

ESQUIMALT COMMUNITY DOCK FEASIBILITY REPORT

BRIEF:

The Township of Esquimalt lies within the Traditional Territory of the Xwsepsum and Songhees People. Since time immemorial, these shorelines have been active places of connectivity, trade, food gathering, and village habitation. The Xwsepsum and Songhees Nations continue to steward the region, and the shorelines are places that hold cultural significance for them.

The Township of Esquimalt has heard a strong desire from their community to build a public, multi-use dock. Christine Lintott Architects (CLA) and Archipelago Marine Research were contracted to:

1. Create community engagement materials to gather community feedback.
2. Identify public land along the water as potential sites for a dock.
3. Understand the ecological considerations for each potential site.
4. Make recommendations for the community dock, integrating the community feedback and ecological assessments.

Locations considered in this study were split into two distinct areas and include:

Gorge Waterway

- Yarrow Place
- Dellwood Road
- Glen Vale Road
- Garthland Road
- Forshaw Road
- Esquimalt Gorge Park West
- Esquimalt Gorge Park East
- McNaughton Avenue
- Arm Street

Strait of Juan de Fuca

- Denniston Park
- Foster Street
- Sturdee Street
- Nelson Street
- Saxe Point Park
- Kinver Street
- Fleming Beach / Buxton Green
- Captain Jacobson Park
- West Bay

SUMMARY OF COMMUNITY ENGAGEMENT:

The community engagement consisted of two parts:

- 1) An open house on January 23, 2025, which served to collect feedback from the community verbally as well as in writing. There were 75 attendees at the public open house.
- 2) An online survey¹ which had 300 respondents.

Results from community engagement confirm that Esquimalt's shorelines are popular and frequently used by the public. There is significant community interest in building a public dock, which people have expressed they would use for various purposes throughout the year. The main concerns expressed by

¹ Details of the survey are attached to at the end of this report (Appendix A).

the community were related to proximity to infrastructure, such as parking and washroom facilities, as well as ecological concerns for the Gorge.

ECOLOGICAL CONSIDERATIONS:

Esquimalt's southern shore faces the Strait of Juan de Fuca, and its northern shore creates the southern bank of the inland Gorge Waterway. Waters associated with each of these two shorelines vary greatly in levels of wave exposure, salinity, and temperature. Species-utilization and fish habitat also differ dramatically between these two areas.

The southern shore is home to habitats that contain kelp, surfgrass, and rocky substrates, whereas the northern Gorge shore is host to a lower-energy environment (lower wave activity) including vast swaths of eelgrass and large numbers of federally listed Olympia oysters, while offering protection for migratory fish and birds.

Any site selected for dock construction along either shore will require specific strategies to avoid and/or mitigate potential impacts to sensitive ecosystems.

Gorge Waterway

The Gorge Waterway is a transitional ecosystem and serves as a conduit between the nutrient-rich waters of the Pacific Ocean from Victoria's Harbour, and the estuarine ecosystems of the Portage Inlet. The banks were traditionally forested and offer low angled shallow seafloor throughout most of the intertidal and subtidal zones. For dock construction, steeper intertidal slopes and shorter access routes are preferred. Where intertidal slopes are shallow, a longer pathway is required to access the floating dock infrastructure, which has greater effects on migratory fish species, including rearing salmonids and herring.

The brackish water of the Gorge is geographically protected from the open ocean and reaches higher temperatures than shores facing the Strait of Juan de Fuca. Regional tidal fluctuations lead to large volumes of water being exchanged with Portage Inlet. The daily changing cycle creates currents which can be strong at narrow sections of the Gorge. This daily refresh of water along the Gorge has led to the area hosting large numbers of Olympia oysters in varying densities. Olympia oysters are listed as a species of Special Concern within the *Species at Risk Act* maintained by the federal government. Another sensitive species is eelgrass, which is an important component of a hugely valuable ecosystem for the area and needs consideration.

Strait of Juan de Fuca

The Strait of Juan de Fuca is considerably more exposed to a higher energy regime (higher wave activity) when compared to the Gorge. Docks here are susceptible to extreme weather conditions, including higher wave heights, strong winds, and increased fetch. Strait facing shores are dominated by coastal bluff ecosystems, which are characterized by steep, rock slopes with limited vegetation, and cold, saline water. Northern abalone are present in low numbers along the shore and listed as an

Endangered species within the *Species at Risk Act*. Understory and canopy-forming kelps are important and sensitive species found along this shoreline.

RECOMMENDATIONS FOR THE COMMUNITY DOCK:

Based on the community feedback and ecological considerations, the consultant team offers the following recommendations:

1) Create a network of docks and water access infrastructure:

- The limited number of public access docks along shorelines in Greater Victoria results in overuse, as seen at Banfield Park. This creates stress on both ecological and human communities.
- Each location has benefits for specific uses. For example, West Bay is an ideal place to launch a kayak but not ideal for swimming. Therefore, it makes sense to create a variety of locations along the shore to make optimal use of these site-specific features.
- Consider various types of water access infrastructure. For example, the promenades at Arm Street and McNaughton Avenue might benefit from a ladder for swimming access.
- Rather than building a new public dock in West Bay, it may be more efficient to lease a dock spot for public access.

2) Focus on Gorge Esquimalt Park West for an initial water infrastructure improvement / community dock. The considerations identified for this location include:

- Consensus – This location is popular within the community.
- Safety – the Gorge is wide here, resulting in a milder current than in other locations and further from boat traffic.
- Human health – a high-risk outfall upstream may result in times when swimming cannot occur. This is true of many potential dock locations.
- Ecological considerations – The natural shoreline is an ecological benefit. Strategies to prevent damage to Olympia oyster and eelgrass communities will need to be implemented.
- Construction considerations – the intertidal slope at the Gorge Esquimalt Park West has a medium angle, which is advantageous for dock construction compared to the shallow slopes seen elsewhere throughout most of the Gorge.
- Existing transportation infrastructure – Bus routes are nearby and the site is connected to the existing bike network. There is plenty of vehicle and bicycle parking, accessible parking and EV charging. The paved paths and gradual incline in the park provide accessible routes to the potential dock location.
- Activity use – Kayak and small craft access would benefit from proximity to parking and the gradual slope. Shallow beachy shore is not ideal for fishing, so this location would not work for that. For swimming, the location is ideal as the water is shallow, the location is exposed to the sun, and the water is warm.

Existing public infrastructure – An emergency phone and public washroom access is available in the Gorge Park pavilion and nature house during hours of operation. Park amenities such as benches, picnic tables, and lighting provide community benefit.

3) Educational outreach:

- Any site selected for dock construction along either shore will require project-specific strategies to avoid and/or mitigate potential impacts to these and other sensitive ecosystems. Education will be an important part of ecological protection strategies.
- The community has expressed interest in cultural education, which has the potential to build a sense of stewardship amongst community members.

4) Wave activity assessment required:

- In general, wave activity along the Juan de Fuca shore poses a threat to infrastructure. If increasing water access along this shore, dock locations with extant break waters are recommended.
- The breakwater at Fleming Beach/Buxton Green and the protected waters around West Bay make these locations along the Juan de Fuca shore possible for dock construction.

CONCLUSION:

A public dock is an opportunity to create community space along Esquimalt's culturally significant shorelines. It is important that this amenity serves all members of the Esquimalt community and aligns with the many on-going initiatives to restore the ecology of the region's shorelines.

Based on community feedback and our understanding of the relevant ecologies, we recommend a network of docks and improvements to water access infrastructure. We recommend initiating these efforts at the location in Gorge Park Esquimalt West



APPENDIX A: DETAILS OF COMMUNITY ENGAGEMENT

1) SURVEY RESULTS

Question: Do you access the water and shorelines in Esquimalt?

Results: Most survey participants access Esquimalt shorelines very often.

Very often (3+ times a week) = 134 participants (44%)

Frequently (4 times a month) = 85 participants (28%)

Occasionally (once or twice a month) = 53 participants (18%)

Rarely / never = 13 participants (4%)

Only during warm weather = 15 participants (5%)

Other = 2 participants (0.6%)

Question: What activities bring you to the water?

Results: Participants access the waterfront for various and multiple activities, results were fairly evenly distributed for this question. The most common use is walking and running for exercise. A similar amount of participants go to the water to observe nature, kayak / use small craft, swim, and spend time with friends and family. Dog walking accounts for 11% of participants shoreline use.

Walking / running for exercise = 180 participants (22%)

Observing nature = 149 participants (18%)

Kayak / small craft use = 143 participants (17%)

Swimming / wading = 126 participants (15%)

Time with friends / family = 125 participants (15%)

Walking my dog = 91 participants (11%)

Other = 15 participants (2%)

Question: At what locations do you access the shore?

Results: The most common location participants access the shore is Saxe Point Park, closely followed by Esquimalt Gorge Park.

Saxe Point Park = 199 participants (25%)
Esquimalt Gorge Park = 191 participants (24%)
Fleming Beach = 130 participants (16%)
West Bay = 80 participants (10%)
Arm Street = 49 participants (6%)
Other = 25 participants (3%)
McNaughton = 22 participants (3%)
Captain Jacobson Park = 20 participants (2.5%)
Yarrow = 18 participants (2%)
Kinver = 12 participants (1.5%)
Glen Vale = 10 participants (1%)
Forshaw = 9 participants (1%)
Sturdee = 9 participants (1%)
Denniston Park = 9 participants (1%)
Foster = 7 participants (0.9%)
Garthland = 6 participants (0.7%)
Dellwood = 4 participants (0.5%)
Nelson = 3 participants (0.4%)

Question (Yes/No): I would use a public dock in the Township of Esquimalt.

Results: Most participants (66%) definitely agree they would use a public dock.

Definitely agree = 196 participants (65%)
Somewhat agree = 51 participants (17%)
Neither agree or disagree = 22 participants (7%)
Somewhat disagree = 17 participants (6%)
Definitely disagree = 16 participants (5%)



Question: What times of year?

Results: Most participants (61%) would use a dock for most of the year. Winter-time wave activity along the Juan de Fuca shore is an important consideration.

Most of the year = 183 participants (61%)

Only during the warm months = 100 participants (33%)

I would not visit a public dock = 19 participants (6%)

Question: What activities would bring you to a community dock?

Results: Most participants (23%) would use a community dock to swim, closely followed by launching kayaks and small watercrafts. Participants also expressed interest in using a dock as a space to spend time with family and friends, and to observe nature.

Swimming / wading = 196 participants (23%)

Kayak / small craft use = 183 participants (21%)

Time with friends / family = 148 participants (17%)

Observing nature = 139 participants (16%)

Walking / running for exercise = 113 participants (13%)

Walking my dog = 57 participants (7%)

I would not use a community dock = 19 participants (2%)

Other = 15 participants (2%)

Question: Would you be interested in a cultural education component to a future community dock, such as signage?

Results: There is interest in including a cultural component. This has the potential to teach the community about how to respectfully use the dock. For example, teaching about the cultural and ecological significance of eelgrass may instill a sense of stewardship among community, encouraging people not to pull the grass.

Yes, very interested = 137 participants (46%)

Somewhat interested = 103 participants (35%)

Not interested = 49 participants (17%)

Other = 8 participants (3%)

Question: Choose your three MOST PREFERRED potential dock locations.

Results: The most preferred location for a community dock is the west side of Gorge Esquimalt Park, near the beach. This is followed by Saxe Point Park and Esquimalt Gorge Park East. It should be noted that there are concerns about the eastern location in Esquimalt Gorge Park's proximity to the reversing falls, which are dangerous to swimmers.

Esquimalt Gorge Park West = 159 participants (19%)

Saxe Point Park = 145 participants (17%)

Esquimalt Gorge Park East = 114 participants (14%)

West Bay Walkway = 86 participants (10%)

Fleming Beach / Buxton Green = 77 participants (9%)

Arm = 58 participants (7%)

McNaughton = 58 participants (7%)

Captain Jacobson Park = 39 participants (5%)

Forshaw = 19 participants (2%)

Yarrow = 19 participants (2%)

Denniston Park = 16 participants (2%)

Sturdee = 12 participants (1%)

Kinver = 11 participants (1%)

Garthland = 8 participants (1%)

Foster = 5 participants (0.6%)

Dellwood = 5 participants (0.6%)

Nelson = 4 participants (0.5%)

Question: Choose your three LEAST PREFERRED potential dock locations.

Results: Results for this question were fairly evenly distributed. Yarrow, Dellwood, Fleming Beach and West Bay Walkway are the least preferred locations, respectively.

Yarrow = 78 participants (9%)
Dellwood = 66 participants (8%)
Fleming Beach / Buxton Green = 65 participants (8%)
West Bay Walkway = 64 participants (8%)
Esquimalt Gorge Park East = 62 participants (7%)
Glen Vale = 56 participants (7%)
Esquimalt Gorge Park West = 51 participants (6%)
Saxe Point Park = 47 participants (6%)
Garthland = 46 participants (5%)
Foster = 43 participants (5%)
Sturdee = 42 participants (5%)
Arm = 38 participants (5%)
Nelson = 38 participants (5%)
Captain Jacobson Park = 34 participants (4%)
Kinver = 32 participants (4%)
Forshaw = 31 participants (4%)
Denniston Park = 27 participants (3%)
McNaughton = 22 participants (3%)

Question: How did you hear about this survey?

Results: Facebook was means through which most participants heard about this survey.

Other = 55 participants (17%)
Poster = 1 participant (0.3%)
Through a friend = 73 participants (22%)
Esquimalt Website = 23 participants (7%)
Esquimalt e-news = 43 participants (13%)
Instagram = 3 participants (1%)

X (Twitter) = 1 participant (0.3%)

Facebook = 114 participants (35%)

Digital sign at a rec centre = 16 participants (5%)

Question: Which age category describes you?

Results: Most survey participants were in the 41 – 50 years age range, followed by 31-40 years and 61-70 years, respectively.

41 - 50 years = 77 participants (26%)

31 - 40 years = 75 participants (25%)

61 – 70 years = 59 participants (20%)

51 - 60 years = 46 participants (15%)

71 – 80 years = 32 participants (11%)

21 - 30 years = 9 participants (3%)

81 – 90 years = 2 participants (0.7%)

11 – 20 years = 2 participants (0.7%)

Question: Where do you reside?

Results: Most participants (68%) live in the Township of Esquimalt, followed by Vic West, then Saanich.

Township of Esquimalt = 208 participants (68%)

Vic West (City of Victoria) = 43 participants (14%)

Saanich = 25 participants (8%)

Other = 24 participants (8%)

View Royal = 6 participants (2%)

Online Survey Participant Summary

Aware Participants = 1,820

Definition: an aware visitor is someone who has made one single visit to your site.

Informed Participants = 1,118

Definition: an informed visitor is someone who has visited your site and sought more information by clicking on something else, such as a widget document or key date.

Engaged Participants = 299

57 registered participants participated in surveys

242 unverified participants participated in surveys

Definition: an engaged visitor is someone who visited your site and contributed to an active tool on a project page.

2) OPEN HOUSE SUMMARY

The open house held on January 23, 2025 had 75 attendees. The following locations were verbally expressed as preferred dock locations at the open house:

- 1) West Bay
- 2) Saxe Point
- 3) Gorge Park West

There is a feeling in the community that a public dock for kayak/small craft access was promised and not delivered in West Bay. Many people would appreciate public access in West Bay, although a dock there would serve small-boat access, and is not suitable for swimming. There may be an opportunity for the Township to lease dock space for public use, rather than constructing a new dock.

There is general interest in having a network of public docks, and water access infrastructure. It is generally understood that the Juan de Fuca shore experiences extreme wave activity, especially in the winter months. Cold water swimming is a popular activity, with a group of regular swimmers accessing the water at Saxe Point Park, although people expressed a stronger desire for swimming infrastructure in the calmer, warmer waters of the Gorge. There are sites within the Gorge that could be improved without building a dock, such as installing a ladder at the Arm Street promenade or McNaughton Avenue.

The public access site at De Costa Place was brought up during the open house. This site was not included in engagement because access is intrusively close to private property. Additionally, parking is insufficient here. Our consulting biologist does not consider this site to have less ecological impact than

any other site. Wherever a dock is built, measures will need to be taken to avoid and/or mitigate potential impacts to these sensitive ecosystems.

The photos below demonstrate the conditions at De Costa Place:

