PORT of vancouver | Vancouver Fraser Port Authority

Project and Environmental Review Guideline

Private residential dock guideline for Burrard Inlet

November 2024

Canada

Contents

1. Introduction

The Vancouver Fraser Port Authority is the federal agency that oversees the shared stewardship of the Port of Vancouver. Under the *Canada Marine Act*, the port authority is responsible for the administration, management, and control of land and water within its jurisdiction. This includes the waters adjacent to residential properties along Burrard Inlet, including Indian Arm and Port Moody Arm.

Landowners in this area who own waterfront property and have, or want to build, a private dock immediately in front of their existing residential property are required to obtain a project permit and enter into a formal licence agreement with the port authority prior to installing a private dock.

Private docks can impact cultural heritage and the marine environment. The number of private residential docks has increased along the shoreline in Burrard Inlet, Indian Arm, and Port Moody Arm. Private docks have the potential to degrade sensitive intertidal habitats by affecting marine or riparian vegetation, causing shading to plants or marine life, altering the seafloor, and introducing pollutants from construction, motors, or bilges. In some areas there is a concentration of individual private docks resulting in multiple riparian crossings, pile structures, and floats in close proximity to one another contributing to cumulative environmental effects and restrictions to public beach access.

It is the port authority's responsibility to ensure the proper management of private docks located within its jurisdiction to mitigate these and other impacts. To that end, all proposed works and activities within or partially within the port authority's jurisdiction are required to obtain a project permit from the port authority through the Project and Environmental Review (PER) process.

The Private Residential Dock Guideline for Burrard Inlet establishes clear design criteria and environmental requirements for new private dock applications in Burrard Inlet, including Indian Arm and Port MoodyArm. A PER project permit is required for the removal of an existing private dock as well as the installation, maintenance or repair, or upgrade of new or existing private docks within port authority jurisdiction.

2. Objectives

These guidelines apply to all new and existing private docks located in Burrard Inlet, including IndianArm and Port Moody Arm. Private docks along the Fraser River are excluded from these guidelines.

The guidelines are intended to:

- Provide a fair and consistent application process to all applicants, including clear guidance, criteria, and requirements
- Facilitate public access to the foreshore
- Provide guidance on the requirements of private dock permit applications related to location, design, and other environmental considerations
- Ensure that private dock use does not negatively affect the environment, navigational safety, cultural heritage, or the community
- Reduce impacts on habitat, seabed, and the marine environment
- Prevent or minimize negative effects to Indigenous rights holders, the public, or the legal rights of others
- Support an efficient and effective review of proposed private dock projects

3. Requirements for a private dock permit application

For all lands and waters managed by the port authority, a project permit and licence agreement are required prior to installing a new private dock or undertaking the maintenance, repair, upgrade, or removal of an existing private dock. This section outlines when a project permit is required and the requirements for preparing an application for a project permit.

A port authority project permit is required for:

- New private docks (single user or shared)
- Maintenance, upgrades, or repairs to existing private docks
- Removal of an existing private dock

As part of the permit application review, the port authority will consider impacts to the environment, navigation, cultural heritage, and other biophysical and socioeconomic factors.

Please refer to Section 3.1.7 for an application document checklist for new private dock installations.

Before an applicant submits a project permit application for a private dock, the port authority encourages the consideration of less environmentally impactful options, such as the use of a commercial marina or a shared dock, which could accommodate the needs of multiple upland owners. Shared docks alleviate impacts from high density private dock structures.

Shared private docks may be constructed to accommodate the moorage of multiple boats and are subject to shared licence charge rates. Contact the port authority for more information about a shared dock application.

Project permits for private dock installation, removal, repair, maintenance, or upgrades should besubmitted online through the Project and Environmental Review (PER) Portal available at: eper.portvancouver.com/.

In addition to a project permit, applicants applying for a new private dock will be required to obtain a licence agreement from the port authority. The licence agreement sets out the term of the licence, allowable uses, the licence area, insurance terms, and any other requirements and/or restrictions.

The licence application process will be initiated upon submission of a project permit application, and the project permit review and licence agreement processes will be conducted at the same time.

For more information on the licence agreement, please visit the private dock page on our website.

3.1. Private dock design and location requirements

Selecting an appropriate location for a private dock is important to ensure safety, protect the environment, respect cultural heritage, and maintain public beach access while considering neighbours' views and access. This section describes private dock location, design, and other environmental and permit application requirements.

3.1.1. Dock location and design criteria

Location criteria

Any new private dock **must** be located:

- At least 30 m away from the navigational channel
- At least 10 m away from adjacent moorage floats and piers

Design criteria

Any new private dock must be sized according to the following dimensions:

- The combined total length of the private dock—including the pier, access ramp, and float—must be as short in length as possible to facilitate access to deep water and shall not exceed a combined lengthof 60 m as measured from the head of the pier at the high water mark
- The moorage float area must be as small as possible, with a maximum area of 30 m^2
- The fixed dock must be as small as possible, with a maximum area of 15 m^2. Fixed docks may in some cases be located above or partially above the high water mark, which normally follows the jurisdictional boundary
- The pier and access ramp connecting the moorage float to the shore shall be a maximum width of 1.8 m

New private docks must adhere to the following other requirements:

(1) Orient private docks at right angles to the general trend of the shoreline and do not interfere with the riparian rights of an adjacent property.
(2) Maintain public access to the beach or foreshore. Between the high water mark and low water mark structures cannot block public access along a beach or foreshore area, unless access is included in the design to allow people to travel around or across the structure, e.g., stairs over a pier, or clear passage underneath.
(3) Keep a minimum of 1.5 m of water below the float at low tide. This minimum clearance of the floating structure is measured from the seabed to the low water mark (as illustrated in Figure 2). This prevents dock grounding and minimizes potential disturbance of the seabed from vessel propellers. Vessels or floats must never rest on the seabed.
(4) Provide a minimum 10% under-keel clearance at low tide of the private vessel that will be moored at the facility. This will prevent vessel grounding and minimize potential disturbance of the seabed from vessel propellers.
(5) Ensure adequate water depth is observed. Dredging cannot be proposed as a methodology to meet the depth requirements described above.
(6) Fill may not be placed on the foreshore area or below the high water mark.
(7) Include a minimum number of piles with as much spacing as possible while maintaining structural integrity.
(8) Enclose and contain all floatation material so it cannot escape or cause contamination. The use of unenclosed Styrofoam should be avoided.
(9) Use environmentally friendly materials and avoid materials that contain toxic substances. To avoid water contamination, unpainted and unstained dock woods such as red cedar, redwood, cypress, eastern white cedar, composite decking, steel, or aluminum is preferred. Treated wood products should be avoided. New creosote-treated structures are not permitted.
(10) Use decking and ramp materials that allow light penetration (target a design with 43% light penetration) to the water surface so marine vegetation can photosynthesize (e.g., grids, grates, and lattices for light passage). Pier height should be sufficient to allow light penetration to the marine environment below.
(11) Avoid or minimize disturbance to existing riparian vegetation. If vegetation is removed, re-planting may be required.
(12) Conduct as many construction activities as possible well back from the water or conduct activities by barge at suitable depths to avoid disturbance to the foreshore and avoid water contamination (e.g., increased turbidity or spills) during the construction of the dock.
(13) New or improved docks must not be in an important environmental area (see Section 3.1.2).

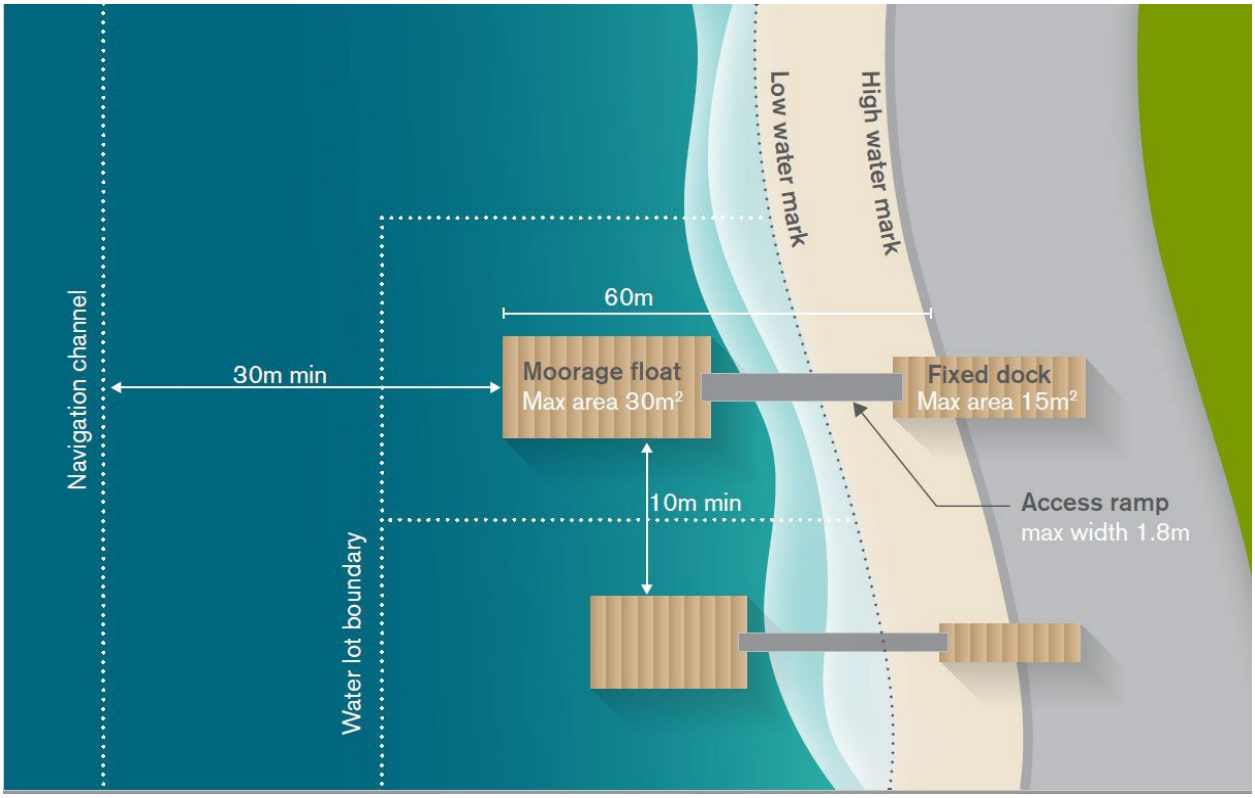


Figure 1 Private dock overhead view illustrating dimension and spacing requirements

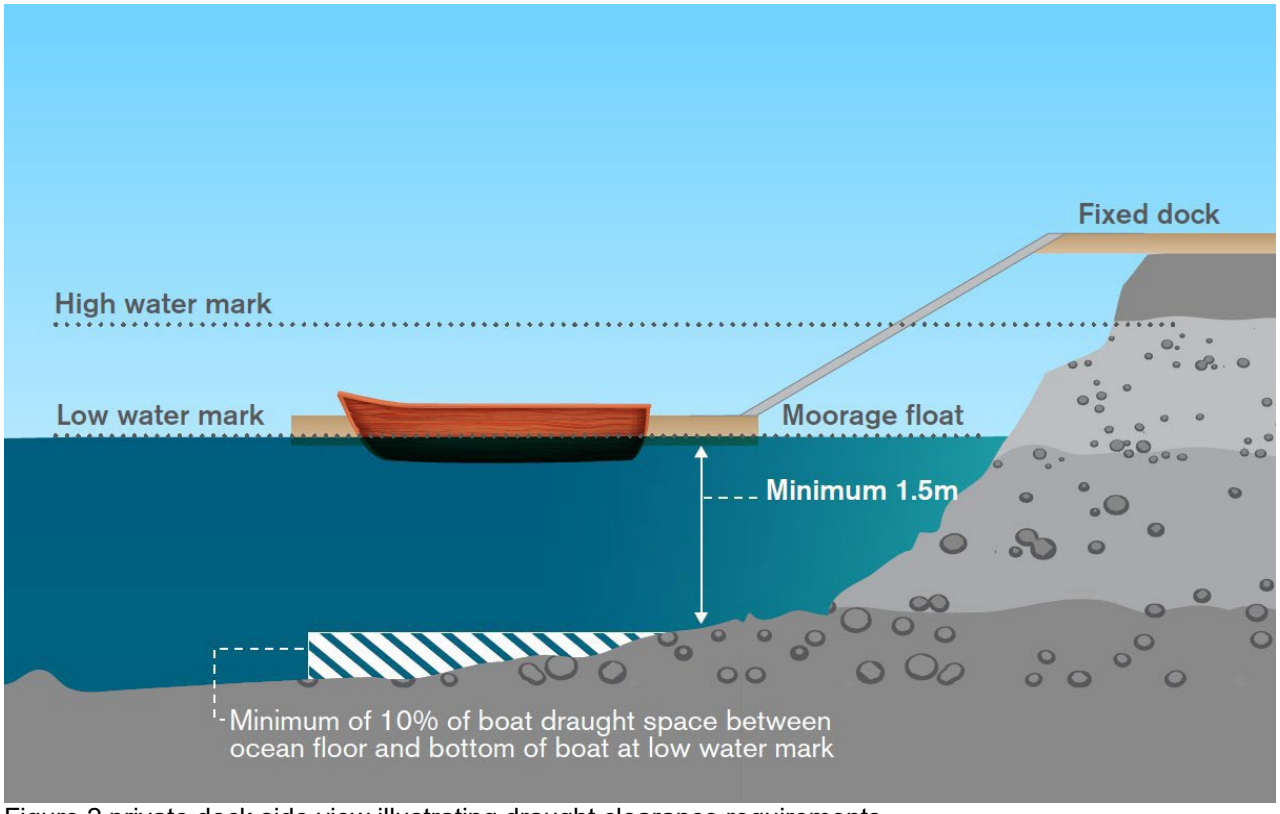


Figure 2 private dock side view illustrating draught clearance requirements.

3.1.2. Important environmental areas

Important environmental areas (Appendix 1) are those locations where new private docks or improvements and/or upgrades to existing docks are not permitted. These areas have identified fish and fish habitat value, occur within or near intertidal zones, conservation areas, cultural areas, and estuaries of streams. These areas provide food and shelter for wildlife and marine mammals living in Burrard Inlet.

The purpose of the important environmental areas is to provide applicants information on where private docks will not be permitted. These areas in no way minimize habitat value or cultural areas in Burrard Inlet as a whole. For applications outside of important environmental areas, the port authority will consider impacts to the environment, navigation, and cultural heritage under our PER process.

The presence of private docks can degrade marine habitat through habitat loss in the dock footprint, blocking essential sunlight for aquatic plants, causing increased sedimentation or scour, and through the removal of riparian plants that provide food and nutrients to marine life.

New private docks are not permitted within important environmental areas shown in Appendix 1: maps 1 to 19 (the important environmental areas are shown in yellow). In these areas, no improvements or upgrades to existing docks are permitted—only maintenance and repair of existing docks will be considered.

Eelgrass locations as surveyed from 2015 to 2019 were provided by Tsleil-Waututh Nation and are shown in Appendix 1: maps 1 to 19 (in green). Proposed private dock locations within 15 m of eelgrass habitat, stream depositional areas, or other sensitive habitat may have additional requirements for our review (e.g., eelgrass survey).

The port authority continues to restrict applications for new docks in **Bedwell Bay**. This continuing restriction is due to potential impacts that new dock development in the area would pose on the environment and on First Nations cultural values for the area. Bedwell Bay is one of the largest remaining eelgrass beds in Burrard Inlet and has cultural significance for First Nations groups.

3.1.3. Biophysical assessment

New docks

Applicants are required to commission a biophysical assessment for any new private dock, regardless of its proximity to mapped important environmental areas. This assessment must be included in the PER application submission.

Biophysical assessments are descriptions of the habitat and species that are present and that may be affected at the proposed dock location. Assessments must be performed by a Qualified Environmental Professional and meet the requirements of the port authority's Habitat Assessment Guideline. The information obtained through the biophysical assessment is to be used to design and locate the private dock to avoid or minimize negative environmental effects.

New docks are not allowed in important environmental areas, only maintenance and repairs of existing docks will be considered.

Any proposed upgrades, maintenance, or repair works to existing docks must be submitted as a PER application to the port authority. Upgrades that include an alteration to the existing footprint or include new pile installation/removal may require the dock owner to commission a biophysical assessment during review. Biophysical assessment requirements will be based on the scope of work and proximity to sensitive habitat.

3.1.4. Archaeological assessment

Dock owners/applicants may be required to commission one or more archaeological assessment(s) for private dock construction, upgrades, and/or repair and maintenance. The port authority will considerthe proposed work, location, and archaeological information available to the port authority to determine if an archaeological assessment is required.

To determine if an archaeological assessment is required, the applicant must provide information about the project area and the proposed project works, as well as any previously conducted archaeological assessments, if available. This information is to be provided in the permit application.

3.1.5. Additional requirements, legislation, and regulations

In addition to obtaining a port authority project permit, applicants are required to submit detailed design drawings, specific to the location of where the dock is proposed.

Outside of port authority permits, new private docks and upgrades, maintenance, or repair to existing docks may require additional approvals from various federal, provincial, or municipal agencies, such as Transport Canada for works that fall under the *Navigation Protection Act*, or Fisheries and Oceans Canada for works that fall under the *Fisheries Act*. The applicant is responsible for obtaining all applicable permissions and approvals, in addition to a port authority PER permit.

3.1.6. Non-permitted uses

The following uses are prohibited:

- Industrial and commercial activities at private docks, including the moorage of commercial vessels, water taxis, or float planes
- Liveaboard vessels, including house boats and float homes
- Boat houses or boat shelters
- Mooring buoys
- Marine ways and marine railways
- Storage of flammable or hazardous materials on a private dock
- Placement of fill on the foreshore area or below the high water mark
- Facilities or docks that are unsafe or impact marine operations
- Storage or installation of any non-essential items or items unrelated to safe vessel moorage on the private dock, including:
  - Picnic tables
  - Cabanas
  - Storage sheds
  - Patios
  - Sun decks
  - Hot tubs
  - Barbeques

The port authority may determine other non-permitted uses not listed above.

3.1.7. Application document checklist

The following information is required for new private dock permit applications:

- Description of existing or planned structures including size and dimensions and materials of moorage floats, fixed dock, access ramp, piers, piles, anchors, and construction materials
- Description of dock utilities and accessories proposed, e.g., electrical, or boat lifts
- Description of construction methodology including any proposed vegetation clearing
- Description of how public access is maintained along the beach

- Confirmation that there will be a minimum of 1.5 m of water below the moorage float at low tide. This may require a hydrographic survey
- Site plan including dock dimensions and distances from adjacent docks or other marine structures
- Design drawings prepared by a B.C. certified professional engineer, specific to the location of where the dock is proposed
  - Drawings submitted must be to scale, and must show the location of any relevant existing or proposed utilities, such as water or electrical
  - Drawings must be dimensioned in all instances where required to demonstrate compliance with this guideline, for example length of the facility, depth of water under the float, high and low watermarks, setback from the navigation channel, etc.
    - Drawing must be provided in AutoCAD and PDF format, with UTM coordinates, at the time of application
- Photos of shoreline and/or dock
- Biophysical survey prepared by a qualified environmental professional
- Archaeological assessment, if applicable

All items listed above must be provided at the time of application for the port authority to begin the permit application review.

Certain locations have additional requirements. Should you live on **Alderside Road in Port Mood**y or **Eastridge Road in the District of North Vancouver**—please contact us for additional information. The port authority may require additional information not listed above.

The port authority continues to restrict applications for new docks in **Bedwell Bay**. This continuing restriction is due to potential impacts that new dock development in the area would pose on the environment and on First Nations cultural values for the area. Bedwell Bay is one of the largest remaining eelgrass beds in Burrard Inlet and has cultural significance for First Nations groups.

Depending on the category of review, the applicant may be required to submit an application fee, documentation deposit, and incur other expenses as part of the PER Review, including costs associated with technical reports and studies, and undertaking consultation activities, and reporting. Learn more about fees on our website (https://www.portvancouver.com/project-and-environmental-review).

Please refer to the PER Application Guide or contact PER@portvancouver.com for further information.

4. Existing licenced dock exemptions

The port authority recognizes that licenced private docks within the port authority's jurisdiction that existed before 2020 may not fully comply with the design criteria and this guideline.

These existing licenced docks are exempt from this guideline until such time as any replacement or upgrade of the existing dock is necessary (e.g., replacement of floats, pier, pilings, or other structural components). Exempt docks are subject to compliance with the terms of the licence, including maintenance and repair obligations.

In some cases, existing licenced docks may not be exempt from these guidelines if any of the following factors apply and are brought to the attention of the port authority:

- Whether the existing dock is in an established important environmental area
- Whether the existing dock is maintained in a usable and safe condition (e.g., does not or may not become a threat to life or property)
- Whether the existing dock is in its originally authorized location
- Whether the holder of the licence is in substantial compliance with the terms of the existing licence

This is not an exhaustive list, and the port authority maintains discretion to consider any other factor it considers relevant for exemption.

The port authority will require that the design and location criteria outlined in Section 3.1 be implemented in the design of any replacement or upgrades to existing docks.

5. Definitions

Access ramp: a variable slope structure that provides pedestrian access between shore, a fixed dock, or pier and the moorage float. May also be referred to as a ramp.

Cumulative environmental effect: the cumulative effects of development in a region are changes to the environment caused by a variety of activities over time.

Existing licenced dock: a licenced, private dock that was built before 2020.

Fixed dock: the fixed portion of a private dock, from where it leaves the foreshore or upland, to either the pier or the top of the ramp, depending on configuration.

Foreshore: the part of a shore between high- and low-water marks, or between the water and cultivated or developed land.

Grounding: occurs when a floating structure or vessel touches the sea bottom resulting from inadequate water depth.

High water mark: the level reached by the seawater at high tide, or by other stretches of water at their highest level.

Low water mark: the level reached by seawater at low tide or by other stretches of water at their lowest level.

Maintenance and repair: activity required to keep existing infrastructure in its existing operational state. This does not include any modifications that change the character, scope, or size of the original structure, facility, utility, or improved area.

Marine way or marine railway: an inclined plane extending from shoreline into water, featuring a "cradle" onto which a ship is first floated, and a mechanism to haul the ship out of the water.

Moorage float: a floating portion of the dock structure that is generally used for mooring boats.

Pier: elevated walkway connecting the fixed dock, or upland, to the top of the access ramp.

Qualified Environmental Professional (QEP): an applied scientist or technologist who is registered and in good standing with an appropriate B.C. professional organization or who, through demonstrated suitable education, experience, and knowledge relevant to the matter, may be reasonably relied on to provide advice within their area of expertise. A qualified environmental professional could be a biologist, agrologist, forester, geoscientist, engineer, or technologist.

Private dock: a floating, human-made structure in the water intended for people to be on. It includes the entire structure, including the moorage float, access ramp, fixed dock, pier, or any combination of these and is used only for private residential purposes. It is not for commercial use.

Riparian vegetation: a vegetated area near a stream or other waterbody which helps shade and protect the stream from the impact of adjacent land uses.

Under-keel clearance: the depth of water between a vessel’s keel and the seabed.

6. Notes/links to other documents

Please refer to the following for additional information on submitting a port authority PER application:

- Vancouver Fraser Port Authority Project and Environmental Review Application Guide
- Vancouver Fraser Port Authority Project and Environmental Review Technical Guidelines
- Project and Environmental Review (PER) Portal

Learn more about the PER process on our website (https://www.portvancouver.com/project-and-environmental-review).

Refer to the following legislation that may be applicable when submitting a PER application:

- *Canadian Navigable Waters Act*
- *Impact Assessment Act*
- *Canada Marine Act*
- Port Authority Operations Regulations
- *Fisheries Act*
- *Canada Wildlife Act*
- *Species at Risk Act*

7. Contact information

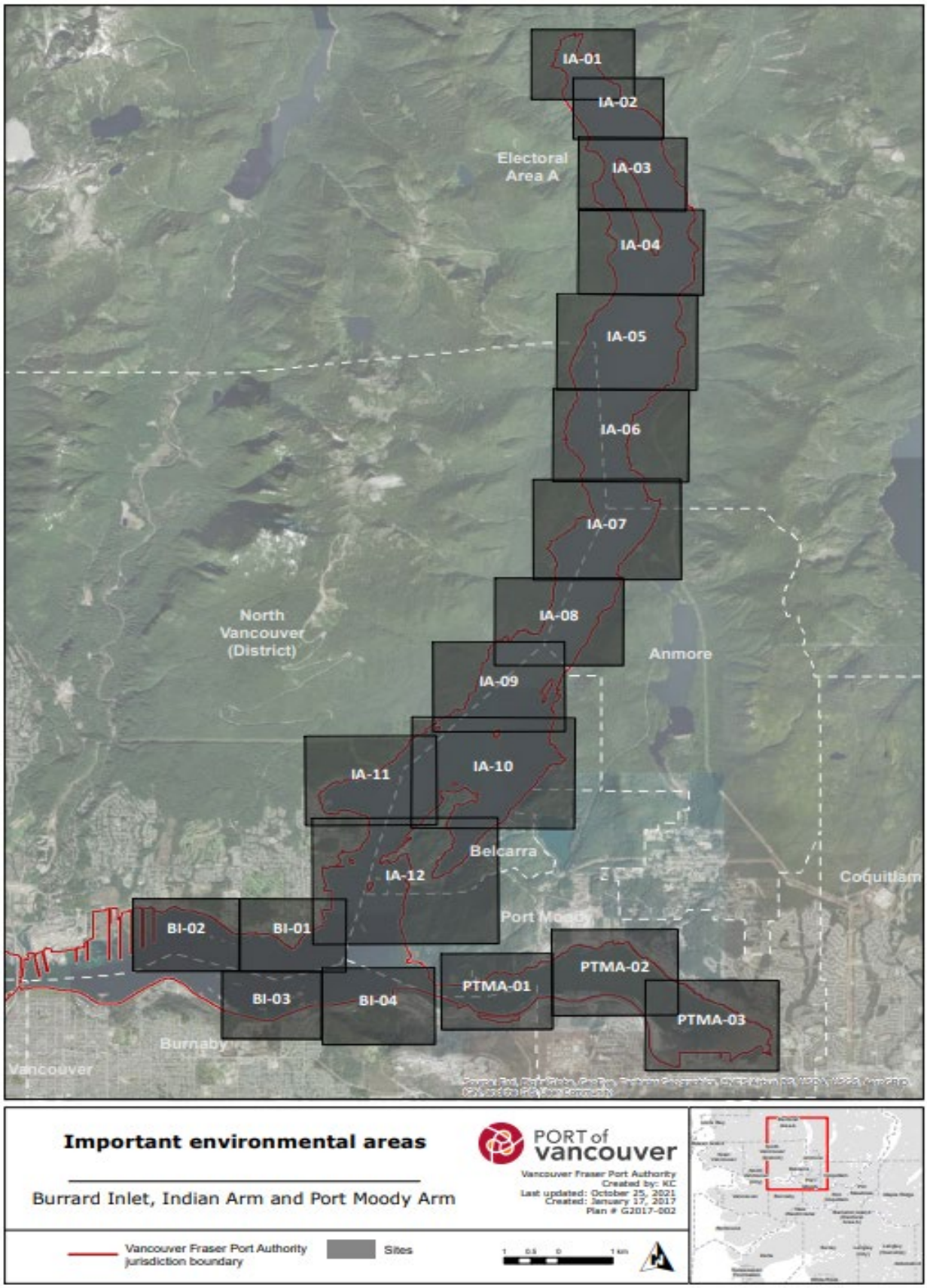
Should you have any questions regarding the guideline or licencing, please contact the port authority at:

- PER@portvancouver.com (permit or guideline related questions)
- RealEstateInfo@portvancouver.com (licencing related questions).

8. Updates

The most up-to-date version of this guideline document will always be available to view and download from our website.

Appendix 1: Maps of important environmental areas (19 maps)



Site IA-01
Indian Arm
Map 1 of 19

IA-01

IA-02

Say Nuth Khaw Yum Park

Say Nuth Khaw Yum Park

Wigwam Inn

Wigwam Creek

Wigwam Inn

Wig wam Creek

1

- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary

N

140 70 0 140 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-02
Indian Arm
Map 2 of 19

High water mark

Low water mark

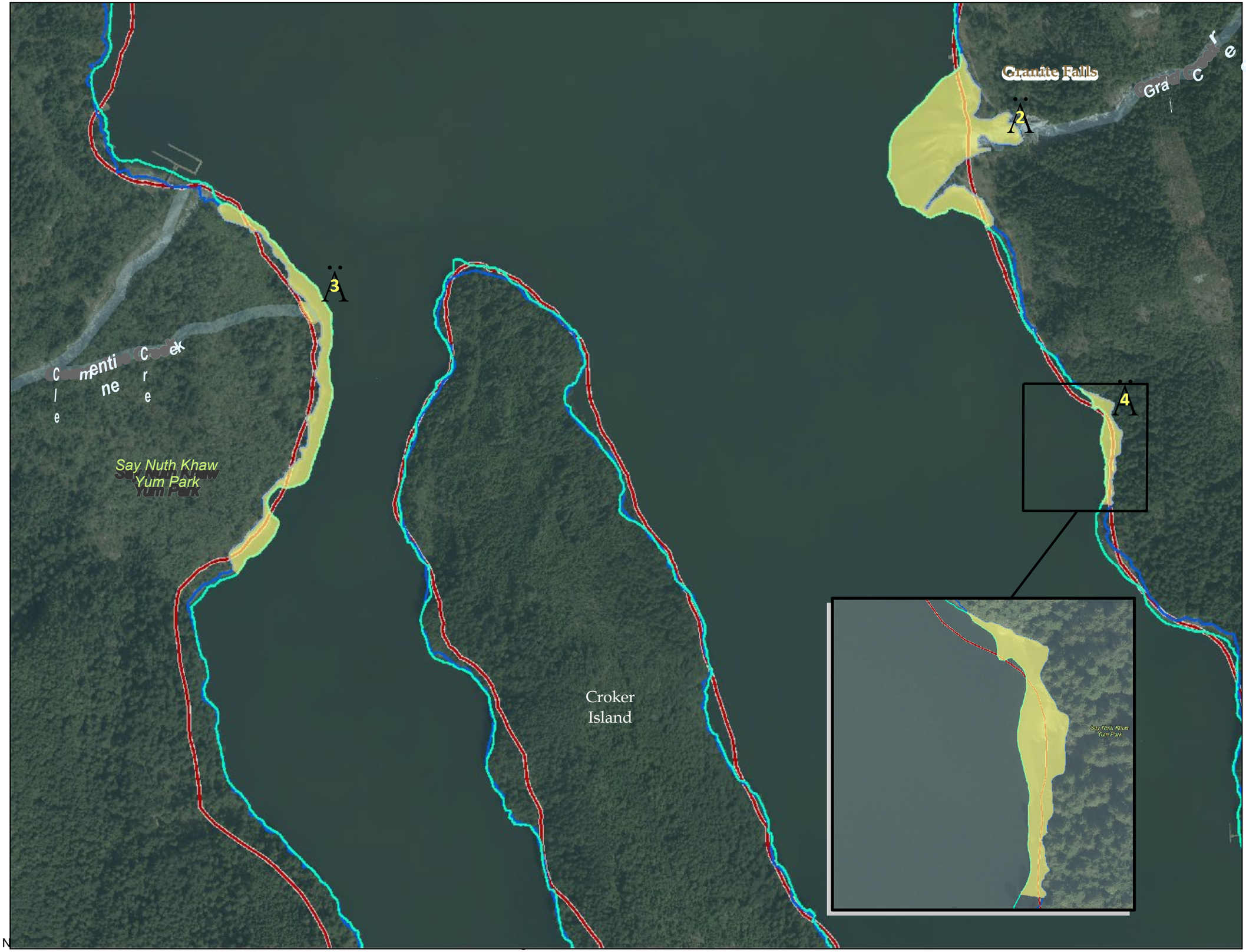
Vancouver Fraser Port Authority jurisdiction boundary

120 60 0 120 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-03
Indian Arm
Map 3 of 19



- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary

140 70 0 140 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-04

Indian Arm

Map 4 of 19

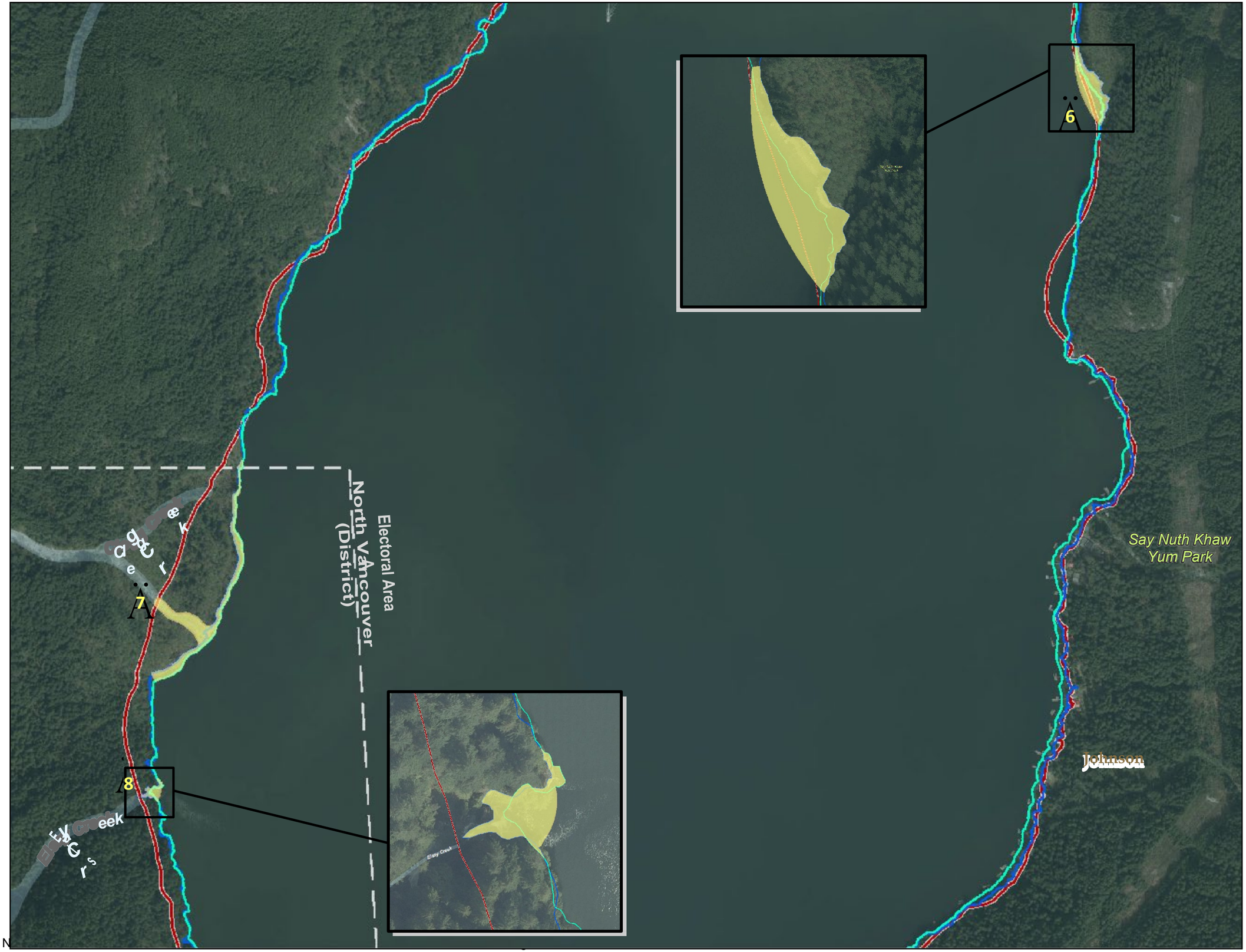
- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary

170 85 0 170 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-05
Indian Arm
Map 5 of 19



- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

N

190 95 0 190 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-06
Indian Arm
Map 6 of 19

- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

N

180 90 0 180 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-07
Indian Arm
Map 7 of 19

Mount Seymour Park

Electoral Area North Vancouver (District)

Say Nuth Khaw Yum Park

Buntzen Bay

Electoral Area A

Anmore

Thwaytes Landing Regional Park

Greenbelt (Indian Arm Alpine)

Thwayte

Holm Creek

North Vancouver (District)

Orlohmah Beach

Shone Creek

9

Buntzen Creek

- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

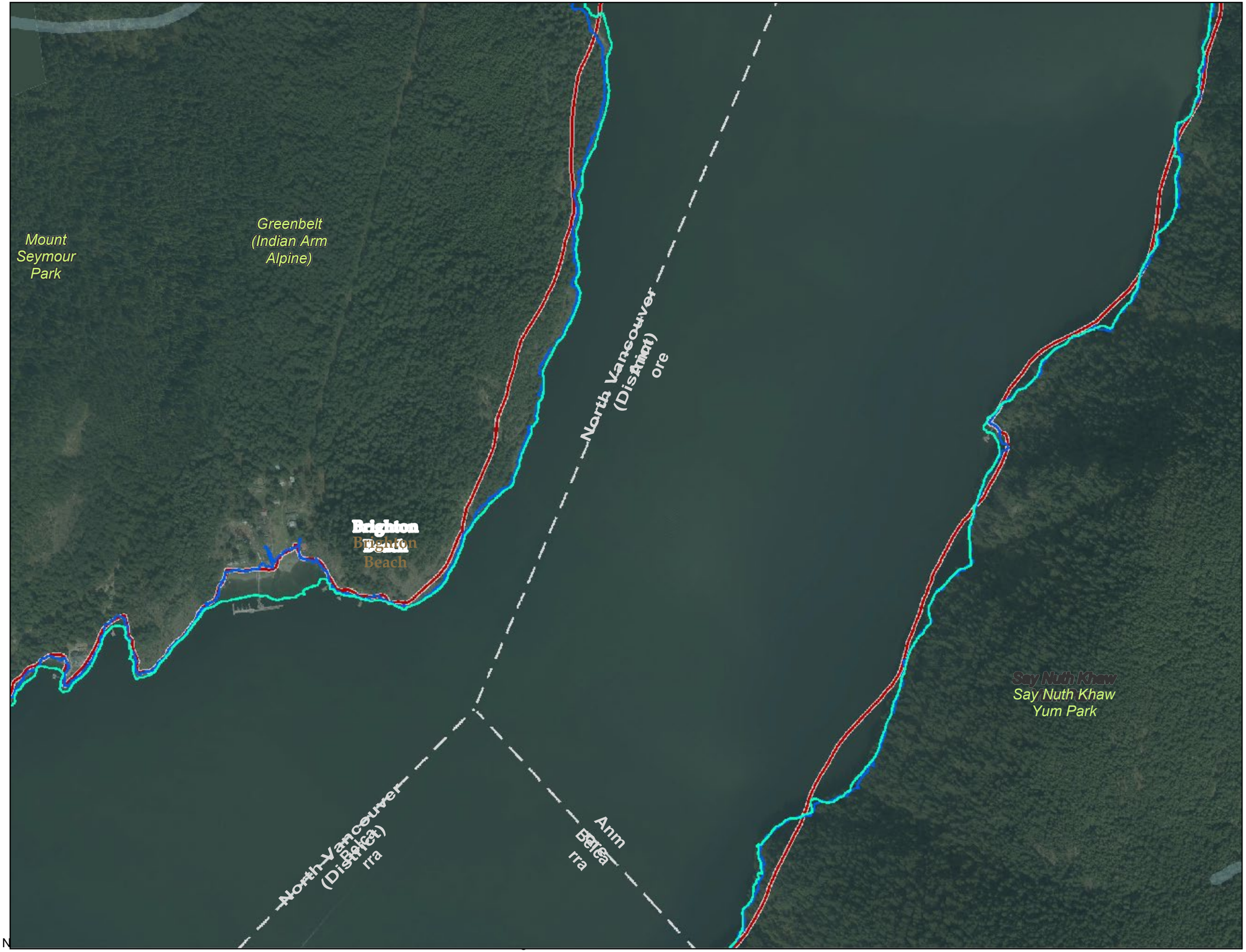
0

200 100 0 200 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-08
Indian Arm
Map 8 of 19



- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

175 87.5 0 175 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-09
Indian Arm
Map 9 of 19

Mount Seymour Park

Perry Creek

Cascade

Greenbelt (Indian Arm Alpine)

North Vancouver (District)

Anmore

Belcarra

Twin Islands

10

Sunshine Falls

Belcarra Regional Park

- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

180 90 0 180 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-10
Indian Arm
Map 10 of 19

Racoon Island

North Vancouver (District)

Belcarra

Farrer Cove

11

Belvedere

Jug Island

12

Cosy Cove

Belcarra

Port Moody

Belcarra Regional Park

- Important environmental area
- Eelgrass
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

Eelgrass survey data provided by Tsleil-Waututh Nation. Survey's were conducted in 2015, 2017, 2018 and 2019.

220 110 0 220 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002

Site IA-11
Indian Arm
Map 11 of 19

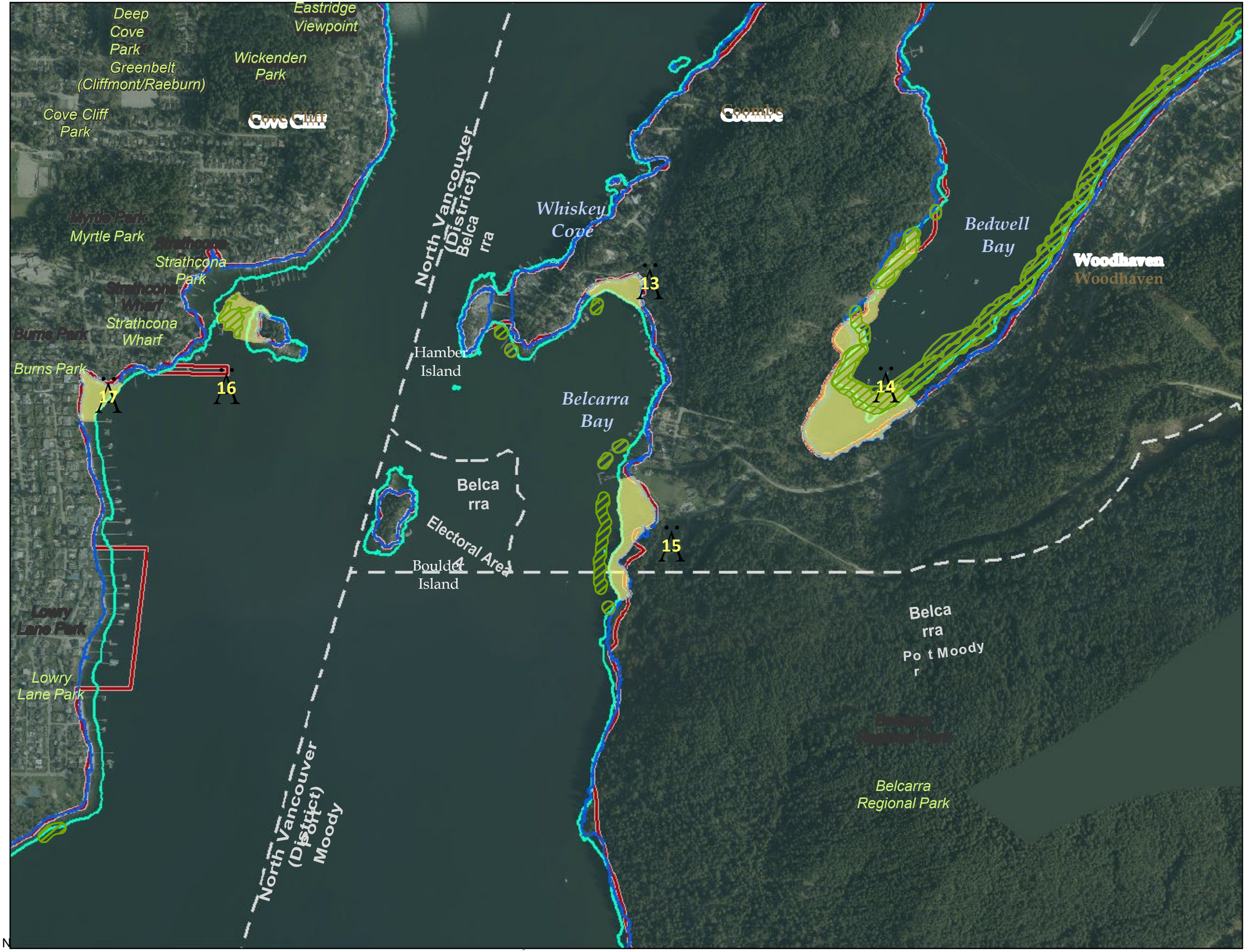
- Eelgrass
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

Eelgrass survey data provided by Tsleil-Waututh Nation. Survey's were conducted in 2015, 2017, 2018 and 2019.

175 87.5 0 175 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: May 06, 2020
Date created: January 17, 2017
Plan # G2017-002



Site IA-12
Indian Arm
Map 12 of 19

- Important environmental area
- Eelgrass
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Municipal boundary

Eelgrass survey data provided by Tsleil-Waututh Nation. Survey's were conducted in 2015, 2017, 2018 and 2019.

250 125 0 250 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: July 07, 2021
Date created: January 17, 2017
Plan # G2017-002

Site BI-01
Central Harbour

Map 13 of 19

- Important environmental area
- Eelgrass
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Navigational channel
- Municipal boundary

Eelgrass survey data provided by Tsleil-Waututh Nation. Survey's were conducted in 2015, 2017, 2018 and 2019.

140 70 0 140 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: October 25, 2021
Date created: January 17, 2017
Plan # G2017-002

Site BI-02
Central Harbour

19

North Vancouver (District)

Burna by

N

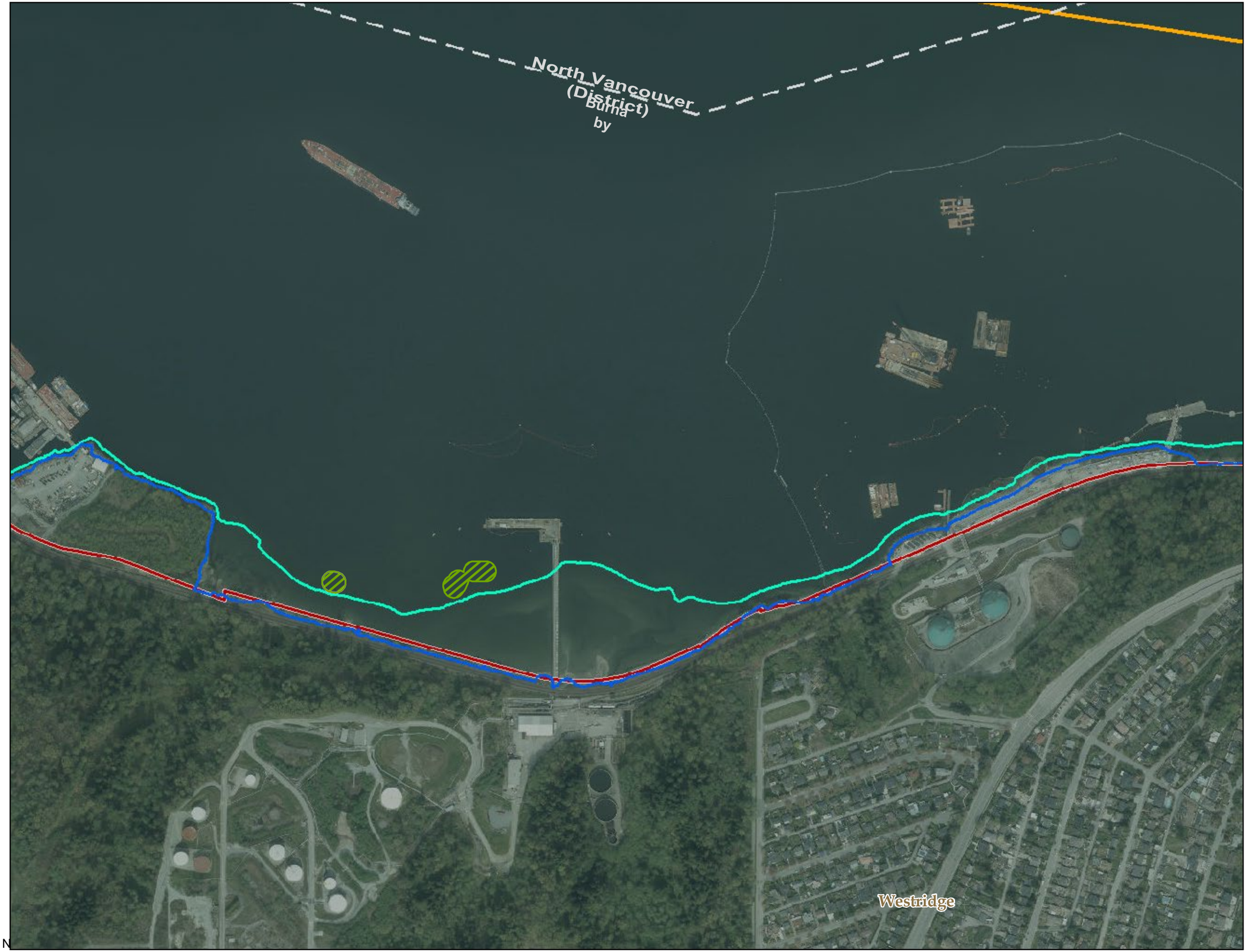
- Important environmental area
- Eelgrass
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Navigational channel
- Municipal boundary

Eelgrass survey data provided by Tsleil-Waututh Nation. Survey's were conducted in 2015, 2017, 2018 and 2019.

140 70 0 140 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: October 25, 2021
Date created: January 17, 2017
Plan # G2017-002



Site BI-03
Central Harbour

- Eelgrass
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Navigational channel
- Municipal boundary

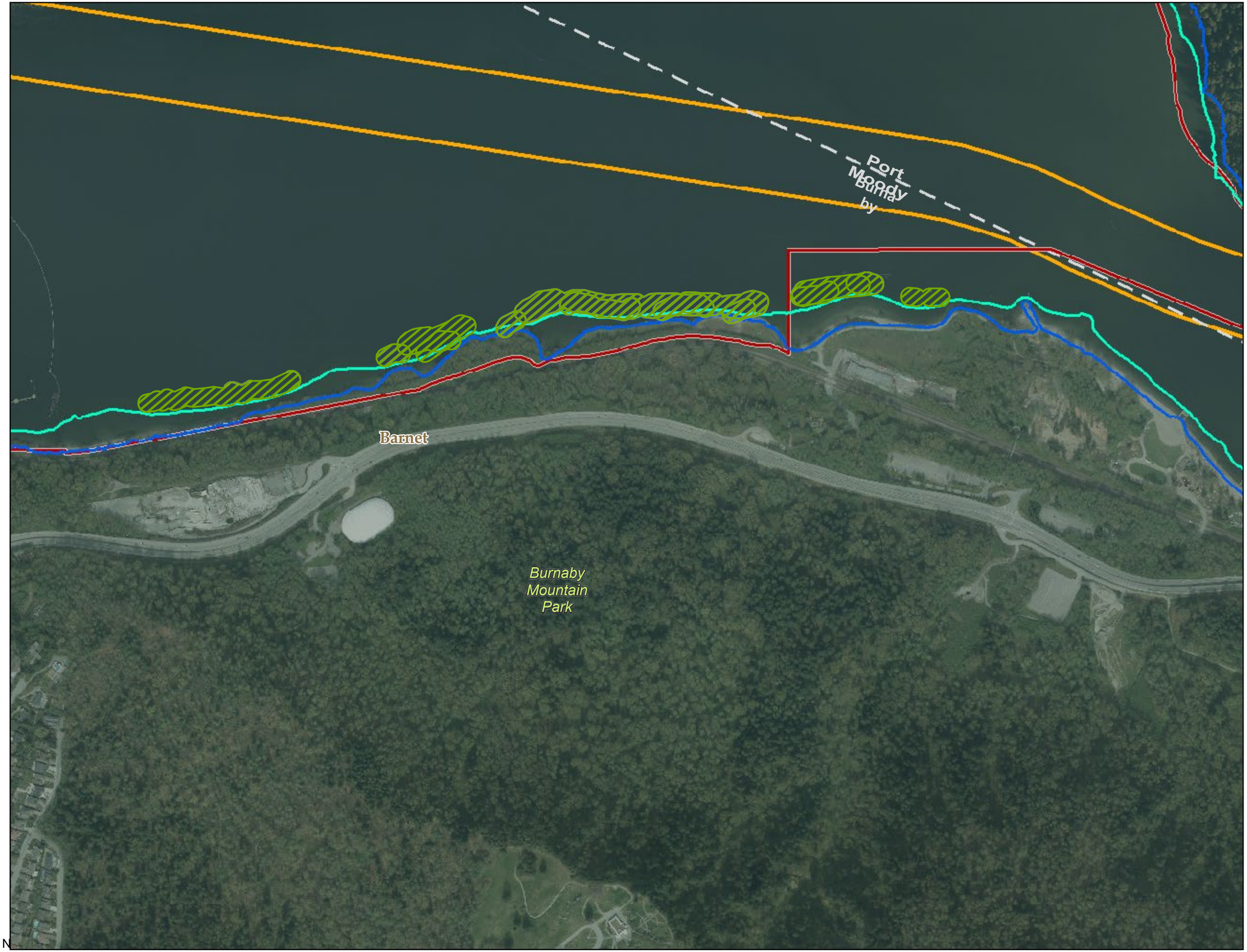
Eelgrass survey data provided by Tsleil-Waututh Nation. Survey's were conducted in 2015, 2017, 2018 and 2019.

130 65 0 130 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: October 25, 2021
Date created: January 17, 2017
Plan # G2017-002

Site BI-04
Central Harbour
Map 16 of 19



- Eelgrass
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Navigational channel
- Municipal boundary

Eelgrass survey data provided by Tsleil-Waututh Nation. Survey's were conducted in 2015, 2017, 2018 and 2019.

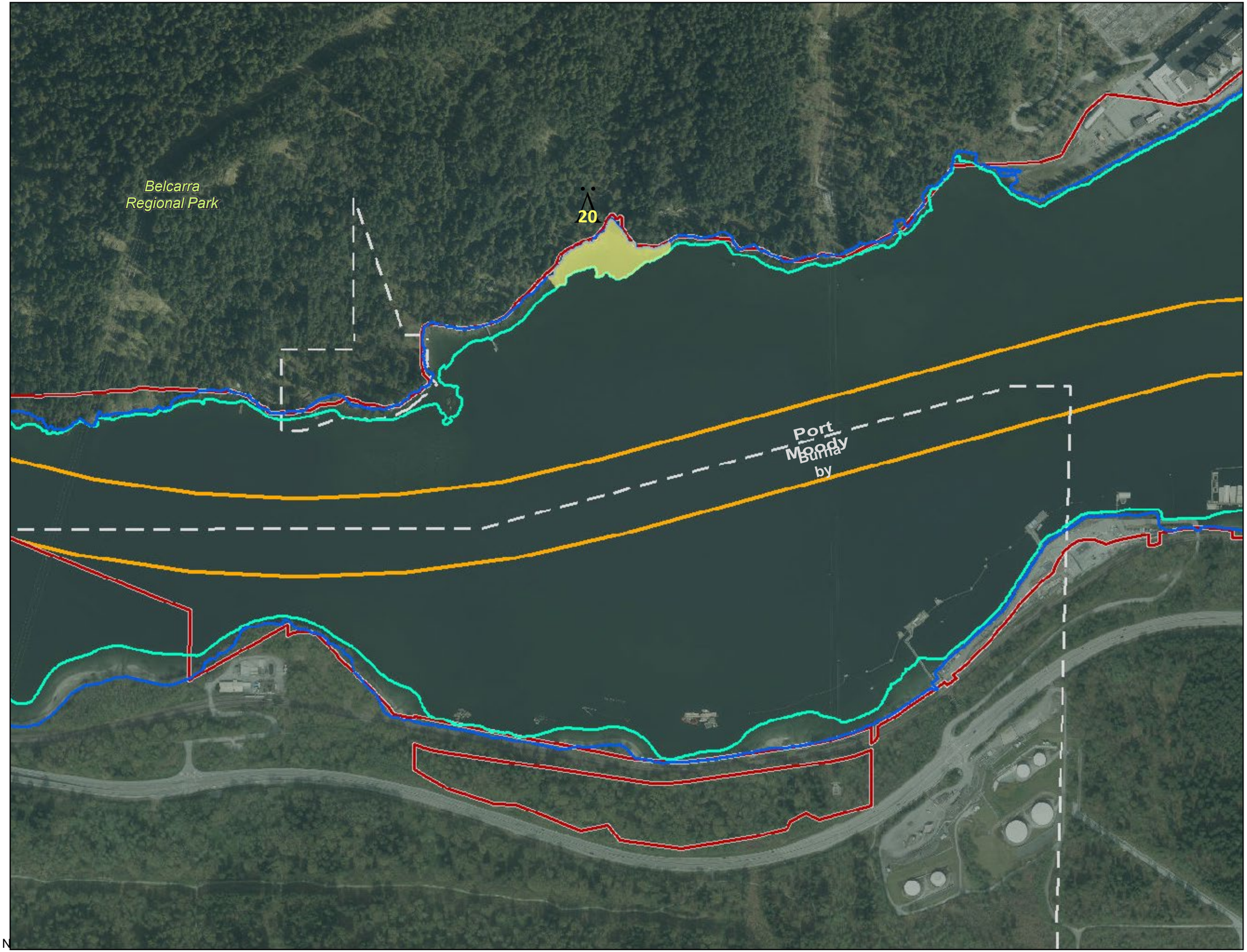
0
150 75 0 150 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: October 25, 2021
Date created: January 17, 2017
Plan # G2017-002

Site PTMA-01
Port Moody Arm

Map 17 of 19



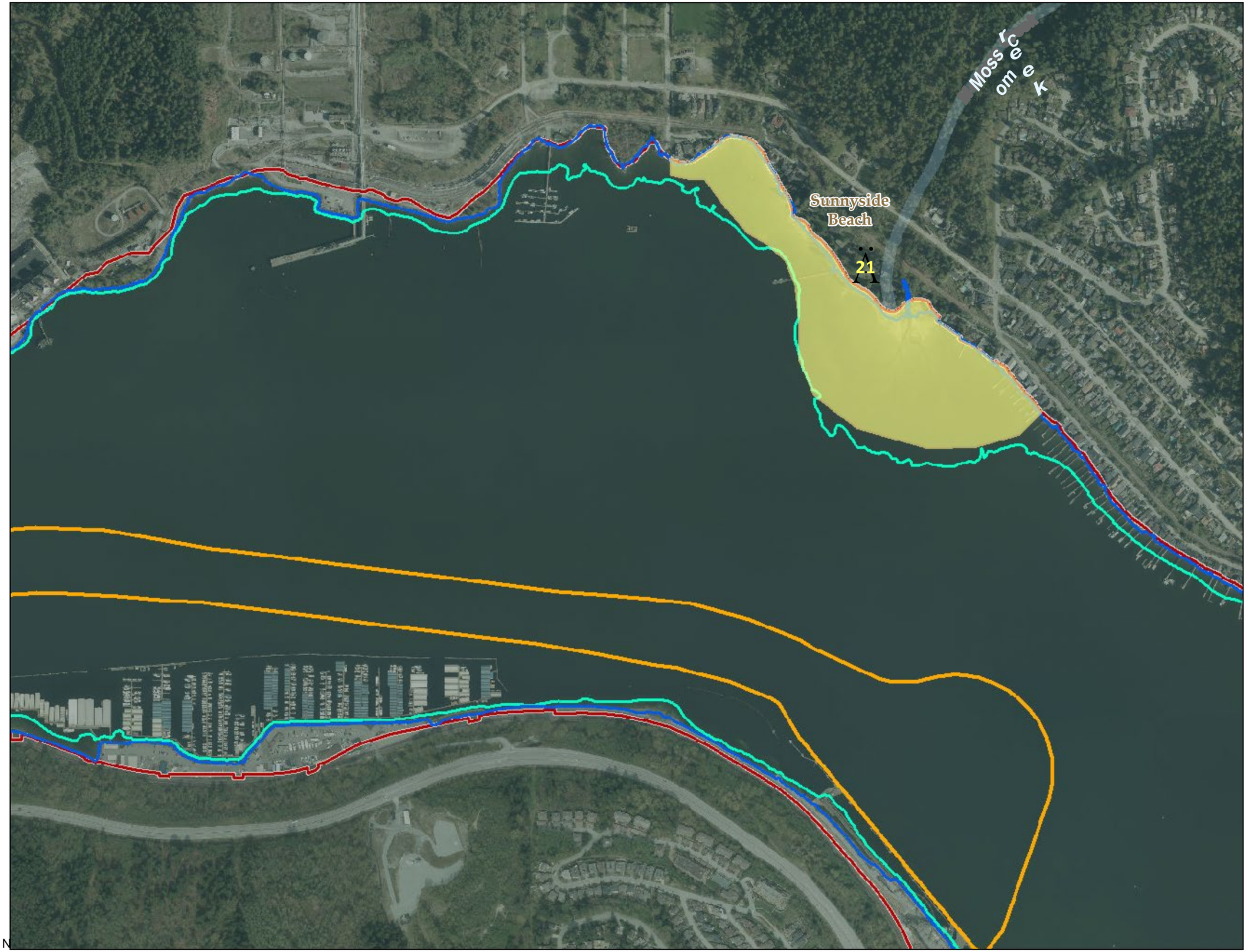
- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Navigational channel
- Municipal boundary

N

150 75 0 150 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: October 25, 2021
Date created: January 17, 2017
Plan # G2017-002



Site PTMA-02
Port Moody Arm

Map 18 of 19

- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Navigational channel

N

170 85 0 170 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: October 25, 2021
Date created: January 17, 2017
Plan # G2017-002

Site PTMA-03
Port Moody Arm

Map 19 of 19

- Important environmental area
- High water mark
- Low water mark
- Vancouver Fraser Port Authority jurisdiction boundary
- Navigational channel

N

180 90 0 180 m

PORT of vancouver

Vancouver Fraser Port Authority
Created by: KC
Last updated: October 25, 2021
Date created: January 17, 2017
Plan # G2017-002