



# Diving Deeper into the State of Vancouver's Waterfront

Proceedings from Georgia Strait Alliance's fifth

## Waterfront Forum

March 31, 2016, Coal Harbour Community Centre, Vancouver



**Georgia Strait Alliance**  
*Caring for Our Coastal Waters*



On March 31, 2016, participants of the Waterfront Initiative Network convened to share their ideas, discuss opportunities, and build connections to strengthen shoreline management. There were three objectives we sought to accomplish at our fifth waterfront forum:

- To refine a suite of indicators to be used in a forthcoming “State of the Waterfront” framework and report.
- To identify location specific and tangible opportunities to shape our future waterfront through the use of a mapping dialogue exercise.
- To find opportunities to improve how the Waterfront Network works together and shares information.

This report is a collection of the proceedings from the forum, beginning with an overview about how we got to this point and the progress made thus far in the Waterfront Initiative.

## Setting the Stage for a State of the Waterfront Report

At the first Waterfront Initiative forum in [April 2014](#), we crafted a bold vision and laid out a framework and timeline for how we could begin to achieve it together. One of the key findings was the need for a better understanding of what we know, and what we don’t know about our waterfront. This set us on a path to create a State of the Waterfront (SOTW) report, a tool and framework that would provide us with invaluable information about the health and resilience of our waterfront, and thereby help to guide and prioritize future actions. Before we could do that, we first had to identify and prioritize indicators and data that would support a strong SOTW report, a need which was identified at our second forum in [June 2014](#). Over two more forums in [April and June of](#)

**The Waterfront Initiative provides a forward-looking, proactive and collaborative approach to building a more resilient, integrated, and healthy Vancouver waterfront. Led by Georgia Strait Alliance, we bring together over 200 individuals from 60+ organizations from all levels of government, including First Nations, private sector, academia, professionals, and civil society to protect and improve a shoreline for all. Beginning in 2013, we are taking the first steps towards better waterfront planning across the region.**





**Table 1** | Number of potential indicators of waterfront health identified between April – January 2015. \*High quality datasets include those with ongoing monitoring and associated data spanning more than 10 years.

THEME	INDICATORS	HIGH QUALITY DATASET*
Transportation	14	9
Access to Nature	15	9
Living	13	12
Working	15	12
Ecosystems	18	13
Climate Change	17	14

2015, we made great strides together in identifying key indicators and associated data sources. Finally in March 2016, we completed a [‘Comprehensive Assessment of Available Data Reflecting the Status of Vancouver’s Waterfront’](#) which included a [summary table of indicators](#) and a basic assessment of the quality of data associated with each indicator.

This exercise and collective work was accomplished through follow up interviews with participants of the network, digging through management plans and reports by GSA’s dedicated research assistant resulted in the identification of 92 indicators relatively evenly distributed across six themes (Table 1). Fourteen indicators had no available data.

## ‘State of’ Workshop

In anticipation of creating a SOTW framework, GSA coordinated a ‘State of’ reporting workshop gathering some of the best minds in indicator-based reporting from around the Lower Mainland. Participants from organizations included Fraser Basin Council (host), Metro Vancouver, City of Vancouver, Vancouver Aquarium’s Coastal Ocean Research Institute, Port of Vancouver, Simon Fraser University, University of British Columbia, and interested consultants. The findings of this workshop provides the initiative with guidance and confidence as it undertakes the creation of a SOTW framework.

Key ideas of the workshop include:

- Indicators are not a perfect representation; they are an ‘oversimplification of a complex system’
- You need data that is available, accessible to your audience, and relevant and robust in both longevity and scope
- Indicators that can demonstrate a more direct or causal relationship to the stressor or benefactor that effects them are stronger (e.g. Salmon survival or returns to native streams have many stressors and effectors since they travel great distances, as such it is difficult to evaluate how improvements to riparian habitat alone are directly impacting survival and return, whereas the quality and area of shoreline habitat might provide a more direct understanding)
- Consider how capable the parties in your group can effect these indicators through targeted action, does the network have the tools, capacity, resources, and connections needed to push the needle on this indicator together?
- Does the suite of indicators complement one another, when put together do they form a holistic idea of waterfront health for example?
- Do indicators achieve the mutually reinforcing goals and common agenda of the project, in our case a thriving, diverse, resilient, and integrated waterfront?



## Diving in: Our fifth Waterfront Forum

Our fifth waterfront forum began with an introduction from Musqueam Councilor and Aboriginal Fishery Officer Morgan Guerin, who eloquently and thoughtfully reminded us that in sharing this special place, we do so much better when we approach it with one heart and one mind. This principle has served as a cornerstone of the Waterfront Initiative since it began in 2013, by bringing the people and organizations that shape our waterfront together and fostering a sense of community and positivity as we work towards more integrated planning and a shared vision.

Thirty-two participants attended the forum representing sectors from many levels of government (First Nations, local, regional and federal), labour, private sector, academia, professionals, non-profits and civil society. Participants divided themselves into groups built around the five themes of the Initiative; themes they felt suited their interests or knowledge including\*:

- Working on the Waterfront
- Transportation
- Flourishing Ecosystems
- Living on the Waterfront
- Access to Nature

In order to create a collaborative and open space to share ideas, we adopted the Chatham house rule, which allows participants to freely use any information they gain from others following the meeting, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

## Prioritizing Indicators

The first activity at our March 2016 forum was to narrow down our previously identified indicators within thematic groups. Key findings of the recently finalized 'Comprehensive Assessment of Available Data Reflecting the Status of Vancouver's Waterfront' and 'State of Workshop' were presented to inform a more focused and informed discussion. Participants were given time to familiarize themselves with a summary of the indicators for their chosen theme as identified in the assessment, and were asked to consider which indicators they felt would be most effective in a State of the Waterfront framework. The following is a summary of these discussions divided by thematic area.

*\* Note that discussion of Climate Change indicators were not included during this forum, but is still a focus of the initiative*

## Working on the Waterfront

Participants of this group were given the difficult task of combining discussion about both Work and Transportation, and began with a higher level discussion to identify a few foundational challenges and objectives to help focus and guide the exercise. Early on, a potential conflict between work and recreation uses were identified, and that planning for integrated, diverse, connected, and multi-purpose land was crucial going forward. By building permeable spaces and connecting the waterfront community with clear, transparent, and accountable governance, the challenges of conflicting land uses could be overcome.

A few key indicators rose to the top of the conversation. Participants felt that the **number and type of waterfront businesses** would serve to create a better understanding of what kinds of services are being provided and how they are changing. Tracking trends in the **distribution, percentage, and integration of industrial, agricultural, and commercial land** would also be key. While talk of employment generated by industry and tourism bubbled, there was an understanding that this data was not as reliable at providing estimates, and therefore could not be used effectively as an indicator of economic health. This is a potential gap in data that could be improved upon to give us a better understanding of employment as it relates to various forms of land use and waterfront businesses.

There was general consensus that educational opportunities was key, namely in providing information to

the public about the fundamental role that industry and the transit of goods play in the city in order to balance these with perceptions of other more experiential, accessible, and visible benefits that waterfront spaces in cities provide.

## Access to Nature

Discussions revolved closely around both physical access to the water, but also the variety of experiences that waterfronts might offer. A complex yet complementary combination of a few indicators could be rolled into a spatial analysis of **number, type, and area of physical access points** including parks, waterfront paths, beaches, cultural, and heritage spaces along with boat ramps, piers, marinas, slips, and public/private docks. An ongoing analysis of these in relation to one another would serve as a strong indicator of the diversity of physical access opportunities and experiences that are provided and could be improved upon.

These conversations inspired deeper thoughts about equity as it is represented on the waterfront, since these forms of access come with varying degrees of exclusivity (e.g. parks typically strive to serve all ages and mobilities, public clubs or docks may require a boat and moorage fees, while private clubs require more expensive membership). In this case, tracking each type of access in relation to the other would be helpful to determine a sense of the diversity of opportunity as it relates to equity of waterfront access. Again it was noted that currently private and industrial land offers no public access, and there may be oppor-





tunities to improve public interaction to the industrial spaces that serve them and to look for opportunities to preserve and enhance public spaces.

The usage and quality of spaces was also brought up as a potential gap in our understanding of our waterfront spaces. While there have been a few different studies on waterfront usage of public spaces conducted in the past 10 years, they are thus far only one off studies in various locations. We would all benefit from a better ongoing understanding of the usage of specific waterfront spaces over time. However, monitoring the proportion of hard vs. soft (paved vs. natural sand/planted spaces) alongside rewilded / restored spaces would give us both an understanding of quality and diversity of the types of nature people have access to and could be closely tied to the 'Shoreline habitat' indicator identified in the ecosystem theme.

## Flourishing Ecosystems

The conversation at this table began by categorizing indicators in a way that would best complement one another. The categories settled on were environmental quality, habitat, and biodiversity. With quite a lot of potential indicators to ponder, there was general agreement on a tidy suite of indicators including:

- Waterbird abundance and diversity
- Water and sediment quality
- Fish health and tissue contaminants
- Shoreline habitat (quality and area)

As canaries in the coal mine, birds are often thought of as early indicators of ecosystem health and there are a number of freely available datasets that detail Waterbird abundance and diversity. At the environmental quality level, water and sediment quality serve as a foundational indicator for the medium of all life in the marine environment and was a popular choice to include. Fish health and tissue contaminants would provide a rounded representation of both environmental and habitat quality. Finally, a spatial and qualitative assessment of shoreline habitat would provide a good understanding for areas to improve and build on.

## Transportation on the Waterfront

Generally, it was agreed that recreational and active transportation (walking, biking, kayaking, sailing) needed to either be better incorporated into the transportation theme, or Transportation indicators could be dissolved and distributed amongst the other four themes which may speak to them more effectively. If indicators of the transportation theme were to be divided amongst the other themes, active and recreational transportation for instance would be well suited to Living or Access to Nature themes, while transportation of goods may be better suited to Working. It is apparent that this conversation will require more thoughtful follow up with the broader network to determine whether Transportation indicators should remain within a cohesive theme, or be divided amongst the other themes.



With that conversation set aside, there was a great deal of consensus on other major indicators that participants considered a best fit for Transportation. **Transit ridership** which includes current forms of Seabus ridership. This indicator also inspires thought around what future and alternate travel routes could exist along Vancouver's waterfront. The other indicator that emerged was **number and types of access points for transit and goods transportation**, which could also help to identify those opportunities where integrated uses could bridge a gap between a working and public waterfront.

## Living on the Waterfront

Many of the conversations from the Access to Nature theme also arose in the 'Living' theme with an emphasis on equity and access to waterfront amenities, along with the diversity, quality and resiliency of those amenities provided. The Walkscore dataset in particular provided by City of Vancouver provides a helpful analysis of equitable **access from walking, biking, and transit to a diversity of amenities** including businesses, community centres, food markets, community gardens, cultural spaces, parks, and schools. The nature of the dataset would also allow for a spatial analysis making it much easier to identify particular areas for more specific and targeted change from a more holistic perspective.

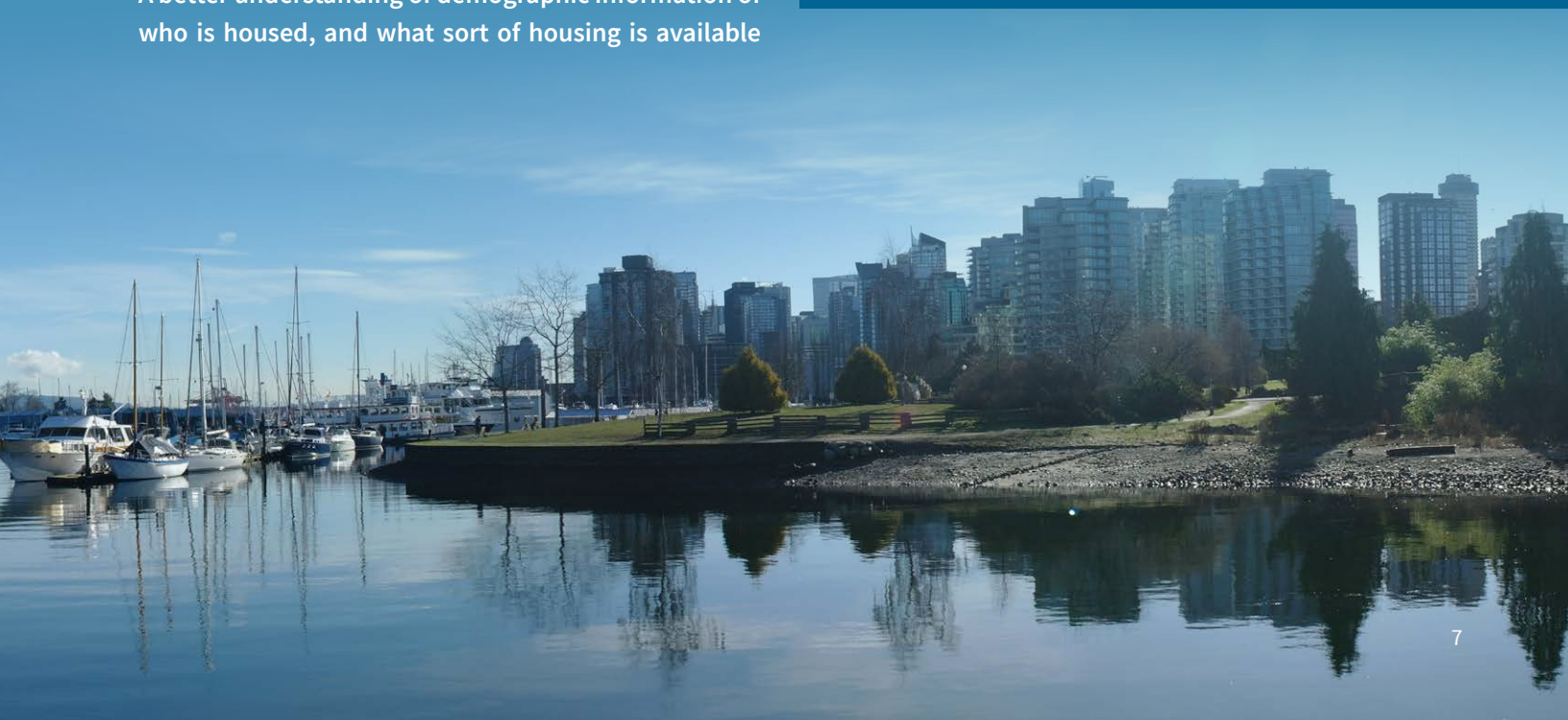
A better understanding of demographic information of who is housed, and what sort of housing is available

on the waterfront was also a topic of discussion, which again reflects elements of equity and access to one of Vancouver's most desirable and contentious assets. By combining an analysis of access to amenities alongside **number and type of waterfront units, tenure** (renter or owner occupied) **and demographic data** (income, education, occupation, family size etc.) from Statistics Canada and Canada Mortgage and Housing Corporation, a richer understanding of who has been, is, and will be served by housing can be investigated more carefully.

Also discussed as potentially helpful indicators were a basic inventory of green building policies and incentives in relation to adapting to and resilience to climate change, as well as crime rate and type serving as a potential proxy for quality of waterfront amenities.

## Conclusions

The results of the discussions reinforced that there is agreement on key indicators that can serve to form a framework for an overall holistic understanding of waterfront health (Table 2).



**Table 2** | Selected indicators, their associated theme, description, and data source/date availability based on discussion from March 31st Stakeholder forum.

THEME	INDICATOR	DESCRIPTION AND ADDITIONAL DETAILS	DATA SOURCE / DATE AVAILABLE
Working	Number & Type of Water-front Businesses	Geospatial data available showing the locations of all issued business licenses. This includes home based, trades, construction, commercial, and industrial businesses.	City of Vancouver, 1997 – Present
Working	Distribution and % of industrial, agricultural, and commercial land	Geospatial data sources only available for current and 2015.	Metro Van - 2005, 2010, 2015, and City of Vancouver - present
Transportation	Transit Ridership	Annual seabus ridership numbers are provided.	Translink & Metro Vancouver: 1989 – present
Transportation	Number and Types of Access Points	Number of access points for transit, and goods transportation are provided. Accessibility of each access point (i.e. bike, car, boat access) is not provided as no data is available.	Translink, Port of Vancouver: Present
Ecosystems	Waterbird Abundance and diversity	Christmas bird counts, Coastal waterbird and beached bird surveys and Stanley Park heron and wintering shore Bird Surveys.	Audubon, 1975 – present; Bird Studies Canada, various dates; Stanley Park Ecology Society, various dates
Ecosystems	Water and Sediment Quality	Ambient monitoring programs provide consistent water and sediment quality data at a number of sites in Burrard Inlet and the Fraser River.	Metro Vancouver, BC MoE, 2003 – present
Ecosystems	Fish health and tissue contaminants	Ambient Monitoring Programs sample fish for length, weight, liver and gonad weight, moisture and lipid content, metals, dioxins and furans, PCBs, organochlorine pesticides, PBDEs, and chlorophenols.	Metro Vancouver 2003- present @ 5 yr intervals
Ecosystems	Shoreline Habitat (quality and area)	Results of habitat inventories conducted for Burrard Inlet and Fraser River are available.	BIEAP and FREMP 2002 and 2009
Access to Nature	Number, type, and area of physical access points	Includes waterfront parks, pathways, beaches, docks, boat ramps, clubs, and cultural heritage spaces.	Vancouver Park Board, City of Vancouver
Access to Nature	Hard vs. soft surfaces	Whether pathways are hard or soft.	VPB 2006 inventory of paths.
Living	Access to Waterfront Amenities	Walkscore presented throughout Vancouver, walkability to amenities (transit and bike also available).	CoV and Walkscore - present
Living	Number and type of waterfront units	Number and type of dwelling. CMHC data also provides types of rental, bachelor, 1, 2, 3 bedroom and total rental units.	CMHC 2010 – present (annual); Stats Can (1961 – present 5 yr interval)
Living	Tenure and demographics data	Renter or owner occupied reported alongside data on citizenship, sex, education level, field of study, labour force status, occupation, ethnic origins, mother tongue, family size, marital status, place of birth and income are provided for housing dwellers.	Stats Can 1981 – present (5 yr interval)
Living	Crime rate and type	The type of criminal activity, the date the crime took place, and the location and the coordinates of the crime are presented geospatially.	CoV 2003 – present



# Successes and Opportunities of the Waterfront

The next objective of our most recent forum was to investigate and discuss the successes and opportunities that Vancouver's waterfront presents. Successes referred to ideas or projects already existing, or previously existed, that exemplify the vision and values of the Waterfront Initiative. The opportunities could speak to projects already proposed, or brand new ideas taken from other parts of Vancouver or around the world and where they could be implemented along our shoreline to make a better waterfront for all.

Talk of successes brought forth a wealth of ideas to build on, and a chance to celebrate what is going right, while new opportunities were born as participant's ideas spilled forth onto maps. These ideas have been transposed onto a [live interactive map](#) produced by forum volunteer Kristy McConnell.

We look to build on this map in the future to continue fueling discussion for how we make these opportunities a reality and continue to celebrate our successes.

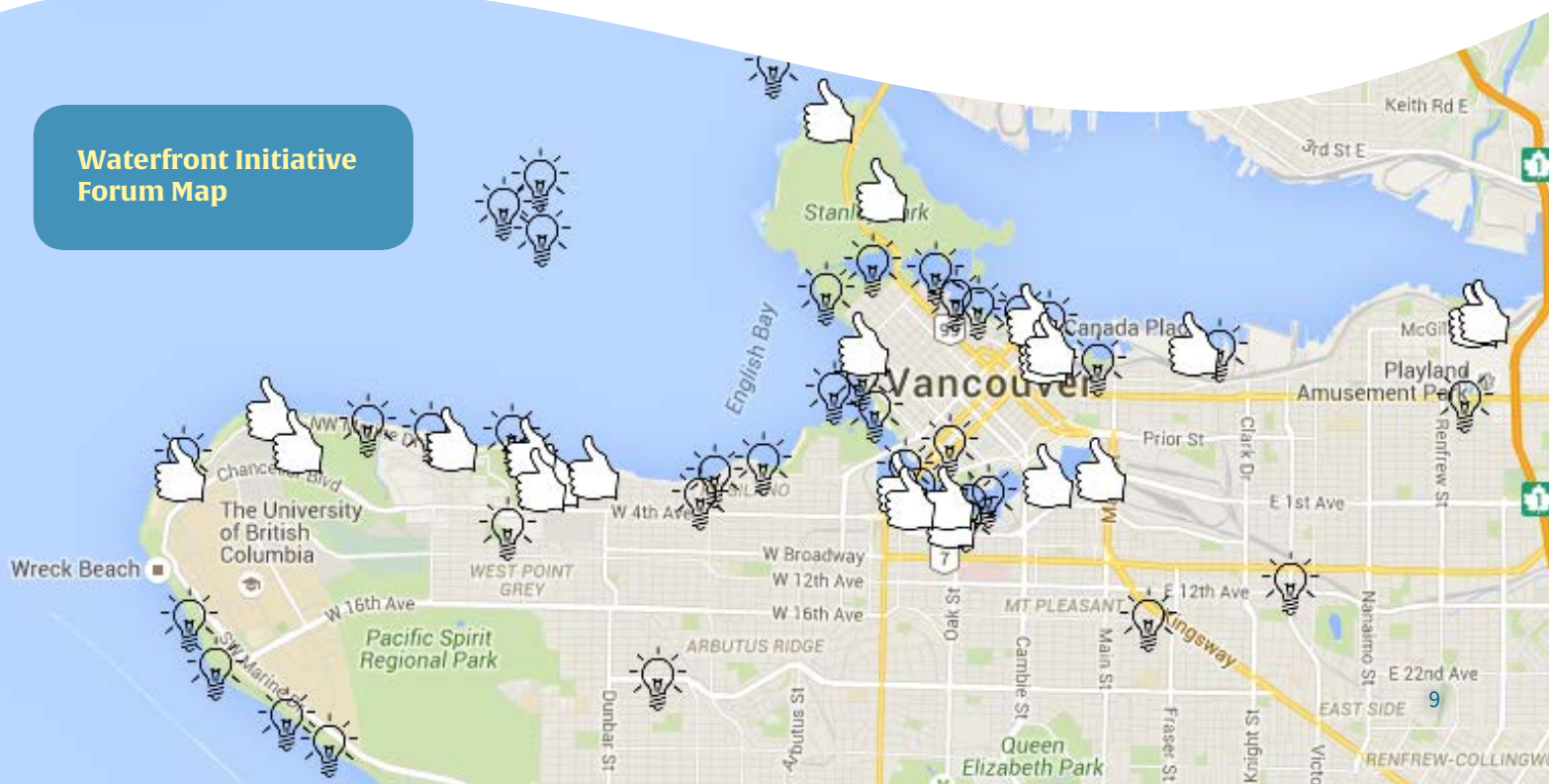
# Working together for a better Waterfront

The final objective of the forum was to gather feedback from forum participants about how we can support better communication amongst the network on waterfront issues, news, and opportunities. Providing a communications channel or platform by which the Waterfront Initiative network could share information and opportunities with one another would help to bring clarity and awareness to waterfront issues. With that we asked the forum participants about which information sharing platforms or methods best suited the waterfront network.

We heard a diversity of different possibilities ranging from social media, online forums, blogs, newsletters, face to face meetings and workshops. However, the result that came up repeatedly was the use of carefully curated emails containing concise but relevant information as needed. The types of information participants wanted to see included:

- successes of initiative and its participating network organizations,
- updates on progress of the initiative,
- relevant news and educational opportunities relating to the waterfront

## Waterfront Initiative Forum Map





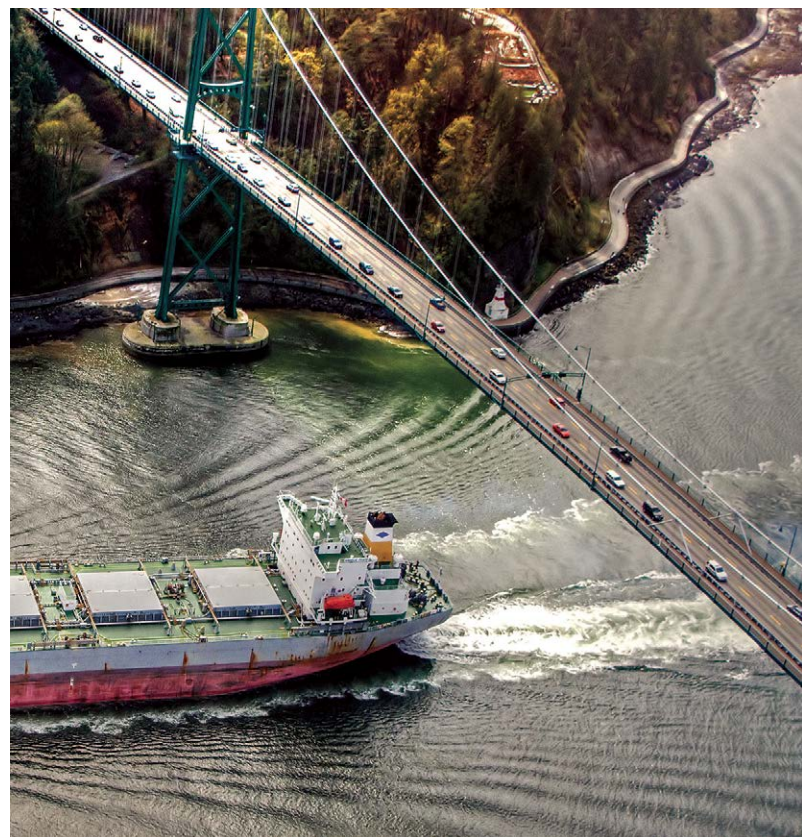
## Next Steps: Producing a State of the Waterfront Report

Based on the input at past forums, findings of the ‘State of’ workshop, results from our comprehensive assessment of data, and our most recent forum we are well equipped to investigate the health of the waterfront in a focused and meaningful way. From September 2016 to February 2017, GSA will be working with Simon Fraser University Urban Studies and Resource Environmental Management professors and students in concert with Waterfront Network to produce the (SOTW) framework and report. Based on input from the forum, there is strong consensus on two to four indicators per theme mentioned above that are supported by strong, relevant, and easily accessible data sources. However, there are certainly more questions to investigate, and likely more narrowing down to do, and we will look to facilitate further workshops, and other opportunities for the network to provide input, to ensure the right approach is being taken. Following the production of the SOTW, we will look to the results to inform specific, measurable, actionable, realistic, and time bound goals for a Waterfront Action Plan.

With that, GSA will continue to use emails as it has, but will work to incorporate important information from others of the network. GSA will reserve the right to curate the messages, but will encourage and invite the network to share opportunities and information that they feel would benefit the more than 200 individuals and 60+ organizations of the network.

Social media is a powerful form of communication for more immediate news and info sharing, however, most forms of social media are not standardly used in professional yet individual capacities that make up the network—except for LinkedIn. With that GSA will look at the feasibility of using LinkedIn to communicate more immediate messages and information with members.

At our third and fourth forums in April and June 2015 respectively, there was discussion on what elements were required to ensure we can work together to make positive change. One component of this was to begin working and meeting in thematic groups potentially facilitated through GSA. These meetings among the interested parties of certain themes would guide actions between intermittent forums (of the larger network) and help to focus in on specific issues or actions. We look forward to working and meeting with the participants of the network over the year to come as we develop the State of the Waterfront report and begin to formulate a Waterfront Action Plan.





**GSA has reached out—and continues to reach out—to a broad network of organizations and individuals to engage them in the Waterfront Initiative. Below is a list of organizations who were able to participate in our fifth Waterfront Forum:**

Bird Studies Canada	South Coast Conservation Program
Evergreen BC	Surfrider Foundation
Fraser Basin Council	T. Buck Suzuki Foundation
HCMA Architecture + Design	Tourism Vancouver
Hemmera	TransLink
International Longshoremen and Warehouse Union	Tsleil-Waututh Nation
Jericho Sailing Centre Association	University of British Columbia
Kerr-Wood Leidal	Vancouver Aquarium
Metro Vancouver	Vancouver City Planning Commission
Metro Vancouver	Vancouver Maritime Museum
Port of Vancouver	Vancouver Park Board
Simon Fraser University	Vancouver Public Space Network

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