSP 2023):

- Installation of temporary facilities and laydown-area(s).
- Dredging of contaminated areas within KIH with the highest concentrations of primary Contaminants of Concern (COCs) (chromium, PAHs, PCBs), with off-site disposal of contaminated material.
- Monitored natural recovery, although not appropriate as a blanket solution for the full study area, remains an important strategy for large volumes of sediment in the central portion of KIH. Some of these areas are currently at low risk levels for human and ecological health and will remain stable or further decrease slowly over future decades.
- Placement of a thin engineered cover (potentially including sand, activated carbon, and/or organic materials), in lower risk areas, where dredging residuals are of concern, or in areas where dredging is not feasible.
- Placement of a conventional sand cap with activated carbon within Anglin Bay.
- Nature-based shoreline rehabilitation to enhance ecological habitat and prevent erosion, while limiting the potential for human access to the water and addressing nearshore contamination.
- Buffer zones between the dredging footprint and shoreline have been added to preserve the integrity of shorelines, sensitive habitats, and archaeological features in some areas.

## About Transport Canada and Parks Canada

Transport Canada is the federal department responsible for developing regulations, policies and services for road, rail, marine and air transportation in Canada. Parks Canada is the federal department responsible for the protection of many of Canada's national historic sites, parks and protected areas. Together, Transport Canada and Parks Canada are leading this Project as federal custodians of the water lots.

This document has been prepared to present key findings from engagement activities that have occurred to date.

## Section 2

### Engagement with Stakeholders, and Interest Groups

Communication and engagement with local stakeholders, regulatory authorities, and the public are an important part of project planning and meaningful to Transport Canada and Parks Canada. In partnership, Transport Canada and Parks Canada are leading the Indigenous engagement and consultation component of the Project. The Nation-to-Nation consultations are not detailed in this report.

The overarching objective of past and ongoing engagement activities is to inform interested parties of the recommended sediment management strategy (the Project) and consider and incorporate feedback on areas or issues of concern. Feedback obtained about the Project to date supported revisions to the SMP prior to detailed design and are being integrated into the in-progress Detailed Impact Assessment.



To date, several engagement activities have taken place. The engagement activities undertaken from September 2021 to December 2022 are briefly summarized in this section. Additional engagement will continue at milestone stages of the Project life cycle.

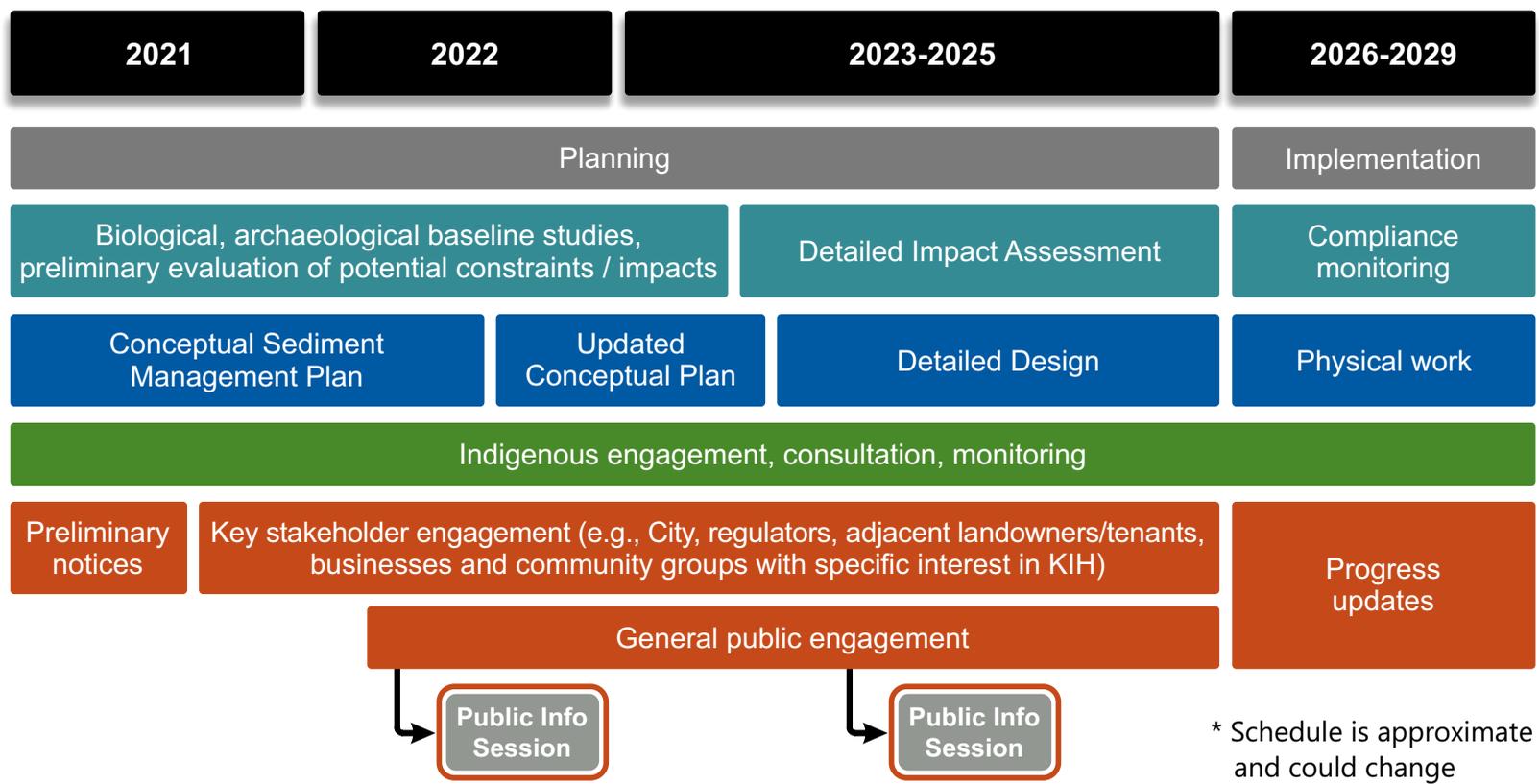


## Identification of Stakeholders and Interest Groups

Four groups of stakeholders and interest groups were identified at the Project's outset to help organize the numerous interests in the Project. These are detailed in the table below.

Stakeholder, or Interest Group	Description	Interest in the Project/Key motivators	Consideration of Input
<b>Landowners</b>	This includes properties that share a boundary with the Transport Canada and Parks Canada water lots, such as the Woolen Mill property and the private owner of the Orchard Street Marsh brownfield lands.	Landowners have a financial and/or personal interest or ownership in the project because of land value considerations and shared interest in the design of features at the boundary between the shoreline and water lot.	Input from this group will be given consideration due to landowner groups' vested interest in the project and outcomes.
<b>Federal, Provincial and Municipal Agencies</b>	This includes representatives from all levels of government, including the site custodians, the City of Kingston, other potential regulators (e.g., Ontario Ministry of the Environment, Conservation and Parks) and federal expert support departments.	These agencies have a mandate or jurisdictional responsibility for one or more elements of the Project.	Input from this group will be given consideration due to regulatory mandates and obligations.
<b>Community Groups</b>	This includes recreational groups and environmental organizations, boating clubs, birdwatching groups, and other water-based recreation associations.	Typically, these groups include users of the water and land (i.e., waterfront) associated with the Project; in many cases, for recreational purposes, environmental stewardship, and conservation interests.	Input from this group will be given consideration based on interest from the general public and other interest groups that are not directly associated with the Project area.
<b>Other Interested Parties</b>	This includes members of the public and any other stakeholders that do not fall into the preceding four groups.	This group may not be directly affected by the Project but may be interested in the process and/or outcomes.	Input from this group will be considered in light of input received from the other groups noted above. Individuals may provide input as part of an organization or distinct from such groups.

# Project Schedule



\* Schedule is approximate and could change



# Section 3

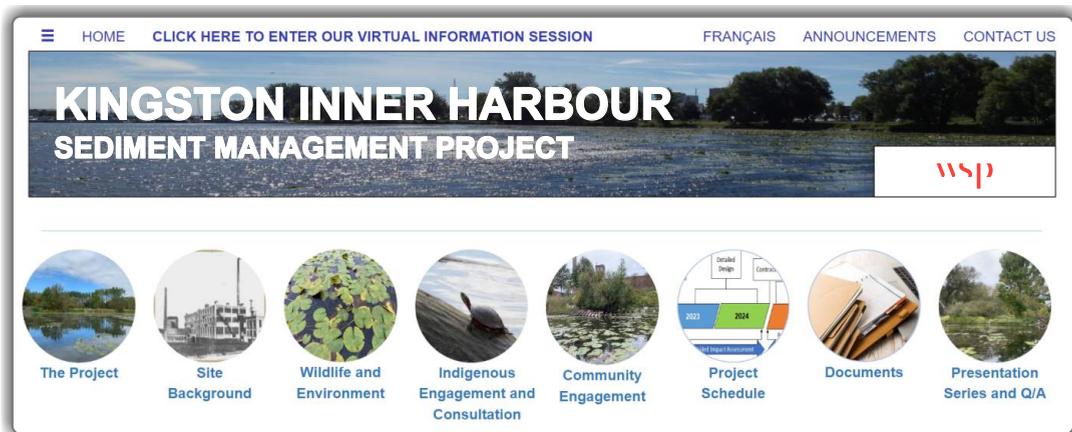
## How We Engaged

### Engagement Methods and Tools

Multiple engagement and communication tools were used to facilitate meaningful opportunities for interested parties to contribute. This allowed for input from stakeholders, regulators, and the general public through a variety of outlets.

### Virtual Information Sessions

The KIH project website documents the delivery of the Virtual Information Session (link at the top of the home page). The format and contents of the Virtual Information Session were developed in response to changing public health restrictions due to the COVID-19 pandemic and were implemented in place of in-person public information sessions. The Virtual Information Session was a multimedia presentation accessed from the KIH Project website. It included a narrated video with major topics: Site Background, Studies and Results, Recommended Management Strategy, Current Status of the Project, and Next Steps. A feedback session was held from August 5<sup>th</sup> to October 30<sup>th</sup>, 2023, where comments on the Virtual Information Session could be provided through a comment form.



## How We Engaged



### Website

A project website was developed ([www.kihproject-projetpik.ca](http://www.kihproject-projetpik.ca)) and is presented in both English and French. The website was initiated in 2021 and was intended to be a central repository of available information on the Project. The initial website launch provided general information on the Project, including a list of existing studies and reports, a project announcements section, and a contact page. The website is periodically updated when new Project updates become available.

### Meetings

Since the Fall of 2021, nine (9) formal meetings and/or workshops for stakeholders and the public have occurred. Meetings were held virtually via Microsoft Teams, with an option to dial-in by telephone. Meetings were held with the following stakeholders and interest groups: the general public, Parks Canada, the City of Kingston, Transport Canada, Public Services and Procurement Canada, and Patry Inc. Developments, Friends of Kingston Inner Harbour, Belle Island Caretaker Circle, Kingston Field Naturalists, Turtles Kingston, and River First YGK. Outside of formal meetings, the Project team continues to regularly provide answers, clarifications, and receives community feedback via email.

### Public Outreach Events

Three public outreach events across four days were held during the virtual information session comment period. Bilingual WSP staff handed out information sheets on the virtual information session and answered public questions on the weekend of August 19 and 20, 2022, at Emma Martin Park, the Kingston Night Market on Friday, September 17th, and the Kingston Farmers Market on Saturday, September 18th.

At the Emma Martin Park outreach event, fifteen (15) groups/individuals interacted directly with the Project team, and others scanned the signage and/or took leaflets. At the night market, nine (9) groups/individuals interacted with the Project team, and nineteen (19) groups/individuals interacted with the Project team at the Kingston Farmers Market. Others scanned the signage and/or took project leaflets. Common themes/questions heard from visitors included: concerns about effects to wildlife, methods being used for sediment clean up, concern about risks from current contamination to recreational users (e.g., swimming, boating) or from consuming the fish; disturbance of sediment within the harbour.

## How We Engaged

### Street Signage

Physical signage was used to communicate the engagement process and to direct interested parties to the website contents. The KIH project website documents the delivery of the Virtual Information Session (link at the top of the home page).

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### Advertisements

Newspaper advertisements were placed in the **Kingston Whig Standard** on 3 September, 10 September, and 17 September 2022 and **Kingston This Week** on 8 September, 15 September, and 22 September 2022. The advertisements were also placed in the online versions of these newspapers from 1–30 September 2022. The advertisements presented a map of the site, some high-level bullet points about the Project, the website address (Uniform Resource Locator [URL]), and a two-dimensional quick response (QR) barcode that interested parties could scan to take them to the website.

A series of similar online advertisements also ran between August 31, 2022 and November 21, 2022. This included advertisements posted to The Weather Network, The National Post, the Ottawa Citizen, CBC News, Kijiji Free Local Classifieds, Wordscapes, and local newspaper websites.

### Summary of Participation

<b>Visits to KIH Website</b>	<b>5,300+</b>
<b>Public Outreach Interactions</b>	<b>34 groups/individuals</b>
<b>Virtual Information Session Visitation</b>	<b>1,846 unique visitors over August, September and October of 2022</b>
<b>Comment Forms</b>	<b>24</b>
<b>Formal Meetings/Workshops</b>	<b>9</b>
<b>Online Advertisements:</b>	<b>167,000 + impressions</b>

# Section 4

## Key Themes and Issues Raised During Engagement

### Biophysical Environment



- Interest in research about existing wildlife, fish, and aquatic life (i.e., turtles, amphibians).
- Concerns related to vulnerable species.
- Potential for contamination of drinking water and water bodies.
- Concerns related to sensitive wildlife habitats including bird nesting areas.
- Interest in how beaver activity might impact sediments and remediation efforts.

### Human and Socio-Economic Environment



- Knowledge about historical contamination from past industrial activity.
- Concerns related to the impacts to human health (i.e., existing contaminants as well as Project activities).
- Concerns related to consumption of fish caught in the harbour.
- Potential concerns related to current infrastructure and operations in the harbour.
- Concerns related to impacts to cultural, historical, and archaeological resources.

### Project Logistics and Methodology



- Concerns related to dredging.
- Interest in seeing additional studies on local hydrology, and current level of risk.
- Risks related to dewatering sediment and spreading of contaminants to new areas.
- Interest in green engineering methods (i.e., use of native species, shoreline habitat enhancement).
- Interest in Project costs and funding.
- Alignment with the City of Kingston's Master Plan.

### Engagement and Consultation



- Additional consultation and engagement activities about the Project with the community.
- Trouble navigating the Project website.
- Involvement of local businesses, clubs, and universities.
- Consultation with Indigenous Nations and communities.

### Future Plans



- Protection for future generations.
- Interested in other developments that may also be planned in the area including along the waterfront.
- Environmental controls for preventing future contamination.

## Key Themes and Issues from Engagement

Some of the input provided to date by participants (i.e., stakeholders and interest groups) that has been received related to key themes and/or issues from engagement is outlined below:

*"If contaminated sediment is removed, where would it be taken? How much would be removed? How would it travel through Kingston?"*

*"Enjoyed your well written reports, and excited to see this area finally get some remedial attention."*

*"Are you using up to date information that takes into account the natural remediation that is occurring? Why do you emphasize "fish deformities" when there have been no reports of deformed fish being found in recent years? Are you taking into account the surge in turtle numbers, or the increased number of Canada Geese and Mute Swans?"*

*"The information presented on the KIH Project website with regards to the human health and ecological risks of the contamination and the mobility of sediments in the KIH is consistent with our scientific understanding of the harbour contamination... We agree strongly that management action is needed along the western portion of the KIH to address the environmental risks of the sediment contamination in this area, where there is little potential for natural recovery. We are pleased to see that the KIH Project team is also considering factors such as sensitive wildlife habitat and green engineering solutions as part of the management plan development."*

*"A reason why natural shorelines really matter was people need to be able to access the ice easily. Would be horrible to have to climb down rocks.... Should always remain totally accessible for all community members. We worry about private ownership."*

*"Every Kingston resident should see this presentation."*

*"Dredging should not be considered the only viable plan. Environmental impacts should be considered more important as the process may require more detrimental harm. There are vulnerable species within the area that require protection."*

## Section 5

### Next Steps

Project engagement activities have focused on informing stakeholders and interest groups about the proposed plans for KIH, and engaging in open dialogue about the key issues that they have identified based on review of the sediment management strategy. Engagement will continue throughout the duration of the Project. The Project team has emphasized that additional opportunities for feedback and consultation will be provided as the Project is refined over time and as additional information is collected (e.g., during Detailed Impact Assessment process).

The tools (i.e., Project website, outreach events, meetings, street signage, and newspaper ads) utilized to communicate about the Project proved successful at reaching the intended group(s) identified for engagement activities. These tools demonstrated that limitations on in-person engagement events would not be a barrier to progressing with public communication and engagement events. Future engagement options (i.e., in-person and remote) will consider the number of people, the issues under consideration, and the status of COVID-19 and public health measures.

The next phase of engagement focuses on the Conceptual Constraints and Impact Considerations (CICC) report and the updated Conceptual Sediment Management Plan (SMP) (fall 2023). The CICC report is intended to document key environmental concerns for consideration to help frame the formal Detailed Impact Assessment and detailed design. Key documentation includes valued environmental components, contingencies, and mitigations, as well as priorities for further study. These key documents will also inform multiple engagement steps throughout the Project before finalization and implementation of the management plan. Feedback to date from consultation and engagement activities has been included in the updated SMP.



## Next Steps

The updated SMP incorporates information from several sources: Parks Canada and Transport Canada; feedback from Indigenous Nations and communities, stakeholders, interest groups (e.g., recreational groups, environmental interest groups, and local property owners), and the general public; and new technical and scientific findings. Updates include:

- ❑ Additional discussion related to (DND) water lots at Anglin Bay;
- ❑ Additional discussion related to natural recovery;
- ❑ Additional refinement to mapping of contamination hotspots (i.e., areas of high contamination);
- ❑ Inclusion of nature-based (green engineering) solutions for shoreline modification;
- ❑ Refinement of remediation areas based on additional sampling, ongoing consultation, and updated information on sensitive habitats and, archaeological areas;
- ❑ Refinement of shoreline modification areas based on coordination with the City of Kingston and consideration of important wetland habitat, sensitive timing windows (i.e., turtle nesting and overwintering season, species at risk);
- ❑ Updated information about the volume of contaminated sediment/disposal costs; and
- ❑ Updated information on sediment transport/movement, turtle habitat (i.e., 2019 data from Friends of Kingston Inner Harbour), species at risk, and fish communities.

The planning stage is expected to be complete in 2025 and construction is expected to begin in 2027. Construction will take approximately three seasons to complete to avoid sensitive environmental timing windows (i.e., turtle nesting and overwintering season). During the next stages of the project, feedback from the CCIC, the updated SMP, and continued engagement activities will support refinements to the remediation planning, including detailed design and permitting; implementation of physical works; post-construction monitoring stages; and long-term monitoring for natural recovery zones. The Project Schedule (Page 7) outlines the ongoing consultation and engagement across the next stages of the project. Follow-up engagement activities will include (but are not limited to) additional stakeholder meetings in early 2024 on the updated SMP and during detailed design (2024-2025) as well as a public review period on the draft Detailed Impact Assessment (mid-late 2024).

