## BLUE CABIN FLOATING ARTIST RESIDENCY: PRELIMINARY FEASIBILITY REPORT

grunt gallery

Prepared by Cole Projects August 29, 2016



# **Other Sights**



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## **1** INTRODUCTION

The aspiration to return artists Al Neil and Carole Itter's cabin to the foreshore to serve as a studio aboard a 'roving', off-the-grid floating artist residency is inspirational, daring, and logistically complex. Crossing over jurisdictional boundaries, the Blue Cabin Floating Artist Residency will assert a presence for art, heritage and culture amongst the economies of trade that dominate our region's waterways. This "Blue Cabin Floating Artist Residency Preliminary Feasibility Report" addresses the first round of questions that supporters, potential partners and funders might ask when considering this ambitious proposal. It presents information about the Blue Cabin's heritage status; the regulatory conditions guiding building, travelling and mooring on the water; and identifies potential moorage sites and partners. This information will aid in the development of an upcoming detailed residency feasibility study and business plan, both of which will further the residency's ongoing sustainable operation.

Celebrating the potentiality of the residency, this Report also presents a range of possibilities for research and collaboration that are cross-cultural and multidisciplinary. It brings forward a desire and need for alternate modes of living and working, and expands our understanding of what constitutes public space.

Despite Vancouver's international reputation for producing exceptional artists, inflated real estate prices make it challenging at best for arts organizations to offer visiting artists spaces for research, experimentation, innovation, and exchange. Artist residencies exist worldwide and the experiences of those who have been lucky enough to take part are often described as life changing and transformational. Recognizing the need for such a generative space, the Blue Cabin Floating Artist Residency presents an opportunity that is unique to this region while global in its reach.



## 2 BACKGROUND

The Blue Cabin is a dwelling that has resisted ownership for 80 years or more. From 1932 to 2015, it rested on pilings above the intertidal zone of high and low tides on Tsleil-Waututh territory within the District of North Vancouver. The cabin was originally barged over from Coal Harbour to serve as a convenient place to live while the Norwegian carpenter who built it worked at the neighbouring shipbuilding yard. Tucked into a small cove between Cates Park and McKenzie Barge & Marine Ways (previously McKenzie Barge & Derrick Company), it had been standing empty for a number of years before artist/musician Al Neil moved there in 1966. At first he was a paying tenant, but over the years, he acted as an unofficial beach watchman in exchange for free rent. His partner Carole Itter joined him in the late '70s and both used this very special site as a generative place for art production until their eviction in 2015.

As characterized by heritage specialist Hal Kalman, "[the Blue Cabin] is the unique survivor of a once popular, but now vanished way of life, when people of little means could live 'off the grid' in 'squats' along the waterfront, yet be within an urbanized, metropolitan area. Many of the squatters in the Dollarton area were artists and the area formed a vital artists' community."<sup>1</sup>

Beside Al and Carole, artist Tom Burrows, Greenpeace activist Dr. Paul Spong, and writer Malcolm Lowry, were among many who lived, worked, and created in the modest homes that dotted the shoreline of the Burrard Inlet. With the exception of the Blue Cabin, Port Metro and the municipality removed all of these dwellings in the late 1960s and '70s. Al Neil's cabin was spared because of its connection to McKenzie Barge.

The McKenzie Barge site was sold to Polygon Homes who in 2014, began to act on plans for the site's redevelopment as "Cates Landing", a 95-unit waterfront condo development. Under their agreement with the Vancouver Fraser Port Authority,<sup>2</sup> Polygon was obligated to remediate the neighbouring contaminated For much of the twentieth century, Burrard Inlet was home to squatters living in houseboats, floating shacks, cabins, and foreshore cottages on pilings. "At their height, squatter communities in Vancouver were home to about 1,800 people.<sup>3</sup>

Sheryl Salloum.



http://www.portvancouver.com/about-us/

<sup>&</sup>lt;sup>1</sup> Kalman makes reference to historian Nancy Kirkpatrick, Director of the North Vancouver Museum and Archives, "Report on Foreshore Cabin Adjacent to Future Polygon Development and Cates Park" submitted to the District of North Vancouver City, November 16, 2014. He paraphrases one of the items in her conclusion that speaks to the "highly symbolic building" and how it connects us to the past.

<sup>&</sup>lt;sup>2</sup> The Vancouver Fraser Port Authority is responsible for the stewardship of federal port lands in and around Vancouver. The port authority manages over 16,000 hectares of water, more than 1,000 hectares of land and approximately 350 kilometres of shoreline.

<sup>&</sup>lt;sup>3</sup> "Without Deed of Permit: Squatters in the Lower Mainland." *Raincoast Chronicles 19*. Harbour Publishing, 2003.

The point is that squatters have been a part of the urban scene in Vancouver for a long time. The term is often used in a pejorative sense, but as often as not squatters, despite their marginal lifestyle, have been productive members of the community, holding jobs, raising families and, in the case of Neil, Itter and others, making art.<sup>4</sup> Daniel Francis



foreshores including the small bay the cabin was nestled within. To avoid demolition, the Blue Cabin Committee led efforts to move the cabin five kilometres west to a secure storage lot for repair and remediation. The forced eviction of Al and Carole, the removal of the Blue Cabin, and the development of Cates Landing are representative of the ongoing gentrification of the shores of Burrard Inlet."<sup>5</sup>

The Blue Cabin Committee volunteer team that worked to save the cabin consisted of Glenn Alteen, Program Director of grunt gallery; Barbara Cole, Founder and producing member of Other Sights for Artists' Projects; Esther Rausenberg, Co-artistic Director of Creative Cultural Collaborations and Director of the Eastside Culture Crawl; and Project Manager Michael Jackson from PM Volunteers. Barbara stepped down from the Committee for the purposes of producing this Report, and Marko Simcic, artist, architect and member of Other Sights, joined the group to advise during planning and fundraising for the cabin's repairs.

<sup>&</sup>lt;sup>4</sup> Blog. Francis, Daniel. "History of Squatting." Daniel Francis, Reading the National Narrative. January 24, 2015. <u>http://www.danielfrancis.ca/blog/history-squatting</u>

<sup>&</sup>lt;sup>5</sup> Kalman, Hal. "Statement of Significance", 2016.



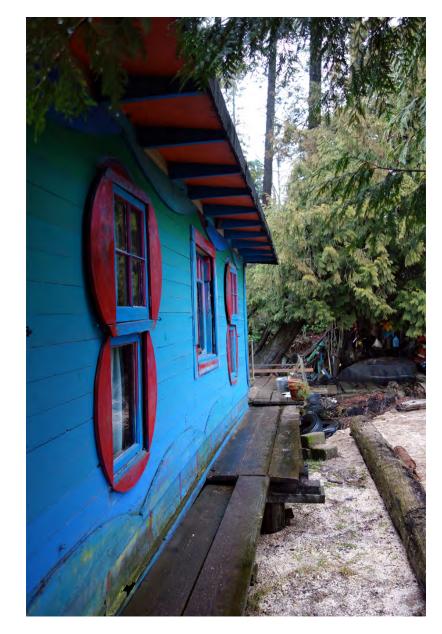
## **3 VISION FOR THE BLUE CABIN FLOATING ARTIST RESIDENCY**

The impetus to save the Blue Cabin began as a conversation amongst a number of artists and grew into a swell of support that travelled well beyond the reach of the Vancouver art community. United in their recognition of the cabin's significance, people from all walks of life stepped up, wrote letters, and volunteered their time, expertise, and resources to ensure the 80-year-old squatters dwelling had a future, albeit one that was unknown. The cabin's successful move was the result of collaborative effort, a gesture of cooperation that is now part of the ethos of the floating artist residency.

The idea of setting the cabin adrift from ownership or permanent location took shape and gained traction through the collaboration of three different arts organizations: grunt gallery, Other Sights, and C3, all of whom remain committed to stewarding the cabin into the future. Their goal is to remediate and repurpose the historic cabin as an artist studio, and mount it to a barge or floating platform alongside a tiny house, to serve as a vital, off the grid, multi-disciplinary artist residency. The platform will be towed by tug to one of a number of confirmed moorage sites for the duration of each artist's stay. Visual artists, musicians, writers, and curators from around the world will use the residency as a place for research, experimentation and creative production, their unique interpretations and discoveries shared with the public through open houses, events, and presentations.

At the heart of this vision is a respect for consultation, collaboration and exchange. The Blue Cabin Committee recognizes that the success of the residency relies upon the generosity of the partners and hosts who welcome it within their jurisdictions and, to that end, have initiated conversations with the Tsleil-Waututh Nation, Fraser Port Authority, District of North Vancouver, City of Vancouver, and City of Richmond.

Offering artists the space and time to research, develop, and share their projects through live/work residencies are out of the reach of most 'host' organizations primarily due to the crisis of unaffordability plaguing the Metro Vancouver area. Despite being recognized as necessary to maintaining a healthy and vital art community, opportunities for dialogue and exchange with artists from places beyond the Pacific Northwest continue to decline. The Blue Cabin Committee saw the cabin's return to the waterfront as an affordable way to counter this trend. For a capital outlay amounting to less than the cost of a 1-bedroom

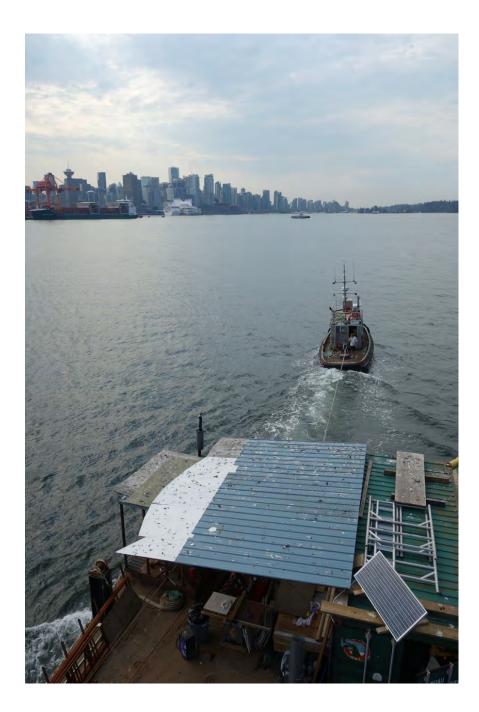


apartment in Vancouver, the cabin-studio, tiny house-accommodation, will provide much needed space for guest artists to occupy the intertidal zone where questions of ownership are curiously suspended between the rules of the land and the water. While the ongoing gentrification of the Lower Mainland erases the city's past, the cabin/studio and small dwelling aligns the history of squatting along the Burrard Inlet with the present-day tiny house movement, both of which represent resourceful solutions to the challenges of finding affordable housing within a metropolitan area.

With the mythologization of Vancouver's natural setting, the tendency is to look out to water/mountain views. As a counter to this, the floating residency will be a platform for re-directing one's gaze and reflection back to the city. It will offer a place of contemplation at the city's edge, allowing passengers to experience locations and perspectives that are otherwise inaccessible to most city residents and visitors. Choosing from a short list of confirmed sites, Artists-in-residence will be embedded within the unique conditions and histories of different moorage locations, each of which brings opportunity for exchange with resident partners or hosts.

The floating platform or barge has been conceived as a small, self-sustaining environment to minimize environmental impact and maximize artistic autonomy. With a commitment to being independent of marinas for charging batteries, pumping tanks and filling reserves, the Blue Cabin Committee is researching the newest technologies in solar and wind power, alternative toilets, and grey water treatments, with the goal of being self-sustaining, and having zero impact on the waterways and marine life it moors within. The marine ecologies of the Indian Arm, Burrard Inlet, False Creek and Fraser River are distinct and unique from one another, yet equally fragile.

As a collaborative effort that has captured the public's imagination, the Blue Cabin Floating Artist Residency represents an innovative response to some of the most pressing issues of our time: global trade, the marine environment, sustainability, affordability, and the protection of culture and heritage. Through partnerships with host sites, artists from a range of disciplines will be ensconced within the unique conditions of the Pacific Northwest and will have opportunities for dialogue and exchange with art and non-art audiences alike. With the Blue Cabin Committee's commitment to, and experience with successful public outreach programs, the residency's potential for impact and lasting public benefit is profound.



## 4 FINDINGS

## 4.1 BLUE CABIN AND HERITAGE

Hal Kalman, a well regarded heritage specialist and architectural historian, with Andrew Todd, an experienced art conservator, prepared "A Plan for the Conservation and Re-use of the Blue Cabin", February 2016, which outlines the history and significance of the Blue Cabin and makes recommendations for its conservation and interpretation. Kalman cites two protection tools for the Blue Cabin Committee's consideration:<sup>6</sup> Heritage Designation, which provides protection against inappropriate change or demolition and is registered against the property title; and a Heritage Revitalization Agreement (HRA), a voluntary but binding agreement with the local government. Under an HRA, the owner agrees to restore, preserve and protect the building in exchange for nonconforming use, density and/or siting regulations. The agreement is implemented through the development permit process. HRA is also registered against the property title.

Because the Blue Cabin has no property title, and is not owned by anyone, there is nothing to register it to. As part of the cargo being carried by a 'non-self propelled vessel' it will be towed by tug across boundaries and jurisdictions. Without a permanent location, the cabin is not tied to any one municipality and the land-use regulations and by-laws they adhere to. It will however be subject to waterway jurisdictions and will have to comply with navigation regulations. See item 4.3 below.

## 4.2 REPAIRS AND MODIFICATION FOR NEW USE

Regardless of the cabin's official designation, the Blue Cabin Committee has stated their intention to rehabilitate the cabin to make the necessary repairs and upgrades to accommodate its new use while still retaining its cultural heritage. To that end they have pursued a Statement of Significance (SOS), a declaration of value that provides a concise description of the historic place and why it is important. An SOS identifies key aspects of the place that must be protected and lists the character defining elements.



With the Blue Cabin Committee working towards the cabin's remediation, they referred to "The Standards and Guidelines for the Conservation of Historic Places in Canada"<sup>7</sup>, which seeks to balance conservation principles and sustainability objectives. Of specific relevance to the cabin, it provides general and additional guidelines for rehabilitation projects involving roofs, exterior walls, windows and doors, interior features, and structural systems.

In Hal Kalman's Conservation report, he strongly asserts that any repairs or alterations made for code compliance and structural upgrading be done under the oversight of a conservation architect or other conservation professional who is a member of the Canadian Association of Heritage Professionals (CAHP). He writes, "Every reasonable effort should be made to minimize the visual impacts of changes, and to take care not to obscure or destroy heritage characterdefining elements." (Kalman, page 29)

<sup>&</sup>lt;sup>6</sup> Described in Part 27 of the *Local Government Act*, see page 30, Kalman, Hal, "A Plan for the Conservation and Re-use of the Blue Cabin", February 2016

<sup>&</sup>lt;sup>7</sup> Parks Canada, website,

https://www.google.ca/#q=parks+canada+standards+and+guidelines+for+historic+places

Consulting structural engineers Bush Bohlman & Partners prepared a structural assessment in March of 2016. Responding to Bohlman's recommendations in addition to those outlined by Andrew Todd in the Conservation report, the Blue Cabin Committee developed and prioritized the scope of work, obtained quotes from contractors, and are currently fundraising for the cabin's necessary repairs. They anticipate work will commence in the early Fall of 2016.

## 4.3 ON THE WATER: REGULATIONS

#### CLASSIFICATIONS

Because there are no vessel classifications specific to Canada, marine engineers refer to those defined by the American Bureau of Shipping and Lloyds of London. The general classification for the Blue Cabin Floating Artist Residency will fall under "non-self propelled vessel". These include barges of all kinds, (work barges: deck, tank, bin, crane, notch, spud, jack-up) and accommodation barges, hotel ships, floating dry docks, and dredges.

#### **REGISTRATION AND LICENSING**

According to *the Canada Shipping Act*, 2001 (CSA 2001), section 46, all nonpleasure vessels must be registered with Transport Canada. A registered vessel is one that has a Certificate of Registry from Transport Canada's Vessel Registration Office. <sup>8</sup>

Registration is a title system for vessel ownership. It is similar to land title registry. Registration with Transport Canada allows for name approval and mortgage registration. Registration requires the vessel's name, port of registry, statement of qualification, appointment of authorized representative, builder's certificate, and tonnage measurement. There is a first time registration fee of \$250.

Small and large non-pleasure vessel owners are responsible to ensure their vessels and operations comply with all applicable regulatory requirements. The Small Vessel Compliance Program (SVCP) is intended to help simplify the process of regulatory compliance by consolidating the requirements of numerous regulations under the *Canada Shipping Act, 2001,* into one easy-to-use tool with guidance notes. Enrolment in the SVCP is optional.

### The residency vessel should be fitted with a compliance notice. This notice

attests it is in compliance with the construction requirements for vessels other than pleasure craft. The notice should be permanently attached in a conspicuous location.<sup>9</sup>

The builder, manufacturer, rebuilder or importer of the vessel should obtain a manufacturer's identification code from the Minister of Transportation.<sup>10</sup>

#### INSPECTIONS

In Canada, commercial vessels or publicly owned vessels must be inspected. Owners can schedule inspections through Transport Canada's regional offices.

The Coast Guard will also, from time to time, inspect vessels of all kinds in relation to navigational regulations, primarily in regard to running lights and fire safety. They may also request to see insurance documents.

#### SAFETY

Refer to CSA 2001, Small Vessel Regulations, Part 5, Workboats of Not More than 15 Gross Tonnage.

A workboat shall carry on board:

- First aid kit
- Personal flotation device or lifejacket of an appropriate size for each person on board (worn by a person less than 16 years of age)
- Reboarding device, unless the vertical height that must be climbed in order to reboard is not more than 0.5 m
- Buoyant heaving line of not less that 15 m in length
- Lifebuoy that is equipped with a self-igniting light or attached to a buoyant line of not less than 15 m in length
- 2A:10B:C portable fire extinguisher at each access to a space fitted with a fuel-burning cooking, heating or refrigerating appliance, mounted with a clamp or bracket that provides a quick and positive release
- Fire axe and bucket
- Protection from falling overboard in accordance with construction standards

<sup>&</sup>lt;sup>8</sup> To Register: <u>https://www.tc.gc.ca/eng/marinesafety/oep-vesselreg-smallcomm-menu-542.htm</u>

<sup>&</sup>lt;sup>9</sup> See: <u>http://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-91/page-17.html#docCont</u> <sup>10</sup> See: http://laws-lois.justice.gc.ca/eng/regulations/sor-2010-91/page-21.html

## 4.4 JURISDICTIONS

The following chart shows the waterways the Blue Cabin Committee is interested in, the jurisdictions they wall within, and potential moorage sites:

Waterway	Jurisdiction	Potential Moorage Sites
Burrard Inlet	Federal. Vancouver Fraser Port Authority; Tsleil-Waututh Nation	Waterfront operations, ILWU New Brighton Park Waterfront 'tenant'
Indian Arm	Federal. Vancouver Fraser Port Authority; Tsleil-Waututh Nation	Cates Park Sites via Tsleil-Waututh Nation
False Creek	Municipal. City of Vancouver	Bulkhead, Olympic Village David Lam Park
Fraser River	Federal and Provincial. Vancouver Fraser Port Authority	Fishing or industrial sites

## 4.5 PERMISSIONS

### **TSLEIL-WAUTUTH NATION**

Each of these four waterways falls within the consultation area of the Coast Salish people. The ocean, inlets, channels, rivers, tributaries and tidal flats of this region have profound cultural significance to the Musqueam, Squamish and Tsleil-Waututh Nations.

"The Tsleil-Waututh people have always assumed the role of caretakers of our traditional territory. Just as the lands and waters have sustained us since time out of mind, it is our sacred trust to not only care for them in return, but to restore the environment to its prior state. Our people have a deep understanding of what the health of our environment means to the lives of our community members. The principles that guide our approach to stewardship are built from teachings passed on by our Elders, our relationship to the land, and our aboriginal rights and title.<sup>11</sup>



<sup>&</sup>lt;sup>11</sup>"Tsleil-Waututh, People of the Inlet", Stewardship,

http://www.twnation.ca/en/About%20TWN/Stewardship.aspx.

The following are excerpts from "Tsleil-Waututh Nation Stewardship Police", issued January 2009.

The Tsleil-Waututh Nation has a Stewardship Policy that guides a consultation process that assesses potential impacts of proposed land and resource policies, plans and developments in relation to Tsleil-Waututh interests. The Policy applies to all of the surface and subsurface air, land, water, cultural and natural resources within the Tsleil-Waututh consultation area. The Policy is divided into five sub-categories:

- 1. Consultation and Accommodation
- 2. Land Alienation
- 3. Planning
- 4. Development Assessment
- 5. Resourcing Requirement for Tsleil-Waututh Engagement

There are four steps in the consultation process:

- 1. Referral set-up fee of \$250 to establish a specific project file in the Tsleil-Waututh Treaty, Lands and Resources Department.
- Information Sharing, through meetings or an exchange of information. A Cultural Heritage Investigation Permit may be required for certain projects to identify, protect, conserve and manage cultural heritage resources (fees range from \$200 - \$400).
- 3. Review of additional information and technical analysis.
- 4. Follow-up meetings vary by project.

### THE VANCOUVER FRASER PORT AUTHORITY

"The Vancouver Fraser Port Authority is responsible for the stewardship of federal port lands in and around Vancouver, British Columbia. Like all Canada Port Authorities, the Vancouver Fraser Port Authority is established by the Government of Canada pursuant to the Canada Marine Act, and accountable to the federal Minister of Transport. Our mandate is to facilitate Canada's trade objectives, ensuring goods are moved safely, while protecting the environment and considering local communities. The Port of Vancouver is Canada's largest, supporting close to one in every five dollars of trade in goods that flow through our country and offering the broadest range of cargo-handling options of any port in North America."<sup>12</sup>



The above map shows the waterways that fall within the Vancouver Fraser Port Authority's jurisdiction. They manage over 16,000 hectares of water, more than 1,000 hectares of land and approximately 350 kilometres of shoreline.<sup>13</sup>

"With a focus on facilitating trade, the Port has a number of approval processes in place to ensure the safe handling of goods. Port users who wish to conduct certain marine operations within the Port's jurisdiction are required to apply for a permit. Examples of marine operations requiring a permit include anchoring, bunkering, diving operations, transport of dangerous goods, etc. Each marine operations application is examined so that any safety and operational concerns can be addressed, in order for the procedure to be safe and successful.

In addition, all organized activities on the water that occur within Port's jurisdiction require a marine event permit. This can be applied for through the Pacific Gateway Portal, a website for customers and stakeholders that offers

<sup>&</sup>lt;sup>13</sup> http://www.portvancouver.com/about-us/

<sup>&</sup>lt;sup>12</sup> <u>https://www.portvancouver.com/about-us/</u>

services such as vessel anchorage services, on-line applications for marine events and harbour dues along with dangerous goods permits."<sup>14</sup>

"Permission to use and occupy Port real estate can be obtained through the Port's Real Estate team. Tenure for public and recreational uses may be restricted to certain locations. The *Canada Marine Act* and Letters Patent govern the types of uses they will approve. The Port makes available a listing of current leasing opportunities in a downloadable brochure." <sup>15</sup>

When applying to lease or license a water or land lot, the proposal undergoes a lengthy review process. Projects may require a "Project and Environmental Review Project Permit". Legal agreements are complex and detailed.

"To use Port property presently occupied by a tenant, an agreement should be made with the tenant directly. It is the tenant's responsibility to obtain the Port Authority's consent, including all agency and regulatory approvals."<sup>16</sup>

On the regulatory side, projects are also evaluated for navigation and environmental impacts.

The Port Authority's departments of real estate, operations, and regulations have little experience with working within the cultural sphere. In conversation with the Port about the Blue Cabin Floating Artist Residency, they recommended the Committee work through municipal organizations with mandates to support arts and culture. There are a number of waterfront parks, that although they fall within the Port's jurisdiction, are overseen and managed by the municipality.

### CITY OF VANCOUVER

False Creek falls within Provincial jurisdiction but it is leased back to the City of Vancouver. False Creek is the area of water east of Kits Point (delineated by a line drawn in a direction of 45° true from 49° 16'39"N, 123° 9'8"W to 49° 17' 1"N, 123° 8' 34"W).



The Blue Cabin Committee should consult with the City and Park Board about plans for the residency, moorage location(s), schedule, and any public events that are generated from the residency.

It falls within the purview of Park Board to issue anchoring permits. Permits allow boaters to anchor a maximum of 14 days during high season (April to September) and 21 days in low season (October to March). Rationale and special permission to moor for longer periods will need to be presented for consideration.

No anchoring is allowed within the navigable channel in False Creek. Anchored boats must not impede access or egress from any of the ferry docks or marinas in False Creek. Navigable waterways are any waterways on which motorized and non-motorized watercraft can operate. For the Vancouver area, this generally refers to salt water areas including False Creek, English Bay and the Vancouver Harbour. The Navigable Waters Protection Act is designed to ensure public access to, and efficient use of, our waterways. The Act is administered by the Navigable Waters Protection Program (NWPP) of Transport Canada.<sup>17</sup>

Events with activities on False Creek involving or affecting the public require approval from Transport Canada's Office of Boating Safety and from the City. The approval process can take up to three months. All organized activities on the water require a Marine Event Permit from Port Metro Vancouver. There is no charge for a Marine Event Permit.

<sup>&</sup>lt;sup>14</sup>http://www1.portmetrovancouver.com/HarbourOperations/Login.aspx?ReturnUrl=%2fHarbourOpe rations

<sup>&</sup>lt;sup>15</sup> <u>http://www.portvancouver.com/wp-content/uploads/2016/05/2016-05-11-VL-Leasing-</u> Opportunity-Brochure\_Final.pdf

<sup>&</sup>lt;sup>16</sup> http://www.portvancouver.com/development-and-permits/land-and-marine-event-permits/

<sup>&</sup>lt;sup>17</sup> Transport Canada, http://www.tc.gc.ca/eng/programs-621.html

## 5 DESIGN

## 5.1 FLOATATION OPTIONS

CARGO: Estimating approximately 36,000 lbs., or 18 ton. Size in the range of 1,000 – 1,500 sq ft. Dimensions TBD.

The Blue Cabin Committee is currently researching floatation options to support the Blue Cabin studio, tiny house, housing for power, and audience/participants boarding capacity. Under consideration are traditional dock floats, steel pipe floats, sectional pontoons, and existing or new barges, each of which have pros and cons that are being weighed against criteria of stability, towage, capacity, and weather conditions.

It has been stressed that whatever the option, it must be very robust to hold up to the demands of towing. Tugs are not designed for gentle use. Self-mooring options are being considered including spuds and 4-point anchoring systems. These too are being evaluated based on their functionality and ease of operation.

The following options and comments regarding pros and cons for each are based on preliminary discussions with a marine engineer.

Option	Approximate Weight	Construction Method	Approximate Costs	Pros	Cons
Traditional Dock Float	Weight: 15 m.t; Deadweight: 20 m.t.	Wood, or combination wood and steel framing on top of plastic foam-filled float tanks. Wood decking on top of framing. Would require approx. 32 plastic floats sized at 96" L x 48" W x 32" deep. Priced at \$670 each. Need to verify stability requirements carefully	\$50,000	Simplest construction option - easy to build; easy to repair and maintain; many qualified builders available	Least robust construction; no great for towing; most vulnerable to damage; little reserve buoyancy; fairly sensitive in regards to weight distribution (creates layout constraints); freeboard - stability could be an issue, depending upon construction method and materials; spud system not possible but could do 4 point mooring system with anchors
Steel Pipe Float	Weight: 40 m.t.; Deadweight: 20 m.t; Total Displacement: 60 m.t.	Large diameter (approx. 48") steel pipes arranged longitudinally with steel beams arranged over top transversely. Wood decking on top of steel beams	\$120,000 +	More robust than traditional dock float option	Same as traditional dock floa
Sectional Pontoons	Dimensions: 45' x 22.5'	A number of steel box shaped pontoons, each small enough to be truckable, joined together to form what is essentially a barge hull. These are standard production items that can be bought "off the shelf". Would require hull depth of minimum 3'. 4' or 5' is more commonly available and would be fine for this application	New: \$163,200 USD; with spuds: \$213,600 Used: \$80,000 + welding to join	The pontoon options will give the most buoyancy and stability. Most robust for towing and longevity. Least sensitive to weight distribution. Will be feasible to fit spuds. Readily available. Possible to fit ballast to correct trim and/or weight distribution issues (especially if using 4' or 5' deep pontoons)	Cost. Will likely need to involve a steel fabricator to assemble and outfit the pontoons. The work would probably need to take place a Shelter Island Marina or Arro Marine (only affordable works yards with big enough travel lift for launching). Breadth is limited to 30' to fit into travel lift
Existing or New Barge	Based on dimensions of 55 x 22 x 4'	Single hull, steel construction, rectangular box shape with raked ends. Hull depth between 3 - 5'. Built in China	New: \$170,000 USD; Used: \$51,000 USD	Best for re-sale. Best for towing. Best for fitting spuds or mooring winches. Stability not likely an issue	Cost. Used barge option would require some up-front maintenance of unknown extent. Possibility of ongoing water ingress issues.

## 5.2 FLOATATION OPTIONS, MAINTENANCE

Each of the floatation options listed above have different lifespans and maintenance requirements. A new or existing barge has the greatest re-sale value. If re-sale is a goal, protecting the initial investment through a reasonable maintenance program is an important consideration.

MAINTENANCE					
Option	Maintenance	Estimated Maintenance Costs	Total Cost Maintenance per 20 years		
Traditional Dock Float	Bi-annual: Paint work on topside (3 days, labour, materials) (10 x \$1,000)	\$ 10,000	¢ 00.000		
	10 years: Maintenance, wood replacement (2 x \$5,000)	\$ 10,000	\$ 20,000		
	Bi-annual: Paint work on topside (3 days, labour, materials) (10 x \$1,000)	\$ 10,000			
Steel Pipe Float	5-7 years: Remove and replace anodes (no divers needed) (3 x \$2,000)	\$ 6,000	\$ 16,000		
Sectional Pontoons	Bi-annual: Paint work on topside (3 days, labour, materials) (10 x \$1,000)	\$ 10,000	\$ 25,000		
	7 years: Remove and replace anodes, scrape hull (diver) (3 x \$5,000)	\$ 15,000	φ 23,000		
Evipting or New Porgo	Bi-annual: Paint work on topside (3 days, labour, materials) (10 x \$1,000)	\$ 10,000	¢ 25 000		
Existing or New Barge	7 years: Remove and replace anodes, scrape hull (diver) (3 x \$5,000)	\$ 15,000	\$ 25,000		

## 5.3 OPERATIONS

### POWER

Considering needs, capacity, and sources for powering the floating residency will have to be thoroughly addressed in the next phase of research but preliminary findings indicate a combination of wind generators and solar panels may be sufficient. These would require a charge controller, battery cell, and power inverter.

### HEAT

A small, cast iron wood stove, positioned in the centre of the Blue Cabin provided a dry heat, albeit intermittently, throughout the dwelling's 80-year tenure in Dollarton. There have been discussions about re-fitting the cabin with a "clean", efficient wood stove for the residency, but delivery and storage of a wood supply has caused some hesitation. Other options under consideration for both the tiny house and studio, are highly economical propane heater/fireplaces and/or electric space heaters.

## WATER

A water tank will hold clean, potable water and a pump is used to distribute it. It is highly recommended that a filter system be installed. A rainwater catchment system can be used as the main water source with water delivery/pumping as a back-up. The water tank should be drained and flushed for every 500 gallons used.

### SEWAGE

The Port Information Guide, Port Metro Vancouver dated January 2016 states that "all vessels should be retaining black/grey water on board, using pumpout facilities as appropriate, or arranging for a collection barge/vessel to properly dispose of the waste while in the port's jurisdiction."

Cognizant of the detrimental effects of grey water on marine life, consideration is being given to greywater harvesting. Harvesting would involve draining greywater from the shower and sink into a settling tank. Greywater is filtered through a large mesh screen or bag filter. It then goes through a second filtration stage using a multi-media filter and then finally, through an activated charcoal filter, 'polishing' the water to make it clear and free of odours. This water would be clean enough for re-use for purposes other than drinking, or could be safely discharged into the waterway.

Incinerator and composting toilets would both be reasonable options for the residency. There are a variety of models on the market, each with their own set of pros and cons. Both require venting and some dumping. Other products treat and stabilize human waste using separation, dehydration and evaporation and are solar powered.<sup>1</sup> A separate bathhouse would keep any odours out of the living area.

<sup>&</sup>lt;sup>1</sup> See example http://www.swsloo.com/how-eloo-works

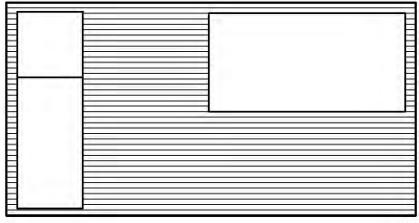
## 5.4 OPERATIONS COSTING

The following table indicates results of preliminary costing and sourcing for operations. For a full project budget see page 24.

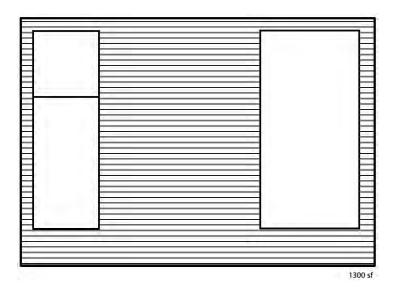
Product Notes	Approximate Cost	\$	Conversion (Aug 5 '16)	Sourcing
165w Nature Power @ \$550 USD x 4	\$2,200	USD	\$2,898	
28 amp charge controller	\$ 100	USD	\$ 132	http://www.westmarine.com/marine-solar-
Deep-cycle flooded marine battery, 105 amp hours, group 31 @ \$249 USD x 4	\$1,000	USD	\$1,317	panels
Marine-grade 400 watt wind turbine, 46" blade span, 12 v output	\$ 460	USD	\$ 606	
Propane. Newport Propane Fireplace (P9000)	\$1,050	USD	\$1,383	http://dickinsonmarine.com/product/newport- p9000-propane-fireplace/
Electric. Eco Heater Ceramic 400 Watt Wall Panel Convection Heater x 2 @ \$150	\$ 300	CDN	\$ 300	http://www.walmart.ca/en/ip/eco- heaterceramic-400-watt-wall-panel- convection-heater/6000189924423
Eccotemp L-10 High Output Outdoor Demand Tankless Propane Water Heater.	\$ 290	CDN	\$ 290	http://outdoortankless.com/products/instant- hot-water-anywhere-eccotemp-I10-tankless- water-heater?variant=4318503553
For potable water. Virgin Polyethylene Poly Resin. 80 gallons	\$ 550	USD	\$ 725	http://www.plastic- mart.com/category/30/marine-water-tanks
Divetron 1200. Submersible. 64 PSI	\$ 918	CDN	\$ 918	http://www.barrplastics.com/divertron-on- demand-water-pumps.html#.V6UgWBT_67Y
The Water Fixer. Model 500. 12V.	\$ 400	USD	\$ 527	http://waterfixercompany.com/model500.html
Faucet kit (\$60); Case of 12 carbon filters (\$200)	\$ 260	USD	\$ 343	http://waterfixercompany.com/order500.html
Greywater Disposal System Kit (land)	\$ 825	USD	\$1,087	http://www.wastewateraustralia.com.au/the- ultragts-houseboat-system.html
Ultra GTS Houseboat System	Requested quote			http://www.wastewateraustralia.com.au/the- ultragts-houseboat-system.html
GRAF One2Clean Wastewater Treatment System	Requested quote			http://www.barrplastics.com/GRAF- One2Clean-Wastewater-Treatment- System_p_1946.html#.V27M_JMrKEI
Marine Size Airhead Composting Toilet	\$1,030	USD	\$1,357	http://airheadtoilet.com
Envirolet Basic Plus (non-electric)	\$2,300	CDN	\$2,300	http://www.envirolet.ca/enbasplusnon.html
Envirolet DC12 (12VDV)	\$2,500	CDN	\$2,500	http://www.envirolet.ca/enviroletdc12.html
Naure's Head	\$1,435	CDN	\$1,435	http://natureshead.net
ELOO-R-15 Residential Model	\$2,500	USD	\$3,294	http://www.swsloo.com

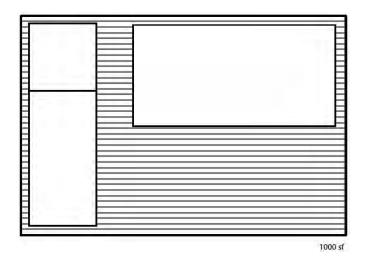
## 5.5 CONFIGURATION: BLUE CABIN STUDIO, TINY HOUSE, POWER/OUTBUILDING

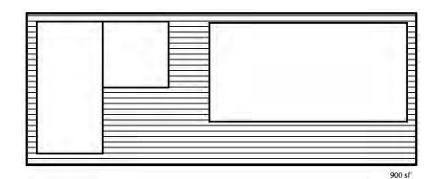
Preliminary configurations and layouts are being developed to help inform the project needs. The following plans present a variety of options that include minimum set backs around the vessel's perimeter, acknowledgement of access doors in the studio and tiny house, power/outbuilding, and an outdoor gathering space for small groups of visitors.



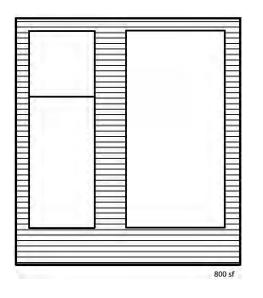


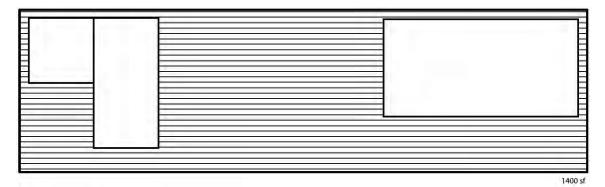






KEY: Large rectangle: Blue Cabin studio Small rectangle: tiny house Square: power/outbuilding





BLUE CABIN FLOATING ARTIST RESIDENCY, PRELIMINARY FEASIBILITY REPORT 19

## 6 WATERWAYS, MOORAGE AND POTENTIAL PARTNERS

The waterways of the Indian Arm, Burrard Inlet, False Creek and Fraser River offer a range of environments, subjects, and histories for artist investigations. From trade on the water that begins with Pacific Indigenous history and precontact trade routes, to the present day moving and storing of global commodities; trafficking on the water whether it be goods or people, services or trades; migration of people, birds and animals; the marine environment and protection of coastal waters; occupation of the foreshores and the history of squats and alternative housing; and the grey zones that challenge jurisdictional boundaries. These subjects invite conversations between artists, writers, unionists, scientists, environmentalists, activists, fisherman, and scholars, to contribute to new understandings about the water that surrounds us.

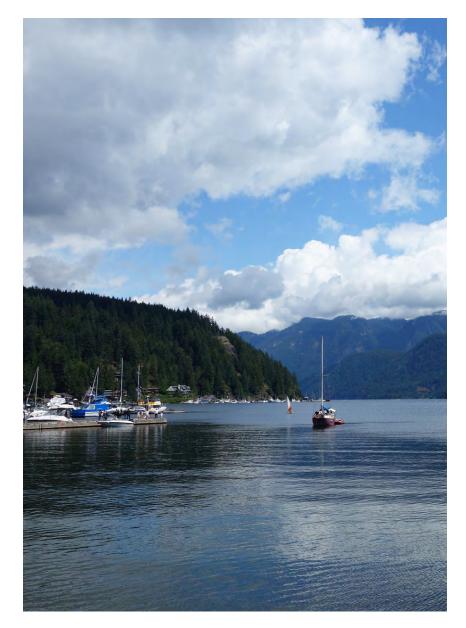
The following proposed moorage sites and potential resident partners or hosts indicate rich possibilities for occupying these sites and engaging with different organizations and publics. All represent nascent conversations with various interest groups.

## 6.1 INDIAN ARM

Focus: First Nations cultural histories and contemporary waterway use In Conversation with: Tsleil-Waututh Nation

The Indian Arm is a steep-sided, salt water, glacial fjord that extends straight north from the Burrard Inlet, between Belcarra and Deep Cove in North Vancouver.

At the mouth of Indian Arm, Dollarton, Cates Park, and a large part of the Burrard Inlet shore were inhabited for millennia by the Tsleil-Waututh Nation, 'The People of the Inlet'. Some ten thousand people are believed to have lived in the area, setting up camps and erecting their summer houses along the foreshore in the late spring as part of their seasonal round. "The village of Wheyah-Wichen ('facing the wind') was located in the present Cates Park. The Tsleil-Waututh Nation and the District of North Vancouver signed a cultural agreement and protocol for Whey-ah-Wichen and Cates Park in 2000."<sup>2</sup>



<sup>&</sup>lt;sup>2</sup> Kalman, Harold. "A Plan for the Conservation and Re-use of the Blue Cabin". 2016. Page 5.

In a Report entitled "Tsleil-Waututh Nation's History, Culture and Aboriginal Interests in Eastern Burrard Inlet", archaeologist Jesse Morin presents findings regarding a study area that includes Burrard Inlet from just west of Second Narrows, east to Port Moody, and north to include Indian Arm, and determined there is archaeological evidence of Tsleil-Waututh village clusters spanning several millennia.<sup>3</sup> Notably, Morin states that "Coast Salish people were not passive harvesters of the natural bounty of the region. Coast Salish people were active managers of these ecologies and made conscious decisions and actions to promote the future health and abundance of these resources. This concept is most simply described as a stewardship ethic." <sup>4</sup>

Of enormous significance to the region is the 6,688 hectare Say Nuth Khaw Yum / Indian Arm Provincial Park which is located on the east and west sides of Indian Arm. The Park is co-managed by the Tsleil-Waututh Nation and the Province of British Columbia. Access to the Park is primarily by water. During the summer, the Indian River Forest Access Road may provide an alternate land route from Squamish but maintenance is infrequent, if at all.

The area of Say Nuth Khaw Yum is considered to be the heart of Tsleil-Waututh territory. After contact, pioneers extracted resources on either side of Indian Arm up to and beyond its north end, through mining, logging and rock quarries, all of which had a negative impact on the land, water, and wildlife. In 1903 the mountain above Buntzen Lake was tunneled to direct water to a powerhouse on the shores of Indian Arm in order to generate electricity to power Vancouver area streetcars. By the 1950s, "the area within and adjacent to Say Nuth Khaw Yum / Indian Arm Provincial Park hosted a settlement pattern made up of a mix of industrial and recreation land uses."<sup>5</sup>

The Blue Cabin Committee have begun a conversation with the Tsleil-Waututh Nation about the possibility of including Cates Park as one of the moorage sites for the artist residency. The Blue Cabin would visit the locale where it rested for some 80 years. If of interest to the Tsleil-Waututh, other sites along the Indian Arm may also be considered.

## 6.2 BURRARD INLET

### Focus: The working waterfront

In Conversation with: Cynthia Brooke, Officer, International Longshore & Warehouse Union, Vancouver, Local 500

Burrard Inlet is a coastal fjord with relatively shallow sides that was formed during the last Ice Age. Its prime location as a portal to Asian trade has led to its growth to become Canada's largest and busiest port for domestic and international trade and tourism. The Port of Vancouver trades approximately \$200 billion in goods (based on 2015 cargo volumes) with more than 170 trading economies.<sup>6</sup>

The Vancouver Fraser Port Authority administers access to all port roadways, terminals and facilities as per Transport Canada marine security regulations. For almost two decades, only those with a Port Pass can enter port lands. Although we can see cranes from a distance and shipping containers stacked high, the life of the city feels disconnected and cut off from the work of the port.

The Blue Cabin Committee is seeking a moorage site that speaks to the activities of the working harbour, the history of labour, and the movement and storage of goods.

## 6.3 FALSE CREEK

Focus: Industrial past, urbanity, housing, and public space In Conversation with: City Studio, Director and Founder Duane Elverum; and Justin Langlois and Holly Schmidt, two artists/educators who are proposing a floating school initiative

Historically, before contact, False Creek was a shared waterway of the Musqueam, Tsleil-Waututh and Squamish Nations and used as a source for sustenance and abundant food supply. Up until the late 1800s, the creek was five times its present size and its shoreline extended far beyond what is currently seen today. At the opening of the creek from Burrard Inlet, sand bars stretched across its mile-long breadth, while at its terminus to the east, a large tidal mud flat supported a rich diversity of sea and plant life. Until 1915, this mud flat extended as far east to what is now Clark Drive. By 1917, the area between Main

<sup>&</sup>lt;sup>3</sup> Morin, Gord. "Tsleil-Waututh Nation's History, Culture and Aboriginal Interests in Eastern Burrard Inlet", redacted version. Prepared for Gowling Lafleur Henderson LLP, Toronto. May 25, 2015. Accessed July 5, 2016, <u>http://twnsacredtrust.ca/wp-content/uploads/2015/05/Morin-Expert-Report-PUBLIC-VERSION-sm.pdf</u>

<sup>&</sup>lt;sup>4</sup> IBID, page 23.

<sup>&</sup>lt;sup>5</sup> "Park Management Plan, Say Nuth Khaw Yum / Indian Arm Provincial Park". February 2010. Produced by Say Nuth Khaw Yum / Indian Art Provincial Park Management Board. SNKY ParkManagementPlan Feb10.ashx.pdf. Map 21, Cultural Series: Pioneer History. Page 31.

<sup>&</sup>lt;sup>6</sup> Vancouver Fraser Port Authority, <u>http://www.portvancouver.com/about-us/statistics/</u>

Street and Clark Drive was completely filled in, and by 1919 both the Great Northern Railway (GNR) and Canadian Northern Railway had established their new western terminals here, all of which set into motion a burgeoning of industrial activity. In a matter of 30 years, saw mills, factories, and port operations took over the creek and its shallow water became so polluted there was little hope it would ever recover. Industries began to move to other regions in the '50s and by the early '70s the redevelopment of Granville Island extended to the south shores where parks and housing edged toward the Cambie Bridge. Expo 86 occupied land on the north shore of False Creek, marking its transition from rail yard to condominium development. Today, False Creek is lined with condominium towers in all directions and attempts are being made to restore pockets of the marine habitat that once defined this fecund inlet.

A residency in False Creek lends itself to a more social and highly educative situation, where possibilities for exchange are expanded to include a variety of communities with divergent interests. To indicate the residency's potential range of function and impact, the following two examples of partnerships present the possibility of utilizing the residency as a space for education and innovation. Both *CityStudio*<sup>7</sup> and a new initiative *Floating School*,<sup>8</sup> present opportunities for residency artists to interact with students to investigate a wide range of issues relating to urbanity.

<sup>&</sup>lt;sup>8</sup> "Floating School is a multi-year artist-led research, production, and programming initiative that takes the form of a School in the earliest understanding of the word, drawing from the etymological base of skholē, which translates as spare time, leisure, rest, or ease. Floating School aims to work beyond dominant narratives of public and private western education, instead looking to notions of retreat, leisure, rest, slowness, and play as sites of productive resistance and forms through which to develop new capacity for political and social action. It embarks on collectively imagining diverse multiple futures of the role that art, public engagement, and learning can play in various communities, and promoting access to these conversations through numerous public events. We envision working with Blue Cabin Floating Artist Residency to launch a two-part research and prototype stage of the Floating School's approach to public programming."<sup>8</sup> Proposals of this kind also speak to some of the ways in which the residency could be used to generate income to help support its on-going programming. This initiative is being researched and proposed by Vancouver-based artists/educators Justin Langlois and Holly Schmidt. Quoted from email, June 28, 2016



<sup>&</sup>lt;sup>7</sup> "CityStudio Vancouver is an innovation hub inside City Hall where staff, university students and community members co-create, design and launch projects on the ground. The central mission of CityStudio is to innovate and experiment with the ways cities are co-created, while teaching students the skills needed to collaborate on real projects in Vancouver with City staff and community stakeholders. These projects improve our city and enrich our neighbourhoods, making the city more livable, joyful and sustainable." CityStudio, http://citystudiovancouver.com

### 6.4 FRASER RIVER

Focus: Resource-based economies In Conversation with: Private businesses, fishing, and other resource-based industries

"Most of the landforms of the Fraser Lowland were produced during or since the last major glaciation. The most important agent for the deposition and sculpturing of these sediments has been the Fraser River, which developed after ice left the Lowland some 8,000 to 10,000 years ago."<sup>9</sup>

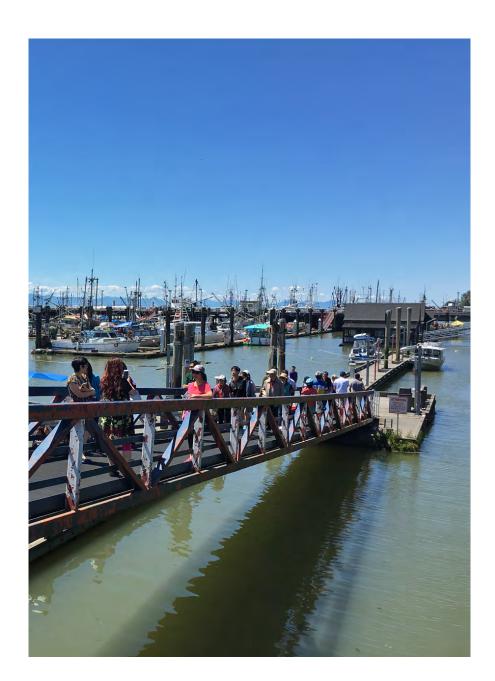
Prior to contact, the banks and tributaries of the Fraser River were central to the lives of First Nations as a vital transportation corridor and key source of food. It is estimated that more than half of the Province's aboriginal population made their home along the river. With the arrival of new world explorers and later, homesteaders and business entrepreneurs, the river facilitated the fur trade, gold rush, lumber mills, fishery operations, while supporting agriculture and community life.<sup>10</sup>

The lower Fraser River has become "an economic waterway for port activity, recreational destination, productive commercial and sport fishing area, agricultural delta and marine transportation corridor. However, people living on the shores of the Fraser River today face the same challenges as the early settlers. The river has a history of major floods, and the lower Fraser River area is dependent on the integrity of 600 km of diking, 400 flood boxes, and 100 pump stations to keep homes, businesses and public facilities above water."<sup>11</sup>

The "mighty Fraser" has been referred to as the "life blood" of BC, connecting the ocean to the heart of the province. The Blue Cabin Committee is considering moorage sites in proximity to some of the natural resource based industries along the lower Fraser River.

http://www.fraserbasin.bc.ca/\_Library/Water/report\_chr\_fraser\_river\_2010.pdf

<sup>&</sup>lt;sup>11</sup> The Economic Importance of the Lower Fraser River". Prepared by the Richmond Chamber of Commerce with the assistance of D.E, Park & Associates Ltd. July 2014. Accessed as a PDF, on-line, July 9, 2016. Page 12.



<sup>&</sup>lt;sup>9</sup> Armstrong, Dr. John E. Edited by Charlie Roots and Chris Staargaard. "Vancouver Geology". Geological Association of Canada. 2009. Accessed on line, June 28, 2016, <u>http://www.gac-cs.ca/publications/VancouverGeology.pdf</u>

<sup>&</sup>lt;sup>10</sup> "The Economic Importance of the Lower Fraser River". Prepared by the Richmond Chamber of Commerce with the assistance of D.E, Park & Associates Ltd. July 2014. Accessed as a PDF, on-line, July 9, 2016. Page 12. For the cited passage, the document credits

## 7 PROJECT PHASES AND RELATED COSTS, PRELIMINARY FINDINGS

	PHASES OF WORK AN	Approximate Cost CDN	Sub-total	
1		Preliminary Feasibility Report	\$ 6,000	
2	Planning	Residency Feasibility study and Business Plan	\$ 36,000	\$ 42,450
3		Consultations, Tsleil-Waututh	\$ 450	
4	Dhua Cabin	Transportation, moving cabin to work site	\$ 8,000	
5	Blue Cabin Rehabilitation	Structural, exterior, interior - materials and labour	\$103,500	\$119,500
6	Renabilitation	Transportation for install	\$ 8,000	
7		Research, design, engineering	\$ 8,000	
8	Tiny house	Fabrication, materials and labour. Electrical, heat, plumbing incl.	\$ 40,000	\$ 50,500
9		Transportation for install	\$ 2,500	
10		Research, design, engineering	\$ 8,000	
11	Floatation	Barge fabrication and delivery	\$170,000	\$243,000
12		2 spuds, delivery	\$ 65,000	
13		Power: 4 solar panels, amp charge controller, marine battery, wind turbine	\$ 4,983	
14		Nature's Head Composting toilet, shipping	\$ 1,500	
15		Heat on demand water heater, hose hook-up	\$ 290	
16		Marine water and holding tank and fittings (80 gallons, polyethylene resin)	\$ 725	
17		Water pump, filter	\$ 527	
18		Water filter, faucet kit, case of filters	\$ 870	\$ 15,978
19		Greywater harvesting system (incl shipping)	\$ 1,100	
20		Propane heater, studio	\$ 1,383	
21		Housings for power, greywater - design, engineering	\$ 600	
22		Housings, fabrication, materials, labour	\$ 1,500	
23		Access, (ramps, gangway, moorage float) design, engineering, fabrication, delivery	\$ 2,500	
24		Components moved on deck. Crane rental (4 hours @ \$105)	\$ 420	
25		Install of components: Cabin, tiny house, housings, 'operations' components assembly and hook-up, access ramp/float. Crane rental. (Different trades, total 10 day install @ \$500 per day)	\$ 5,000	
26	Installation	Install, safety, rails, fire. (Materials and labour, 5 days @\$500)	\$ 2,500	\$ 10,938
27		Life vests, ladder, fire safety, first aid kit	\$ 1,268	
28		Bumpers, marine hardware	\$ 1,000	
29		Inspections	\$ 750	
30	Project Management	Coordination of all components, delivery, installation	\$ 5,000	\$ 5,000
31		TOTAL		\$487,366

Note: Line items 11, 12. Barge and spuds represents the highest cost for floatation options, but offers full re-sale value Most inexpensive option is a dock float with 4 point mooring system with anchors. Float and system, approx \$60,000. No re-sale value

TOWING	Example: Towage from False Creek to Cates Park. Tymac: \$490 per hr x 4 to 5 hours depending upon tides.	\$2,450
SAFETY (Line item	27, breakout)	
	vest	\$ 230
	vest	\$ 230
	ladder	\$ 150
	fire	\$85
	fire	\$85
	first aid	\$93
	axe	\$ 200
	lifebuoy	\$ 100
	throw rope	\$ 60
	buoyant light	\$ 35
	Sub-total	\$1,268

RESIDENCY (Costing will be detailed in subsequent Reports)			
	Fundraising, grants, partners, funders - ongoing		
	Board development		
	Residency management, scheduling, planning, coordination		
	Artist selection		
Administration	Artist support		
	Towing and moorage		
	Maintenance, ongoing		
	Partnerships, affiliations, ongoing		
	Public outreach - ongoing		

## 8 APPENDIX

## 8.1 CONTACTS, BY SECTIONS

SECTION 4.1: BLUE CABIN AND HERITAGE

AT Conservators Ltd Andrew Todd Andrewtoddconservators.com 604 947 2617 Office 604 802 2108 cell andrewtodd@telus.net

BC Heritage Amy Calder, Capacity Planner 778 995 7243 <u>acalder@heritagebc.ca</u>

City of North Vancouver Planning Department, Heritage Chris Wilkinson, Planner 604 990 4206 cwilkinson@cnv.org

City of Vancouver Planning Department, Heritage Megan Herod, Planning Assistant 604-873-7038 Megan.Herod@vancouver.ca

City of Vancouver Planning Department Hugh McLean Heritage Group, Heritage Planner 604-873-7056 hugh.mclean@vancouver.ca

District of North Vancouver Kathleen Larsen, Planner 604 990 2369 larsenk@dnv.org

Heritage Branch of BC government Ursula Pfahler, Senior Heritage Planner 250-387-4696 ursula.pfahler@gov.bc.ca

Heritage Vancouver Society Javier Campos, Board President 604 558 1881 <u>info@heritagevancouver.org</u> javier@designcollective.ca

Hal Kalman Heritage specialist and architectural historian 1-205-380-0070 <u>hal@haroldkalman.ca</u> www.haroldkalman.ca

North Vancouver Museum & Archives Nancy Kirkpatrick, Director 604 990 3700, ext 8001 kirkpatrickn@dnv.org

North Shore Heritage Preservation Society Peter Miller, President Northshoreheritage.org 604 926 6096 pmiller396@gmail.com

Vancouver Heritage Foundation Judith Mosley, Executive Director 604-264-9642, extension # 302 http://www.vancouverheritagefoundation.org judith@vancouverheritagefoundation.org

## SECTION 4.2: REPAIRS AND MODIFICATION FOR NEW USE

AT Conservators Ltd Andrew Todd Andrewtoddconservators.com 604 947 2617 Office 604 802 2108 cell andrewtodd@telus.net

Bush Bohlman and Partners Clint Low 604 688 9861 clow@bushbohlman.com

Hal Kalman Heritage specialist and architectural historian 1-205-380-0070 <u>hal@haroldkalman.ca</u> www.haroldkalman.ca

Simcic Uhrich Architects Marko Simcic 604 999 0967 marko@simcicuhrich.com

#### SECTION 4.3: ON THE WATER: REGULATIONS

Bray Yacht Design and Research Ltd. Patrick Bray 604 531 8569 http://www.brayyachtdesign.bc.ca

Ian McMurdo 778 997 9285 ianmcmurdo@gmail.com Robert Allan Ltd. Naval Architects and Marine Engineers 604 736 9466 http://www.ral.ca/services/index.html

Transport Canada Vessel Registration Kaitlyn Edwards Administrative Assistant General Inquiries: 1 877 242 8770 <u>http://www.tc.gc.ca/eng/marinesafety/oep-</u> vesselreg-menu-728.htm

#### SECTION 4.4: JURISDICTIONS

City of Vancouver Strategic Transportation Planning Branch Tanner Watteyne, Coordinator 604 873 7315 Tanner.Watteyne@vancouver.ca

Tsleil-Waututh Nation Treaty, Lands, and Resources Department Ernie George, Director Treaty, Lands and Resources 604 924 4183 egeorge@twnation.ca

Tsleil-Waututh Nation Treaty, Lands, and Resources Department Michelle George Referrals Analyst 604 924 4182 michellegeorge@twnation.ca

Tsleil-Waututh Nation Treaty, Lands, and Resources Department Amanda King Senior Referrals Analyst 604 924 4164 aking@twnation.ca Vancouver Fraser Port Authority Real Estate Department Christine Erickson 604 665 9050

#### SECTION 4.5: PERMISSIONS

City of Vancouver Strategic Transportation Planning Branch Tanner Watteyne, Coordinator 604 873 7315 Tanner.Watteyne@vancouver.ca

Port Metro Vancouver Harbour Master's Office Operations and Security 604 665 9086 Harbour\_Master@portmetrovancouver.com

Vancouver Fraser Port Authority Real Estate Department Christine Erickson 604 665 9050

#### SECTION 5: FLOATATION

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Home Made Home Germaine Koh 778 317 9745 mail@germainekoh.com

#### SECTION 6.1: INDIAN ARM

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Tsleil-Waututh Nation Treaty, Lands, and Resources Department Amanda King Senior Referrals Analyst 604 924 4164 <u>aking@twnation.ca</u>

#### SECTION 6.2: BURRARD INLET

International Longshore Warehouse Union ILWU, Local 500 Women's and Human Rights, Education and Community Outreach Cynthia Brooke 604 779 8837 Cynthia.e.brooke@gmail.com

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Port Metro Vancouver Naomi Horsford, Municipal Executive Liaison 604 665 9309 office 778 231 0462, cell Naomi.Horsford@portmetrovancouver.com

#### SECTION 6.3: FALSE CREEK

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City of Vancouver Sustainability Group Doug Smith, Acting Director 604 829 4308 doug.smith@vancouver.ca Justin Langlois and Holly Schmidt Research Project: Floating School 604 339 3624 jstnlngls@gmail.com hschmidt711@gmail.com

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