



Back to the Sea Society

A Collect-hold-and-release Community Aquarium for the Halifax Regional Municipality: A Feasibility Study

Request for Proposals

February 24th, 2020

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INTRODUCTION

The Back to the Sea Society (“Back to the Sea”) is issuing a Request for Proposals (RFP) to qualified consultants to complete a feasibility study that will examine a proposed permanent community aquarium facility to be located in the Halifax Regional Municipality (HRM). The Back to the Sea Society has identified a need for external expertise in planning, engineering, and design, and welcomes submissions from respondents with relevant qualifications, expertise, and capabilities to perform the scope of work outlined herein.

While it foresees a need for advisory support with performing scenario and financial analysis, developing facility requirements and characteristics, and analyzing environmental and accessibility considerations, the organization remains open to input from respondents regarding the specific scope of services to be provided in relation to the needs described within this RFP.

BACKGROUND

The Back to the Sea Society

Back to the Sea is a registered charity dedicated to sparking curiosity for local marine life off the coast of Nova Scotia and to fostering a desire to protect our ocean. Back to the Sea was launched in 2016 with the ultimate goal of opening a collect-hold-and-release aquarium in the Halifax Regional Municipality. At its inception, the organization recognized a growing movement in ocean conservation and education in Canada to promote “community aquariums” (or “collect-hold-and-release” aquariums). This alternative model for aquariums works to provide engaging, hands-on education on marine conservation while prioritizing a near net zero environmental impact. To deliver this education and execute its mission, Back to the Sea has focused equally on tourists to HRM, local residents, and students of all ages and levels of education.

The organization’s earliest steps included developing a business scope, undertaking preliminary financial and market analysis, participating in several ocean-related events, and launching a proof of concept titled “Touch Tank Days”. In the summer of 2016, this project saw Back to the Sea host seven events at multiple sites in HRM to test its approach to the community aquarium concept locally. The success of these events helped validate Back to the Sea’s vision and approach (see “Appendix A: Touch Tank Hut Highlights, 2016-19).

Following the success of its inaugural year, Back to the Sea was in search of a location at which to expand its community aquarium concept and operate on a seasonal basis. In 2016, Back to the Sea hosted five of its Touch Tank Days at Fisherman’s Cove and undertook a study that considered (in part) the feasibility of establishing operations at this site location. While this

analysis suggested that Fisherman’s Cove was a feasible and attractive option, Back to the Sea remained open minded in considering other options.

Around this time, Alderney Landing had been taking steps to expand their community hub in Dartmouth, recognizing the growth of the Alderney Ferry route and Dartmouth waterfront as major tourist attractions in HRM. After hearing about the success of the Touch Tank Days, the facility offered space and access to amenities on its property at no cost so that Back to the Sea could operate a “Touch Tank Hut” in the summer of 2017. The Touch Tank Hut’s first season at Alderney was a resounding success (see Appendix A). Back to the Sea built considerable momentum during this season, attracting local media interest, building a long-term partnership with Alderney Landing and other local organizations, and gaining support from key local municipal and provincial government leaders.

The 2018 season saw continued success at Back to the Sea’s seasonal Alderney Landing location (see Appendix A). The Touch Tank Hut was similarly popular in 2019, during which Back to the Sea instituted an admission fee (versus purely donation-based admission). Also during this season, Back to the Sea offered seasons passes to the Touch Tank Hut and further developed relationships with regular visitors.

Throughout its journey and along with the success of the Touch Tank Hut, Back to the Sea has remained focused on, and has continued to refine its long-term vision: **to open HRM’s first permanent collect-hold-and-release aquarium facility**. While it continues to benefit from the support of a dedicated and growing core group of volunteers, as well as an operationally-focused, diverse, and knowledgeable Board of Directors, the organization is aware that it must sustain its focus and momentum, particularly by growing its staff, volunteer, and external advisor ranks. Given its momentum and trusted reputation as a community educator in marine conservation and supporter of environmental stewardship, the organization believes it is a suitable time to take strategic next steps towards opening a permanent facility.

A Permanent Community Aquarium Facility for HRM

Several trends suggest there is a clear need for a permanent community aquarium facility in HRM: the growing local interest in Back to the Sea’s seasonal Touch Tank Hut, increased public awareness regarding climate change and environmental stewardship, and gaps in educational programming on marine conservation and oceans in the province. Furthermore, several comparable facilities have been established across Canada demonstrating the success of the community aquarium model.

Established in 2004, British Columbia’s Ucluelet Aquarium can be considered the first to have deployed the community aquarium model in Canada. It is financially self-sustaining (through admissions, memberships, programming revenue, retail sales, wage subsidies, sponsorships,

etc.), which reflects the equal importance of both the tourism and education sectors to the financial viability and overall success of community aquariums. Community aquariums have grown in popularity in Canada. There are now four in British Columbia (Ucluelet, Campbell River, Port Alberni, and Gibsons) and two on the east coast (Petty Harbour, Newfoundland and Labrador and Back to the Sea's Touch Tank Hut). Before its inception, the Back to the Sea Society had developed relationships and connections with other Canadian community aquariums, and Back to the Sea's founder began her career in aquarium museology at the Petty Harbour Mini Aquarium.

In 2017, in collaboration with Ocean to Eye Level Consulting, the organization developed a feasibility study and analyzed Back to the Sea's proposed business scope in the HRM context. Although this RFP intends to procure a more detailed and focused feasibility study related to its vision for a permanent facility in HRM, several insights from the 2017 study remain relevant today (see Appendix B):

In addition to the information presented in Appendix B, Back to the Sea has previously identified several critical questions that it requires help in answering in order to move forward towards a permanent space in HRM. These include (but are not limited to):

1. **Location:** the Alderney Landing location has been successful due to its proximity to other tourist attractions (particularly the Alderney Ferry route) and "community hub" aspects associated with Downtown Dartmouth. Additionally, given the many valuable relationships it has developed over the past 3+ years with local community and business leaders, politicians, schools, and youth organizations, Back to the Sea has a strong preference to locate its future permanent facility at a site along the Dartmouth waterfront. However, there may be other locations within the broader HRM waterfront that are preferable but require trade-offs (e.g., choosing a lower traffic location could reduce rent/building costs). Other important location considerations include walkability and transit accessibility, parking availability, proximity to competitors, access to municipal services, appropriate zoning, and proximity to schools and universities.
2. **Water and life support system:** the decision between an open water and closed water system has significant building design and location implications. An open water system involves pumping seawater from a nearby source into exhibits, returning discharge to the ocean. This is cost efficient, but could restrict location options as the water must be of sufficient quality (i.e., temperature, salinity, dissolved oxygen), and introduce risk to species housed in the facility in the event of an environmental disaster (e.g., an oil spill in nearby waters). A closed water system involves creating sea water or bringing in sea water from an external location. This water is then recirculated in a closed loop system, using chillers and filters to maintain water quality. This system addresses the drawbacks of an open water system, but is often much more costly. A third option to consider is a hybrid water system, similar to what is currently in use at the Huntsman Marine Station in St. Andrews, NB. This incorporates elements of both open and closed water systems.

A smaller volume of seawater is continuously drawn in directly from a nearby source and circulated through the tanks using pumps, filters and chillers to maintain water quality. This allows the system to be quarantined if needed and for larger volumes of water to be exchanged when necessary.

3. **New or existing building:** renting and retrofitting an existing building would be more cost efficient but could also reduce flexibility in terms of space and building design options. Constructing a new building would be associated with higher costs, it would also improve design and functional flexibility.
4. **Overall facility design:** Back to the Sea has envisioned a two-floor facility in order to divide space into exhibit space (i.e., on the ground floor) and office and programming space such as classrooms or lecture theatres (i.e., on the second floor), but remains open to alternative arrangements to enable the provision of multiple categories of facility space.
5. **Project budget:** Back to the Sea has developed high-level capital and operational cost and budget estimates (e.g., the Ucluelet Aquarium executed a capital campaign of \$3 million for its facility), but is seeking advice on how best to finalize a more detailed project budget that would inform future capital fundraising campaign(s) and long term financial sustainability.

OBJECTIVES

The Back to the Sea Society's critically important next steps towards building and opening its permanent space will be directly supported by the insights garnered from the feasibility study solicited through this RFP. Part of this critical step is to begin fostering a relationship with an engineering partner who can act as a strategic advisor to Back to the Sea on its journey to **opening day of Halifax's first permanent community aquarium**. As such, the primary objective of this RFP is to procure a feasibility study focused on the goal of establishing a permanent community aquarium facility in HRM that will:

1. Provide a **scenario and financial analysis** of site location and facility options;
2. Outline **building specification recommendations** that Back to the Sea should consider moving forward in the next phases of the design process; and
3. Discuss **environmental and accessibility considerations** for the facility.

SCOPE OF WORK

The feasibility study scope of work shall include the following responsibilities at a minimum, and any additional responsibilities reasonably necessary and customarily provided by the respondent. An important scope consideration for all respondents to note is that Ocean to Eye Level Consulting will be available in an advisory capacity throughout the engagement to provide

specialized subject matter expertise in community aquarium development. Ocean to Eye Level has helped launch five aquarium organizations across Canada, by providing advice and expertise in non-profit start up, business planning, life support systems, exhibit design, fundraising, animal collection and care, etc. Ocean to Eye Level Consulting has been supporting Back to the Sea Society since 2015.

The following key requirements are critical to achieving our objectives:

1. Scenario and Financial Analysis

- i. The respondent will provide different cost analysis scenarios as it relates to potential Back to the Sea Society facility decisions based on various selected locations (e.g., cost trade-off between open, closed, and hybrid water life support systems).
- ii. The respondent should compile existing water quality data (e.g., by requesting data from local authorities) as it relates to site location analysis in the context of the open water system scenario (i.e., location options for a facility supported by an open water system may be limited by surrounding seawater quality). Location of sewage outflows should also be considered in determining site location.
- iii. The respondent will provide supporting analysis and a recommendation on site and location for the permanent community-aquarium facility, along with any relevant commentary related to municipal plans and bylaws and civil engineering requirements (e.g., GIS mapping and feasibility for providing services from the street).
- iv. Additionally, the respondent will include responses to the following items:
 - a) **Long-Term Operational Feasibility:** estimates of building operation costs (e.g., maintenance, repairs, utilities) over 5+ years and how these costs will influence Back to the Sea's revenue model for the permanent facility. Success for Back to the Sea's permanent facility will be defined in part by not having to rely upon large annual fundraising efforts. As such, analysis of operational feasibility should carefully consider how the facility (and organization itself) can effectively scale-up to a full size that meets the needs of its surrounding communities in a financially sustainable and controlled manner.
 - b) **Building Design Considerations** – New vs. existing building, open water vs. closed vs. hybrid water system, and geotechnical requirements.
 - c) **Facility Size** – Square footage, number of stories, and capacity requirements, with particular consideration given to the fact that building size is directly linked with the long-term operational feasibility of a charitable organization such as Back to the Sea.
 - d) **Low Impact Building** – Assessment of energy savings opportunities (e.g., geothermal heating, solar panels) and environmental/sustainability certification requirements (e.g., LEED) for proposed sites.
 - e) **Fundraising Period** – Sample financial models highlighting only those capital investment scenarios that are feasible with adequate fundraising or gifts in-kind.

2. Building Specification Recommendations:

- i. The respondent will provide advice on the following general building considerations (and any additional items based on expertise) for Back to the Sea to consider in the next design phases:
 - a) Municipal approval requirements
 - b) Electrical requirements
 - c) HVAC requirements
 - d) Plumbing/water system requirements and permits
 - e) Parking
 - f) Sea-level rise and storm surge resilience requirements

3. Environmental and Accessibility Considerations:

- i. The respondent will provide an overall environmental lens to their response, including the impact facility decisions may have on the environment and how the facility design can contribute to climate change mitigation.
- ii. The respondent will provide an overview of the accessibility implications of the specific recommended site location and the location's ability to meet all applicable accessibility standards.

While *Scenario and Financial Analysis*, *Building Specification Recommendations*, and *Environmental and Accessibility Considerations*, are critical, mandatory components of the scope of the feasibility study, Back to the Sea is open to any advice the respondent may provide related to additional considerations (e.g., architectural, conceptual design, structural, mechanical, and electrical engineering, etc.).

DELIVERABLES

- Final scenario and financial analysis report, complete with recommended building specifications and environmental/accessibility considerations.
 - Prior to delivering a final version of the report, the successful respondent should work closely with Back to the Sea to provide first and second drafts, allowing opportunities for the organization to collaboratively review the document and provide input and feedback.
- A sample roadmap outlining suggested next steps for Back to the Sea.

PROPOSAL REQUIREMENTS

Corporate Overview

Each respondent should provide the following in its proposal:

- A brief description of the organization, including company location(s), number of employees, year established, corporate vision, etc.
- A brief description of the goods and services the respondent has previously delivered, and/or is currently delivering
- A testimonial of interest detailing the respondent's desire to work with non-profit or conservation organizations, such as The Back to the Sea Society
- Short profiles of the project team members who will be conducting this work, including their relevant experience working on similar engagements

Experience and Qualifications

Each respondent should:

- Clearly demonstrate an understanding of the HRM and community aquarium context (e.g., tourism market, location considerations, etc.)
- Provide a description of its knowledge, experience, or abilities in the following areas:
 - Commitment to sustainability/environmental stewardship
 - Conducting feasibility studies which include financial modeling/scenario analysis
 - Civil, mechanical and/or electrical engineering with facility design/operations
- Clearly demonstrate how its knowledge, experience, and abilities are relevant to its understanding of the Back to the Sea mission, and vision for the permanent community-aquarium facility
- Describe up to three relevant examples in delivering similar projects using the template found in Appendix C

Project Plan

Each respondent should provide the following in its proposal:

- A high-level timeline of the project, including the sequencing of project activities
- A detailed work plan that demonstrates an understanding of the RFP objectives, and adherence to the project scope
- Confirmation of availability for project team members to complete the work within the prescribed timeline estimates

Back to the Sea Society will welcome additional value-add activities or services as part of the project plan, as suggested by the respondent. This is not a mandatory submission requirement.

References

Each respondent is requested to provide up to three reference contacts from clients who have obtained services similar to those requested in this RFP.

Respondents should provide contact information (i.e., phone number and email address) for each reference. Each project reference should be able to clearly speak to the extent of the work performed by the respondent and identify their overall satisfaction with the services delivered.

Pricing

Back to the Sea Society has secured \$14,000 in funding to fund the cost of the feasibility study described within this RFP.

As part of proposals, respondents should:

- Indicate a total overall cost for the services proposed; and
- Provide a breakdown detailing how this overall cost is calculated.

EVALUATION CRITERIA AND SCORING

The following is an overview of the categories and weighting for the rated criteria in the RFP. Back to the Sea will conduct the evaluation of proposals based on the below:

Rated Criteria Category	Weighting (Points)
Corporate Overview	10
Experience and Qualifications	20
Project Plan	20
Reference(s)	Pass / Fail
Environmental Stewardship	25
Availability of Proposed Team Members	Pass / Fail
Pricing	25
Total Points	100

TIMELINE

- **RFP issuance date:** Monday, February 24th, 2020
- **Deadline for respondents to ask questions:** Friday, March 20th, 2020, 5:00 PM (AST)
Postponed to Monday March 30th, 2020, 5:00PM (AST)
- **Deadline for proposal submissions:** Friday, March 27th, 2020, 5:00 PM (AST)
Postponed to Friday April 3rd, 2020, 5:00PM (AST)
- **Contract award (target):** April 2020
- **Project kickoff (target):** May 2020

SUBMISSION DETAILS

Respondents may address questions in writing only, via email submission to info@backtothesea.ca in advance of the deadline for questions specified above.

Proposals are to be submitted in a digital, PDF file format only (i.e., no hard copies) to info@backtothesea.ca in advance of the submission deadline specified above.

Back to the Sea reserves the right to reject any and all Proposals, with or without cause, and accept Proposals that it considers most favourable. Nothing in this RFP, the Proposal submissions, nor Back to the Sea's acceptance of Proposal submissions shall obligate Back to the Sea to enter into or complete negotiations with respondents. Back to the Sea is not liable for any costs incurred by respondents in replying to this RFP or in connection with any interviews or negotiations relating to this RFP.

APPENDIX A: TOUCH TANK HUT HIGHLIGHTS, 2016-19

2016:

- Engaged over 1,500 visitors (tripling initial goal of 500) over seven events at multiple sites in HRM
- Secured two sponsorships
- Formed core group of dedicated volunteers
- Received positive feedback and strong interest in Back to the Sea's programming from local teachers, daycares, summer camps, and youth organizations

2017

- Engaged over 1,800 visitors over 13 days of operation (increased from an initial plan of nine days due to demand) at new seasonal location at Alderney
- Secured seven sponsorships
- Admission to the hut by voluntary donation only – raised close to \$2,000 from visitors

2018

- Engaged over 8,000 visitors over 63 days of operation at Alderney Landing
- Secured 13 sponsorships and two employment grants
- Received over \$7,800 in donations from local residents and tourists from around the world
- Maintained focus on education and programming by engaging over 400 children in local day camps and schools, many of which appreciated being able to lower costs by travelling to the Touch Tank Hut on foot

2019

- Dedicated additional time and resources to future permanent facility plans, but kept the Touch Tank Hut running for reduced hours to respond to the continued demand from visitors
- Engaged over 2,100 visitors over 36 days of operations
- Sold 16 season passes, with one family returning over a dozen times over the course of the summer
- Brought in over \$5,600 in admission sales
- Secured 13 sponsorships and three employment grants

APPENDIX B: RELEVANT INSIGHTS FROM 2017 FEASIBILITY STUDY

- **Comparison of direct and indirect competitors:** direct competitors include aquariums and marine education centers, e.g., the Bedford Institute of Oceanography’s Sea Pavilion, the Fisherman’s Cove Heritage Centre, and the Discovery Centre. Indirect competitors include popular tourist attractions in Halifax and Dartmouth, e.g., the Halifax Waterfront, Dartmouth Waterfront, Halifax Public Gardens, and the Halifax Citadel.
- **Financial sustainability:** potentially achieved through diverse revenue streams (e.g., admissions, memberships, exhibit sponsorships, program revenues, fundraising events and campaigns, and retail merchandise sales), minimizing expenses by carefully considering methods through which to effectively scale the organization to successfully accommodate the size of its surrounding community, as well as the use of volunteers and in-kind contributions.
- **Local demographics, economic, and market analysis:** Halifax features a growing, diverse, and highly educated population, and a particularly high concentration of educational institutions including: universities, colleges, high schools, elementary schools, and youth organizations. Nova Scotia’s tourism and ocean industries are local economic strengths that continue to see increased momentum. Given these promising characteristics, Nova Scotia’s 7,500+ kilometers of coastline, and Halifax’s strong and growing reputation as a hub for ocean industries, research, and education, it is notable that HRM does not yet have a dedicated, permanent, and year-round public aquarium facility.
- **Number, size, and nature of exhibits:** a high-level estimate suggests that a facility size ranging from 1000-2,800 square feet could accommodate between 30-40 live animal exhibits, each comprised of an acrylic tank with mounting support and overhead lighting. Both “wet” displays (e.g., touch tanks, fishing demonstration tanks, lobster pots) and “dry” displays (e.g., audiovisual displays, children’s play areas) would be offered.
- **Number of visitors:** estimate to range between 25,000-30,000 annually in the first year, with growth expected in subsequent years.

APPENDIX C: RELEVANT PROJECT EXPERIENCE

The respondent should use the format of the table below to showcase experience delivering similar projects.

Project Name:	
Background:	
Business Challenge Faced:	
Respondent's Approach:	
Impact/Benefits Achieved:	
Relevance to The Back to The Sea Society:	