



You are receiving this newsletter because you have expressed an interest in, or a connection to, the Iona Island Wastewater Treatment Plant Projects, the adjacent Iona Beach Regional Park, resource recovery opportunities, or the area's ecology.

[Learn more about the projects](#)

April 24, 2023

Project Updates

Thanks to the Province for \$250 Million in Funding

On March 3, 2023 the Province of BC announced a contribution of \$250 million toward the first phase of the Iona Island Wastewater Treatment Plant Projects, helping Metro Vancouver to meet the demands of the growing population, while protecting the health of people and the environment.

[Read the Province's news release](#)

Lagoon Clean Out

Over the next seven years, the existing treated sludge lagoons will be cleaned out to prepare the site and support wastewater treatment plant upgrade construction. Each area will be re-purposed for alternate uses during and after project construction. The sludge lagoons will eventually be transitioned to wetlands, terrestrial habitat, and park amenities that will be integrated into Iona Beach Regional Park.

In spring 2023, water is expected to be removed from the southeast lagoon. Clean out operations on the other sludge lagoons will begin in spring 2024 for approximately nine months, and occur yearly until 2030.

Metro Vancouver will continue to monitor and mitigate noise, odour, and wildlife impacts throughout operations. Visit the [project webpage](#) to learn more about lagoon clean out activities.



Location of the Iona Island Wastewater Treatment Plant treated sludge lagoons.

Bird Studies for Ecological Restoration Projects

xʷəyeyət (Iona Island) contains a wide range of fish and wildlife habitats, and a high diversity of species, including several species at risk. In 2022, Metro Vancouver conducted bird surveys on the island and observed approximately 159,000 birds comprising 122 species. The survey findings are being used to inform project designs, such as avoiding sensitive habitats and considering key biophysical features. Ecological restoration projects aimed at enhancing foraging habitat may also improve habitat quality.

During the 2022 northward migration, survey results found that the migrating western sandpiper stopped over for a longer duration on xʷəyeyət (Iona Island) than anticipated, based on other research in the Fraser River Estuary. The data underscores the regional importance of xʷəyeyət (Iona Island) and its foreshore for providing shelter and food sources to migrating, wintering, and resident bird populations.



Western sandpipers refueling at Iona Beach Regional Park (photo credit: Hatfield Consultants).

Ground Improvements

The Ground Improvements Project includes the preliminary and detailed design of ground improvements and preload, including seismic analysis, to quantify the soil densification required prior to construction of the new Iona Island Wastewater Treatment Plant. In January 2023, Metro Vancouver selected WSP as the consultant to lead ground improvements and preload design engineering services. Import of preload and fill materials is expected to begin upon receipt of the Development Permit from the City of Richmond.

Barge Berth Design

Metro Vancouver has proposed the design of a barge berth located on the North Arm of the Fraser River in proximity to the new Iona Island Wastewater Treatment Plant. Constructing a temporary barge berth will help reduce construction traffic on Ferguson Road and will improve safety for cyclists, pedestrians, and vehicles travelling to xʷəyeyət (Iona Island), which is only accessible via a two-lane road.

The barge berth will replace approximately 260 to 270 dump trucks per day; reduce both traffic throughout the Lower Mainland and greenhouse gas emissions, consistent with regional objectives; and help to minimize costs and delays.

In March 2023, Metro Vancouver selected Advisian as the consultant to lead barge berth design. The barge berth design process will include further study of potential facility locations. This study will include an assessment of the noise, dust, light, and related health impacts at each of the potential locations.

In summer 2023, Metro Vancouver will provide an engagement opportunity for community members to share their feedback on the Barge Berth Project design.

Causeway Improvements

The Iona Island Causeway, connecting Sea Island to xʷəyeyət (Iona Island) via Ferguson Road in Richmond, BC, provides the only road access to xʷəyeyət (Iona Island). As part of the Iona Island Wastewater Treatment Plant Projects, the causeway is undergoing improvements to maintain safe access to xʷəyeyət (Iona Island) for all road users during construction. Causeway improvements include widening the causeway to accommodate construction traffic, upgrading utilities required for the new treatment plant, and enhancing pedestrian and cyclist infrastructure to ensure safe access. These interim improvements will support the construction of the other projects. The longer-term planning and design for a causeway breach is being completed in parallel.

In February 2023, Metro Vancouver selected McElhanney as the consultant to lead design and construction services for the Causeway Improvements Project. Preliminary design of the causeway improvement is expected to be completed in spring 2023, and construction is expected to take place from fall 2024 to spring 2025.

Early Works Electrical

The Early Works Electrical Project includes the relocation of the existing BC Hydro main power feed cable, installation of a backup generator station that is integrated into the existing plant electrical distribution system, and supply of temporary construction power from the existing BC Hydro YVR/Sea Island substation to a new substation near the Iona Island Wastewater Treatment Plant. Metro Vancouver selected Brown and Caldwell as the engineering consultant to design the Early Works Electrical Project. Preliminary design for the project will begin in April 2023, continuing into detailed design later this year.

Pilot Testing Program

A pilot program to test secondary and tertiary treatment processes will be implemented between 2024-2026 to inform the selection of preferred processes. The program results are required to finalize preliminary design of the upgraded plant. Metro Vancouver has selected AECOM Jacobs as the engineering consultant to deliver initial pilot testing management services.

Iona Island Wastewater Treatment Plant Upgrade – Consulting Engineering Services (Designer) Procurement

The project team continues its pre-procurement activity in anticipation of the release of the Consulting Engineering Services (Designer) Request for Proposals (RFP) for the design of the Iona Island Wastewater Treatment Plant Upgrade. The RFP is intended for market release in mid-spring 2023, with the intent to award the contract towards the end of the year. Over the past several months, the team has been undertaking market sounding activities with wastewater and water project owners as well as with firms with expertise in designing large-scale wastewater projects.

For more information and updates, please visit the procurement section on the [project webpage](#) on our website.



Rendering of the future Iona Island Wastewater Treatment Plant.

New Iona Beach Regional Park Jetty Toilet

If you've had the chance to take a stroll on the Iona Jetty lately, you may have noticed something new at the mid-way point. That's right – in late March, Metro Vancouver installed a brand new pit toilet for public use.



New public pit toilet located at the mid-point of the Iona Jetty.

Community Engagement

The following online engagement meetings were held since the Early Works and Preliminary Design phase began in April 2022:

- Ecological Technical Advisory Panel – June 1, 2022
- Hub Cycling – June 15, 2022
- North Arm Fraser River Marine Users Group – June 20, 2022
- Vancouver Airport Authority – August 24, 2022
- North Arm Fraser River Marine Users Group – November 14, 2022
- Vancouver Airport Authority – December 7, 2022
- Ecological Technical Advisory Panel – December 8, 2022

Please visit the [project webpages](#) to see a list of engagement events and meeting summaries from the Project Definition Phase (June 2018 to February 2022).

About the Projects

The Iona Island Wastewater Treatment Plant in Richmond, BC was built in 1963 and today serves approximately 750,000 residents in the Vancouver Sewerage Area (serving Vancouver, parts of Burnaby and Richmond, the University Endowment Lands, and UBC). The facility provides primary treatment and processes about 200 billion litres of wastewater each year.

The plant is being upgraded to protect public health and the environment in our growing region. The design concepts for the projects include:

- **Tertiary wastewater treatment** to improve the treated wastewater quality being discharged to the Salish Sea
- **Ecological restoration projects** to restore Iona Beach Regional Park's diverse and sensitive ecosystems, build climate resilience, increase park visitor connection to nature, and create integration between the wastewater treatment plant and Park.

Resource recovery opportunities to help support the region’s carbon neutrality objectives, by recovering important resources such as reclaimed water for non-potable uses, and biogas captured and used at the plant to generate heat for operations as well as supply for renewable natural gas to the Fortis BC natural gas distribution system

- **Extensive ground improvements** to protect the plant from earthquake events and account for future sea level rise this century

The projects are now in the Early Works and Preliminary Design phase, with early works to prepare the site underway.

Visitors to xʷəyeyət (Iona Island) may see crews conducting work related to these activities.

The Unflushables

Wipes and other items don’t break down in our sewer system (or your pipes). They can cause nasty clogs and overflows into your homes and your neighbourhood. Put wipes in the garbage, not the toilet. Find out what else can’t be flushed: unflushables.ca.



Keeping You Informed

Thank you for your interest in the Iona Island Wastewater Treatment Plant Projects. If you know others who are interested in the project, please forward this email and encourage them to sign up for future newsletter by visiting the [project webpage](#) and clicking on the “Sign Up” button under “Stay Connected”.

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Metro Vancouver is a federation of 21 municipalities, one electoral area, and one treaty First Nation that collaboratively plans for and delivers regional-scale services. Its core services are drinking water, wastewater treatment and solid waste management. Metro Vancouver also regulates air quality, plans for urban growth, manages a regional parks system and provides affordable housing. The regional district is governed by a Board of Directors of elected officials from each local authority.

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