



Iona Island Wastewater Treatment Plant Projects – Barge Berth



Building infrastructure to protect human health and the environment in a growing region

Project Overview

Metro Vancouver continues to explore suitable locations for a barge berth to support construction of the Iona Projects. Transporting construction materials by barge would ensure safer, more efficient delivery of construction materials to the site over the projects' 15-year timeline, when compared to using trucks alone.

Why a Barge Berth?

Due to the challenging geotechnical conditions in the Fraser River Estuary, extensive ground improvements are required to protect the new plant from future earthquake events and sea level rise.

The barge berth will:

- Reduce construction traffic by replacing approximately 500 dump trucks each day from local roads
- Improve safety for ~370,000 annual visitors who walk, bike, and drive to visit the park
- Reduce greenhouse gas emissions through traffic reduction and align with regional sustainability objectives
- Maintain the project schedule, which will minimize costs and delays to comply with regulatory requirements

Site Selection Criteria

Metro Vancouver has identified four potential sites for the proposed barge berth. A study is being completed to evaluate the identified sites, including the environmental and health impacts at each of the locations. The study will evaluate:

- Input from xʷməθkʷəy̓əm (Musqueam)
- Input from community members
- Ecological impacts
- Functionality
- Costs
- Schedule

Metro Vancouver will select the optimal site.



Locations being considered for the barge berth include:

- Site 1:** Northwest of Iona Island
- Site 2:** Adjacent to the construction laydown area
- Site 3:** In McDonald Slough
- Site 4:** YVR facility

Proposed barge berth location

Introduced Sept 2024

Minimizing Impacts on the Community

Metro Vancouver is committed to mitigating impacts of the project on the community. Metro Vancouver will establish noise and air quality monitoring stations in the surrounding neighbourhood to ensure the barge berth complies with the City of Richmond's noise bylaws and air quality.

Reduce Noise

To minimize the impact of construction-related noise on nearby residents, the following measures will be implemented:

- Noise reducing linings at material transfer points
- Low speed conveyors
- Sound baffles

Reduce Dust

Dust mitigation measures will include:

- Misting material on barges to control dust emissions from the barge
- Misting incoming supplier materials to meet mandated dust control requirements
- Additional methods to capture and limit dust emissions

Reduce Light Pollution

Light mitigation measures will include:

- Operational lights outside of mobile equipment to be shielded and directed on the barge only
- Other than navigational lights, nighttime (non-operational) lighting on the barge berth is not expected

Ensuring Marine Safety

Metro Vancouver is working with Transport Canada, recreational marine users, and North Arm Fraser River marine users to ensure the project considers and complies with all marine user safety standards. The barge berth will be located outside the active navigation channel to ensure the safety of all marine users.

Reduce Environmental Impacts

Metro Vancouver will ensure that the berth is:

- Constructed in accordance with provincial and environmental standards
- Permitted by Transport Canada and Fisheries and Oceans Canada

Timeline

We anticipate the barge berth to be in peak operation between 2026-2030. The barge berth design and construction timelines will depend on the selected site.

Barge Activities

- Barges would not be powered (would be pulled by tug)
- Average of one barge per day (sometimes two barges)
- Hours of work:
 - 7:00am – 8:00pm
 - Monday - Friday

All work will comply with City of Richmond bylaws or granted bylaw variances. Once operational, the barge berth will provide a safe and efficient means for transporting construction materials to the site of the IWWTP Projects for approximately 10 years.

Keeping the Community Informed

Metro Vancouver will keep the community informed as the project progresses by sending updates through print notifications, email, the project website, and on-site signage. You can subscribe to our mailing list to receive regular updates via email by clicking on the "sign up" button located on the project's webpage.

Our Community Liaison is available throughout the project to listen to concerns and address any questions you may have.

Contact Us

Community Liaison: 604-432-6200

(Monday to Friday from 8:00 am to 4:30 pm)

After Hours Emergency: 604-451-6610

Email: ionawwtp@metrovancover.org

Website: metrovancover.org/iona

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