Capital Regional District

625 Fisgard St.,
Victoria, BC V8W 1R7

Notice of Meeting and Meeting Agenda
Regional Parks Committee

Wednesday, February 25, 2026 | **9:30 AM** | **6th Floor Boardroom, 625 Fisgard St., Victoria, BC V8W 1R7**

J. Brownoff (Chair), L. Szpak (Vice Chair), C. Coleman, S. Goodmanson, G. Holman, M. Tait, S. Tobias, K. Williams, R. Windsor, C. McNeil-Smith (Board Chair, ex officio)

The Capital Regional District strives to be a place where inclusion is paramount and all people are treated with dignity. We pledge to make our meetings a place where all feel welcome and respected.

1. Territorial Acknowledgement

2. Approval of Agenda

3. Adoption of Minutes

3.1. 26-0214 Minutes of the Regional Parks Committee meeting of January 28, 2026

Recommendation: That the minutes of the Regional Parks Committee meeting of January 28, 2026 be adopted as circulated.

Attachments: Minutes - January 28, 2026

4. Chair's Remarks

5. Presentations/Delegations

The public are welcome to attend CRD meetings in-person.

Delegations will have the option to participate electronically. Please complete the online application at www.crd.ca/address no later than 4:30 pm two days before the meeting and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the CRD Board at crdboard@crd.bc.ca.

6. Committee Business

6.1. 26-0200 Feasibility of Reconstructing the Marine Access Ramp at Island View Beach Regional Park

Recommendation: There is no recommendation. This report is for information only.

Attachments:
- Staff Report: IVB Marine Access Ramp
- Appendix A: IVB Marine Access Ramp Location
- Appendix B: IVB Boat Ramp Restor Assmt, Golder Assoc, 2016

6.2. 26-0154 Regional Parks Trail Repair Program Update

Recommendation: There is no recommendation. This report is for information only.

Attachments:
- Staff Report: Regional Parks Trail Repair Program Update
- Appendix A: Regional Parks - Trail Repair Program - Summary
- Presentation: Regional Parks Trail Repair Program

7. Notice(s) of Motion

8. New Business

9. Adjournment

The next meeting is March 25, 2026.

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625 Fisgard St.,
Victoria, BC V8W 1R7

Capital Regional District

Meeting Minutes

Regional Parks Committee

Wednesday, January 28, 2026 **9:30 AM** **6th Floor Boardroom**
625 Fisgard St.
Victoria, BC V8W 1R7

PRESENT
Directors: J. Brownoff (Chair), L. Szpak (Vice Chair), C. Coleman, G. Holman, M. Tait (EP), S. Tobias (EP), K. Williams, M. Wager (for S. Goodmanson) (EP), R. Windsor (EP), C. McNeil-Smith (Board Chair, ex officio)

Staff: T. Robbins, Chief Administrative Officer; L. Jones, General Manager, Parks, Recreation and Environmental Services; K. Lorette, General Manager, Housing, Planning and Protective Services; M. MacIntyre, Senior Manager, Regional Parks; P. Klassen, Senior Manager, Regional Planning; N. Cann, Manager, Visitor Experience & Stewardship, Regional Parks; J. Robinson, Senior Conservation Biologist, Regional Parks; M. Lagoa, Deputy Corporate Officer; J. Ives, Committee Clerk; J. Dorman, Committee Clerk (Recorder)

EP - Electronic Participation

Regrets: Director S. Goodmanson

The meeting was called to order at 9:31 am.

1. Territorial Acknowledgement

Vice Chair Szpak provided a Territorial Acknowledgement.

2. Approval of Agenda

MOVED by Director Coleman, SECONDED by Director Williams,
That the agenda of the Regional Parks Committee meeting of January 28, 2026 be approved.
CARRIED

3. Adoption of Minutes

3.1. 26-0110 Minutes of the Regional Parks Committee meeting of November 26, 2025

MOVED by Director Coleman, SECONDED by Director Williams,
That the minutes of the Regional Parks Committee meeting of November 26, 2025 be adopted as circulated.
CARRIED

4. Chair's Remarks

There were no Chair's remarks.

5. Presentations/Delegations

There were no presentations or delegations.

6. Committee Business

6.1. 26-0105 2026 Regional Parks Committee Terms of Reference

M. Lagoa presented Item 6.1. for information.

6.2. 26-0043 Bylaw No. 4688: Capital Regional District Parks Regulation Bylaw No. 1, 2018, Amendment Bylaw No. 2, 2025

M. MacIntyre spoke to Item 6.2.

MOVED by Director Coleman, SECONDED by Director Williams,
The Regional Parks Committee recommends to the Capital Regional District Board:
1. That Bylaw No. 4688, "Capital Regional District Parks Regulation Bylaw No. 1, 2018, Amendment Bylaw No. 2, 2025", be read a first, second, and third time; and
2. That Bylaw No. 4688 be adopted.
CARRIED

6.3. 26-0026 Large Carnivore Monitoring Project - East Sooke, Matheson Lake and Roche Cove Regional Parks

N. Cann presented Item 6.3. for information.

Discussion ensued on the following:
- data sharing, public education and educational campaigns
- detection of carnivores and risk to public
- collaboration with UVic, other institutions and organizations
- protection and advocacy for protected species
- data collection for human interactions and mitigation of attractants

6.4. 26-0078 Foodlands Access Service - Bear Hill Farm Pilot Project

P. Klassen spoke to Item 6.4.

Discussion ensued on the following:
- project and proposal timelines
- financial implications and funding sources
- participant selection and application process
- education and outreach components
- regional agricultural strategy updates

MOVED by Director Szpak, SECONDED by Director Coleman,
The Regional Parks Committee recommends to the Capital Regional District Board:
That formal approval be granted for use of the eastern portion of the Bear Hill site (5920 Patricia Bay Highway) by the CRD Foodlands Access Service for a five-year pilot project to explore the activation of under-utilized regional and municipal properties as productive farmland.
CARRIED

7. Notice(s) of Motion

7.1. 26-0104 Motion with Notice: Collaboration on Protection of Sensitive Ecosystems and Species at Risk (Director Holman)

Director Holman spoke to Item 7.1.

Discussion ensued on species at risk, ecological values and travel corridors.

MOVED by Director Holman, SECONDED by Director Coleman,
The Regional Parks Committee recommends to the Capital Regional District Board:
That CRD staff report on the feasibility and merits of collaborating with First Nations and with other conservation agencies and organizations on conducting a spatial analysis of ecological values in CRD to support Regional Park's land securement and stewardship interests.
CARRIED

8. New Business

There was no new business.

9. Adjournment

MOVED by Director Coleman, SECONDED by Director Williams,
That the Regional Parks Committee meeting of January 28, 2026 be adjourned at 10:22 am.
CARRIED

_____
CHAIR

_____
RECORDER

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REPORT TO REGIONAL PARKS COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 25, 2026

SUBJECT **Feasibility of Reconstructing the Marine Access Ramp at Island View Beach Regional Park**

ISSUE SUMMARY

To provide an update on the feasibility of the Capital Regional District (CRD) reconstructing the marine access ramp at Island View Beach Regional Park.

BACKGROUND

At its October 9, 2024, meeting, the CRD Board directed staff to reexamine and report back to the Regional Parks Committee on the feasibility of reconstructing the marine access ramp at Island View Beach Regional Park as a regional asset, including all necessary steps and consulting Tsawout First Nation and other relevant stakeholders.

The marine access ramp at Island View Beach was originally constructed in the 1970s by residents, without CRD involvement. The structure is located on provincially owned foreshore, and there is no tenure authorizing its occupation (Appendix A). A 2014 legal opinion for the CRD confirmed that the Province holds jurisdiction and ownership over the foreshore areas outside the surveyed boundaries of Island View Beach Regional Park.

Although the 1989 Island View Beach Regional Park Management Plan identifies the replacement of the ramp with a facility designed for car top (light boats) as an action, this direction did not account for underlying land-tenure or technical constraints. Additionally, as per the *Local Government Act*, the CRD Regional Parks Service cannot spend requisition funds on lands outside of regional parks without a license or operating agreement of some kind. It is possible to create a sub-regional service to fund capital improvements that benefit municipal partners. Such works would still require a license or operating agreement.

Current Condition

The marine access ramp is in a state of disrepair and is unusable. It has not been maintained for many years and consists of failing concrete and debris accumulation. At very low tides, the ramp does not extend far enough into the water, further limiting its usability as a boat launch. Overall, the ramp is unsuitable for safe and reliable marine access without major intervention.

Environmental and Financial Considerations

In 2016, the CRD contracted Golder Associates to assess the potential repair or replacement of the marine access ramp in its current location. The report (Appendix B) was shared with the District of Central Saanich in March 2016 and was provided for information to the Regional Parks Committee on June 15, 2016. Key findings included:

- The marine access ramp disrupts natural coastal processes, causing erosion north of the ramp and sediment buildup to the south.

- Reconstruction or repair would likely continue these impacts and may require breakwaters or dredging in this environmentally sensitive area.
- Island View Beach is not a suitable site for an unprotected boat ramp, as it does not meet best-practice design guidelines.
- Repairing or rebuilding the ramp was not recommended and would involve significant cost, ranging from hundreds of thousands to millions of dollars.

In 2026, the marine access ramp continues to disrupt natural sand migration, negatively affecting the sensitive sand dune ecosystems at the north end of the park. The cost to repair or rebuild the ramp is now expected to be significantly higher than the 2016 estimates, and any design would need to account for climate-change impacts. Climate change has already amplified shoreline instability in this area, with king tides and severe storm events causing repeated damage and requiring frequent maintenance and repairs to the berm in the park.

Island View Beach—TIXEN Working Group

The Island View Beach—TIXEN Working Group (Working Group), established in 2024, provides a collaborative forum for the CRD, District of Central Saanich (Central Saanich) and the Tsawout First Nation (Tsawout) to coordinate on management and operations for Island View Beach Regional Park, TIXEN, and related areas.

- At the November 2024 meeting, CRD staff provided an overview of the 2016 Golder Report. The group agreed that further evaluation is needed to determine viable options, and Central Saanich staff indicated they would explore opportunities for new boat launch facilities on the Saanich Peninsula with neighbouring municipalities.
- At the January 2025 meeting, Tsawout staff indicated that they are looking into developing design concepts for the ramp for small watercrafts. Staff have yet to be updated on the outcome of these plans.

Central Saanich's draft Parks and Trails Master Plan commits to collaborating regionally on a strategy for motorized boat facilities on the Saanich Peninsula, while maintaining seasonal access for small, non-motorized watercrafts at Island View Beach and assessing rehabilitation measures for the existing marine access ramp.

Tsawout holds a deep cultural and historical connection to the Island View Beach area, including the foreshore, and is exploring marine access opportunities through its Reef Net Revitalization Project. In mid-2025, staff discussed Tsawout's initial interests in constructing a canoe shed and a light boat launch for small, non-motorized watercraft within or near the park. Ongoing discussions between Tsawout and CRD staff seek to build a long-term partnership that honors cultural priorities while supporting shared goals for access and stewardship.

Next Steps

Staff will meet with the Tsawout First Nation and the District of Central Saanich in the coming months to better understand their perspectives and intentions regarding marine access. These discussions will focus on clarifying the type of infrastructure being considered, whether the proposed marine access is intended to be within or outside of the regional park, and potential responsibilities for implementation. Following these discussions, staff will report back to the Board on what was heard, any implications, and seek further direction on the CRD's position and role in the future of a marine access ramp at Island View Beach.

IMPLICATIONS

Financial Implications

There are no immediate financial or service delivery implications associated with drafting this report. The 2016 report by Golder Associates indicated costs in the hundreds of thousands of dollars for repair options and in the millions for new marine access infrastructure, though these estimates will require confirmation through additional technical studies.

From an ongoing operations and maintenance perspective, future marine access improvements at Island View Beach Regional Park would require dedicated resourcing to support safe, reliable, and environmentally responsible service levels. Future partnership opportunities with Tsawout First Nation may draw on additional resources and could require the use of core funding.

CONCLUSION

Repairing or rebuilding the existing marine access ramp at Island View Beach Regional Park would involve significant environmental impacts, substantial capital and operating costs, and site-specific challenges. The existing structure is located outside the park boundary and is not within the CRD's jurisdiction. The District of Central Saanich and Tsawout First Nation have expressed interest in maintaining access for small, non-motorized watercraft at or near Island View Beach. Any consideration of a marine access ramp as a regional asset would require coordinated collaboration with the Province, the District of Central Saanich, Tsawout First Nation, and other interest holders. Staff will continue to engage with the Tsawout First Nation and the District of Central Saanich to better understand their interests and potential next steps and will then seek Board direction on the appropriate role and level of CRD involvement.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Mike MacIntyre, Senior Manager, Regional Parks
Concurrence:	Luisa Jones, MBA, General Manager, Parks, Recreation & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Island View Beach Marine Access Ramp Location
Appendix B: Island View Beach Regional Park Boat Ramp Restoration Assessment, Golder Associates, 2016

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Metres

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UTM Zone 10N NAD 1983

Important This map is for general information purposes only. The Capital Regional District (**CRD**) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD **will not be liable** for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

2026-02-25-SR-RPC-IVB-BoatLaunch-AppendixA.pagx | February 2026

- Island View Beach Regional Park Boundary
- Island View Beach Regional Park
- Island View Municipal Park
- Property Line
- Road

*2023 Orthophoto

Appendix A
Island View Beach Regional Park: Marine Access Ramp

Regional Parks Committee
Staff Report
February 25, 2026

CRD
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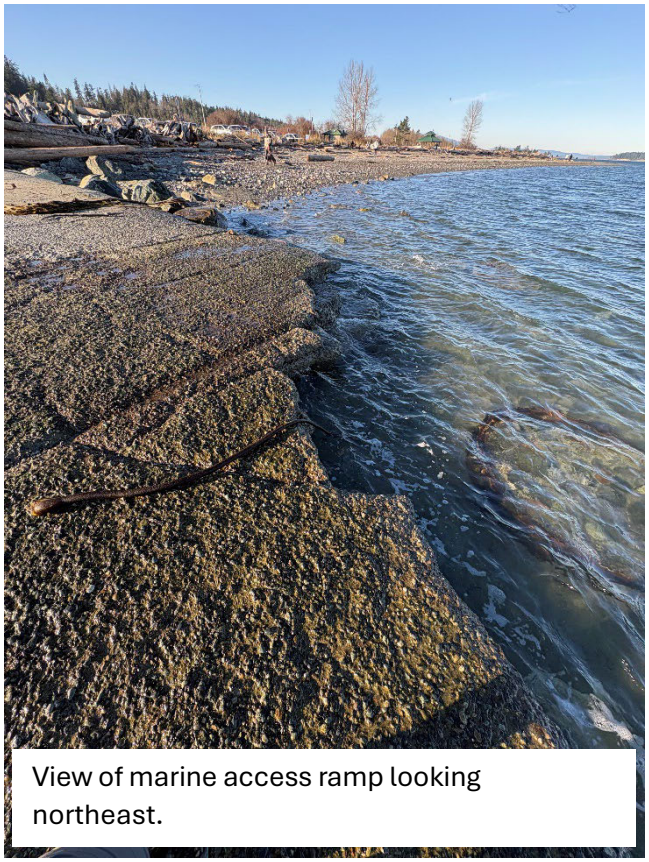
Island View Beach Regional Park: Marine Access Ramp

View of marine access ramp looking south at low tide from beach.

View of marine access ramp looking west at low tide from parking lot.



View of marine access ramp looking northeast.

March 18, 2016 Reference No. 1544314-002-L-Rev0

Ms. Lynn Wilson
Capital Regional District
CRD Parks and Recreation
490 Atkins Road
Victoria, BC
V9B 2Z8

ISLAND VIEW BEACH REGIONAL PARK BOAT RAMP RESTORATION ASSESSMENT

Dear Ms. Wilson,

1.0 INTRODUCTION

Golder Associates Ltd. (Golder) is pleased to provide Capital Regional District (CRD) with this report summarizing the assessment of potential restoration of the boat ramp located within Island View Beach Regional Park (the park), British Columbia. The scope of work for this project was presented in our proposal dated November 30, 2015 (Golder File Reference No. P1544781-001-WP-Rev1).

This report is limited to analysis of coastal erosion and does not include geotechnical, geo-environmental, ecological or archaeological investigations and analysis. This report should be read in conjunction with the "Important Information and Limitations of This Report" as this forms an integral part of this report.

The objectives of the conceptual design phase of the work were to:

- assess the existing boat ramp at the southern end of the park with respect to future repair works.

The critical issues identified for the project are:

- review the prevailing coastal processes at the park;
- review available reports of the coastal environment;
- document the current condition and use of the boat ramp; and
- assess the potential for restoration of the boat ramp.

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Golder Associates: Operations in Africa, Asia, Australasia, Europe, North America and South America

2.0 METHODS

2.1 Site Reconnaissance

The site reconnaissance included foot traverses of the shoreline of the park to observe the boat ramp, associated shoreline features and to identify geomorphic indicators of sediment transport processes in the vicinity of the boat ramp. Observed features were documented with photographs. Three shoreline profiles were collected using an inclinometer and hip chain to characterize slopes of the boat ramp and shoreline.

2.2 Data Collection and Review

Available data and reports were reviewed. The data and reports available for review were:

- Predicted tidal elevation data for December 3 and December 19, 2015 and tidal elevation summary data for Saanichton Bay (ID#7255) based on the Fulford Harbour reference station #7330 for the period 1952 to 1992 (published by Canadian Hydrographic Service);
- Bathymetric data for Haro Strait from Chart 3462 "Juan De Fuca Strait", dated 1998 (published by Canadian Hydrographic Service);
- Topographic data at a scale of 1:50,000, National Topographic System Map 92 B/11, "Sidney", dated 2000 (published by Natural Resources Canada);
- Wind time series from the weather station at Victoria International Airport (WMO ID #71799) Climate ID # 1018620, January 1953 to present (published by Environment Canada);
- Third-party reports summarizing coastal investigations of the park (provided by CRD); and
- Topographic survey data derived from LiDAR surveys, date unknown (provided by CRD).

2.3 Wind Analysis and Wave Hindcast

Wind time series data from the weather station located Victoria International Airport (the airport) were obtained from Environment Canada (EC) weather archive (Environment Canada 2015) and imported into Matlab® (Mathworks 2015) for compilation, analysis and plotting. This station is the closest weather station to the park, situated approximately 9 km to the north-northwest of the site. Due to the proximity of the boat ramp to the airport, the wind data from the airport are considered to be representative of winds at the boat ramp. The airport has the longest wind record in the vicinity of the park. The station has an elevation of 19.5 m Geodetic compared with an approximate elevation of 0 m Geodetic for the boat ramp. Wind data at the Victoria International Airport station (19.5 m elevation) were adjusted to 10-m wind using a log wind profile.

Wind speed and direction at the station is recorded as the average speed and direction during the last two minutes of the hour. Data were downloaded from the EC website up to December 31, 2015. The availability of hourly wind time series until this date was greater than 99%. Monthly wind roses were produced using all available data. Data were binned into 16 directional bins (22.5° each) and plotted by frequency of occurrence (percentage).

An extreme value analysis of available wind speed and direction data was conducted to develop a wave hindcast at the project site. A wave hindcast provides estimates of wave conditions where site specific wave data are not available. Site specific wave data are not available for the park. Waves that can affect the shoreline at the park are generated by over-water winds across Haro Strait. The wave hindcast was developed following the Sverdrup, Munk, and Bretschneider (SMB) method which links the significant wave height and significant wave period to wind speed, fetch length and water depth using semi-empirical algorithms (CIRIA/CUR 2007). The wave hindcast returned estimates of wave heights and periods for wind-wave events of various return periods at the park.

3.0 PHYSICAL SETTING

The park is part of a littoral cell that extends from the shoreline around Mount Douglas northwards to Cordova Spit (Figure 1). The littoral cell is approximately 15 km in length and consists of "feeder" bluffs in the south, northwards directed longshore transport and the deposition at Cordova Spit. This littoral cell is referred to as "Cordova Shore" (Lynn Wilson, CRD, pers. comm., October 30, 2015) and forms part of the western shoreline of Haro Strait on Vancouver Island, BC (Figure 4). Haro Strait is bounded to the east by San Juan Island (USA), to the north by the Gulf Islands (Canada) and is open to the south into the Strait of Juan de Fuca. The section of Haro Strait north of the park is broken up by islands (e.g., James and Sidney) and includes Cordova Channel and Sidney Channel. Haro Strait forms part of the Salish Sea.

The park is a low-lying coastal park situated within the boundaries of the District of Central Saanich (Figure 2). The park consists of a coastal lagoon and wetland separated from the open waters of Haro Strait by a spit and barrier beach that is oriented south to north with the prevailing direction of longshore sediment transport. The littoral cell contains Cowichan Head which is situated approximately 2 km to the south of the boat ramp (Figures 1 and 2). The park is situated between the shore to the east and steep bluffs to the west (Figure 2).

4.0 DATA REVIEW

4.1 Site Reconnaissance

A site reconnaissance was carried out by Morgan Tidd and Jackson Harris at low tide on December 3, 2015. Due to adverse weather (wind) conditions resulting in large waves at the shoreline that prevented access to the boat ramp (Photograph 1), the site reconnaissance was rescheduled to December 19, 2015 and was carried out by Morgan Tidd and Rowland Atkins between 14:00 PDT and 16:30 PDT. Visual observations of waves on the day of the site reconnaissance indicated approximately 0.3 to 0.4 m waves with a wave period of approximately 4 s to 4.5 s.

Photograph 1: Image taken facing east along the boat ramp on December 3, 2015

Beach profiles were collected at the boat ramp location (Figure 3). The profiles were oriented approximately perpendicular to the shoreline and extended from the near shore to the crest of the first major break in slope. The profiles were collected along the median line of the boat ramp, 15 m to the north of the boat ramp and 15 m to the south of the boat ramp. The profiles were collected during the falling tide between 15:10 PDT and 16:15 PDT.

The cross shore profiles indicate that the beach to the south of the boat ramp (green line, Figure 3) is higher than the beach to the north of the boat ramp (blue line, Figure 3) across the surveyed section of the shoreline. The difference in elevation varies between approximately 0.1 m and 1.1 m with an average of 0.6 m. The change in elevation is consistent with the trapping of beach sediment on the updrift side of an obstacle and erosion on the downdrift side of an obstacle. Along this shoreline updrift is to the south and downdrift is to the north. The boat ramp is lower than the beach to the south through the upper foreshore for a distance of approximately 28 m (red line, Figure 3) and higher through the intertidal zone. This appears to be related to the accumulation of woody debris south of the boat ramp. The boat ramp is higher than the beach to the north except landward of the boat ramp crest and the area of woody debris accumulation. This appears to be related to erosion of the downdrift shore. At approximately mean sea level, the boat ramp lies proud of the beach surface, approximately 0.3 m higher than the beach to the south (light blue line, Figure 3) and approximately 0.5 m to the north (light purple line, Figure 3). This implies that the boat ramp acts as an obstacle to longshore transport.

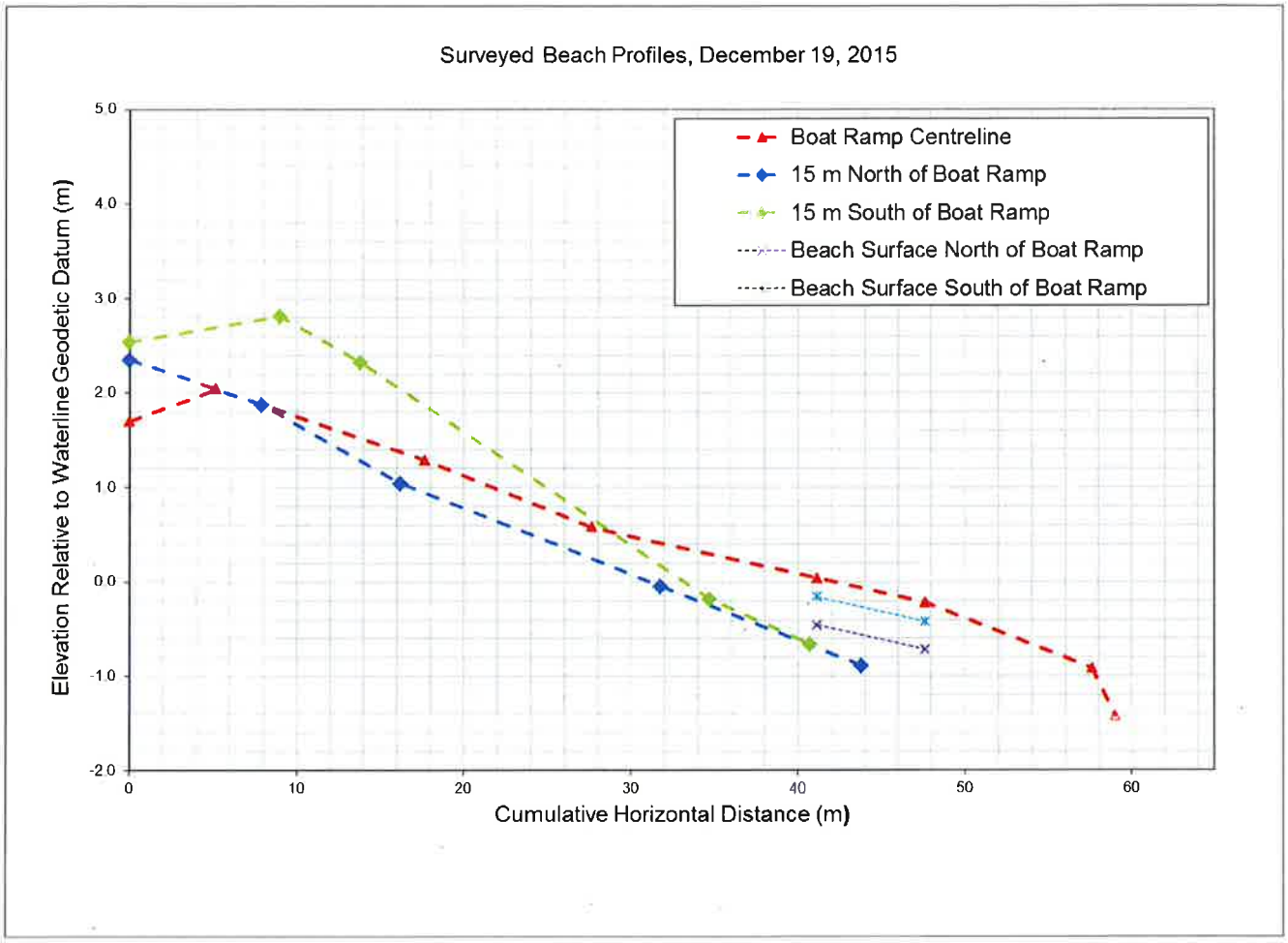

Figure 3: Surveyed beach profiles taken on December 19, 2015

The boat ramp was examined from the parking lot down to the waterline. The boat ramp consists of a concrete structure with a crest approximately located in line with the zone of accumulated woody debris on the shoreline to the north and south (Photograph 2). The crest of the boat ramp was observed to be blocked with woody debris (Photograph 3) on December 19. Woody debris was also observed at the crest on December 3 (Photograph 4), but we understand that the woody debris observed on December 3 was fully removed from the ramp prior to December 19. This implies that the woody debris observed on December 19 had accumulated on the ramp in under two weeks.

Photograph 2: Image taken facing north from the crest of the boat ramp on December 19, 2015

Photograph 3: Image taken facing east on December 19, 2015

Photograph 4: Image taken facing east on December 3, 2015.

The boat ramp beyond the woody debris slopes seaward at a typical gradient of 4% to 5% (Photograph 5). The boat ramp is approximately 5 m wide and extends seawards from the area of woody debris accumulation for at least 30 m (e.g., Photograph 3). The seaward end of the boat ramp was not observed during the site visit; however, subsequent review of available satellite imagery (GoogleEarth™, image date June 7, 2015) indicates that the boat ramp extends approximately 59 m offshore of the parking lot and the survey extended approximately 58 m offshore of the parking lot. Probing with a rod beyond the furthest point surveyed indicated a drop-off of approximately 0.5 m at the end of the boat ramp to the surrounding seabed. This drop off has been included in Figure 3 as a hollow red triangle. These survey data place the seaward end of the boat ramp at an elevation of approximately -0.9 m Geodetic Datum (1.3 m Chart Datum) and the foot of the boat ramp structure 0.5 m lower at approximately -1.4 m Geodetic Datum (0.8 m Chart Datum).

Photograph 5: Approximately the centre of the boat ramp (cross-shore) taken facing west on December 19, 2015.

The boat ramp has a relatively intact sloped concrete edge facing south (Photograph 6). The north edge of the boat ramp has been eroded and indicates that the ramp consists of a concrete cap over a core of cobble-to-gravel-sized fill (Photograph 7). Sections of rebar were observed in the eroded surface of the boat ramp at a distance of approximately 45 m from the parking lot (Photograph 8). The hollow in the surface of the boat ramp was approximately 2 to 2.5 m wide, 1.5 to 2 m long, and 0.3 to 0.5 m deep. The hollow occupied approximately half the width of the crest of the boat ramp and appeared to limit the use of the ramp.

Photograph 6: The southern side of the boat ramp taken facing east on December 19, 2015

Photograph 7: The northern side of the boat ramp taken facing southeast on December 19, 2015

Photograph 8: Eroded surface of the boat ramp taken facing east on December 19, 2015

Evidence of cracking and spalling of the concrete was observed seawards of the woody debris (e.g., Photographs 6 and 7). The elevation drop that occurs immediately on either side of the ramp is shown in Figure 3 and in Photographs 9 and 10. No sediment was observed on the boat ramp surface during the site visit. The elevation drop on the south side is less pronounced than the elevation drop on the north side. This difference in beach elevation is indicative of northwards directed sediment transport. The beach surface to the south consists of a higher proportion of sand sized material relative to the beach surface to the north where more cobble-sized material was observed (e.g., Photographs 9 and 10). Typical cobble size was estimated in the field to be 150 mm minus (6" minus).

Photograph 9: Beach to the south of the boat ramp taken facing north on December 19, 2015

Photograph 10: Beach to the north of the boat ramp taken facing southeast on December 19, 2015

4.2 Review of Available Reports

A review of third-party literature provided to Golder by CRD was completed. Data and information in the context of coastal processes occurring at Island View Beach, in particular at the park boat ramp location, were identified where available. A brief bulleted summary of relevant information obtained from the literature review is provided below.

Historical and Successional Baseline Study of Island View Beach (Randhawa et al. 2012)

- Between 1930 and 2011 low lying areas (salt marsh, sand dunes and beach) decreased by 22%; areas of forest and shrub land increased by 17%; and areas of infrastructure increased by 5%;
- Large woody debris was identified as disrupting cross shore sediment transport;
- Island View Beach is part of a gravel and sand spit that has been built northwards by deposition of materials moved by longshore currents from the cliffs at Cowichan Head;
- The park was established by CRD in 1966 when it consisted of 25.9 ha of agricultural land. In the1980s, after a flood damaging agricultural land, a seawall was built to the south of Island View Road. In 1986 and 1987 there were breaches in the dike within the park. Tree stumps were used to mitigate flooding.

Coastal Processes Summary (CRD 2015)

- The park is part of a littoral cell extending from Cowichan Head to Cordova Spit. Cowichan Head is a sediment source to the littoral cell. Steep bluffs within the park are now forested and appear to have stabilized. These bluffs were assumed to have been active in the past during periods of higher sea levels;
- Island View Beach is part of a large sand dune ecosystem composed primarily of silts, sands and gravels.
- Prevailing southeasterly winds have resulted in the orientation of the shorelines observed along the Cordova Shore, and around James Island and Sidney Island. The eroding bluffs along the shorelines are based on the local bedrock geology.
- Two layers of fine silt and clay are found at depths of 3.5 m and 9 m below the ground surface in the park, each approximately a metre thick. These impermeable layers slow down percolation and influence horizontal water flow driven by precipitation or tidal water elevations/flow;
- In 1936 modifications to the park began with ditch excavation and sea wall construction to remove water from the current park area to increase agricultural value and reduce mosquito habitat. Due to the low relief and a lack of slope gradient resulting in ditches that are imperfectly drained and have limited discharge such that some areas are stagnant. Modification of land for agricultural purposes and residential infrastructure has changed local hydrology. Two ditch systems have been constructed within the park and are separated at the northern park boundary.

Salt Marsh Stewardship (Blundon 2013)

- Anthropogenic modifications to Cordova Shore are identified as diking (causing tidal and ocean restrictions) and the outfall, boat ramp and rip-rap (which restrict sediment transport).

Evaluation of Carbon Storage in Coastal Wetlands: Central Saanich, James Island, and Sidney Island (Usipiuk et al 2013)

- Ditch creation in the 1930s lowered the water table in the park resulting in a change in hydrology and natural vegetation. Dike and ditch construction disrupted natural water flow patterns, shifting biodiversity from low marsh native species to shrubs.

A Study of Mosquito Populations at Island View Beach Regional Park and Adjacent Tsawout First Nations Land (Fried and Dhaliwal 2013)

- No information was identified that related to shoreline erosion and wave regime at the park.

Hydrology Characterization of Island View Beach Saltmarsh (DeVries et al 2013)

- No information was identified that related to shoreline erosion and wave regime at the park.

4.3 Review of Satellite Imagery

Available GoogleEarth™ imagery was reviewed to examine changes in sediment transport and woody debris accumulation over a longer period of time. Imagery is available for the period March 4, 2004 through June 7, 2015. Interpretations of sediment transport and woody debris accumulation based on the available imagery were:

- March 4, 2004 – woody debris appears to have accumulated 30 m seaward of the parking lot. Waves were observed to be breaking on the shore from the southeast. A moderate tide level is inferred based on observed waterline.
- January 1, 2005 – Woody debris present to the north and south of the boat ramp but the boat ramp appears to have been cleared of wood because the ramp appears like a line through the wood. No waves were observed. A high tide level is inferred based on the observed waterline.
- July 23, 2011 – Imagery has poor resolution, but two boats are observed offshore. No waves were observed. A moderate tide level is inferred based on the observed waterline.
- October 22, 2011 – Woody debris appears to have been cleared and sediment appears to overtop the boat ramp on the south side at approximately 30 m and approximately 42 m seaward of the parking lot. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. No waves were observed. A moderate tide level is inferred based on the observed waterline.
- May 9, 2012 – Woody debris piles present to the north and south of the boat ramp and sediment appears to overtop the boat ramp on the south side at approximately 30 m and approximately 43 m seawards of the parking lot. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. No waves were observed. A moderate tide level is inferred based on the observed waterline.
- June 10, 2012 – Boat ramp is clear of woody debris but sediment appears to overtop and bury the ramp from approximately 27 m to approximately 37 m seawards of the parking lot. No waves were observed. A low tide level is inferred based on the observed waterline.

- September 11, 2012 – Boat ramp is clear of woody debris and sediment. A dark line along the north side of the boat ramp suggests a steep (erosional) drop from ramp to beach surface. Waves were observed to be breaking on the shore from the east. A low tide level is inferred based on the observed waterline.
- September 14, 2012 – Boat ramp is clear of woody debris and sediment. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. A dark line on the south side of the boat ramp at approximately 47 m to approximately 53 m seaward of the parking lot suggests erosion of the boat ramp on this side. Waves were observed to be breaking on the shore from the east. A low tide level is inferred based on the observed waterline.
- March 22, 2013 – Boat ramp appears to have been cleared of woody debris and the debris piled either side, but sediment appears to overtop the boat ramp from the south side from approximately 29 m to approximately 38 m seawards of the parking lot. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. A dark patch on the south side of the boat ramp at approximately 40 m offshore suggest the boat ramp surface has been eroded. Waves were observed to be breaking on the shore from the east. A low tide level is inferred based on the observed waterline.
- March 28, 2013 – Boat ramp appears to have been cleared of woody debris and sediment. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. The dark patch on the south side of the boat ramp observed on March 22 is no longer visible, but a dark patch appears in the surface of the boat ramp. No waves were observed. A low tide level is inferred based on the observed waterline.
- April 16, 2013 – Boat ramp is clear of woody debris but sediment appears to overtop and partially bury the ramp from approximately 30 m to approximately 40 m seawards of the parking lot. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. No dark patches observed on the south side. Waves were observed to be breaking on the shore from the south east. A low tide level is inferred based on the observed waterline.
- April 30, 2013 – Boat ramp is clear of woody debris but sediment appears to overtop and partially bury the ramp from approximately 25 m to approximately 37 m seawards of the parking lot. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. Some discontinuous dark patches were observed on the south side, including a dark patch at approximately 40 m seawards of the parking lot. No waves were observed. A low tide level is inferred based on the observed waterline.
- September 11, 2013 – Imagery has poor resolution. The boat ramp appears to be clear of woody debris. Sediment appears to overtop and partially bury the boat ramp from approximately 34 m to approximately 40 m seawards of the parking lot. Waves were observed from the south east but breaking wave direction could not be inferred. A moderate tide level is inferred based on the observed waterline.
- September 25, 2013 – Boat ramp appears to be clear of wood and sediment and is in use by a vehicle. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. A dark patch was observed on the south side at approximately 40 m seawards of the parking lot. No waves were observed. A moderate tide level is inferred based on the observed waterline.

- March 23, 2014 – Boat ramp appears to be clear of wood and sediment. Dark patches as evidence of erosion are muted both on the north and south sides. The boat ramp appears to be higher than the beach to the south due to a light line along the boat ramp edge. No waves were observed. A moderate tide level is inferred based on the observed waterline.
- May 31, 2014 – Imagery has poor resolution. The boat ramp appears to be clear of woody debris and is in use by a vehicle. Sediment appears to partially overtop the boat ramp from approximately 32 m to approximately 37 m seawards of the parking lot. Dark patches as evidence of erosion are muted both on the north and south sides. Waves were observed from the south east but breaking wave direction could not be inferred. A moderate tide level is inferred based on the observed waterline.
- July 30, 2014 – Imagery has poor resolution. The boat ramp appears to be clear of woody debris. Sediment appears to partially overtop the boat ramp from approximately 30 m to approximately 38 m seawards of the parking lot. Dark patches as evidence of erosion are muted both on the north and south sides. No waves observed. A low tide level is inferred based on the observed waterline.
- November 29, 2014 – Boat ramp appears to have been cleared of woody debris with wood piled either side. The beach is submerged so inferences of sediment transport and erosion around the boat ramp are not possible. No waves were observed. A high tide level is inferred based on the observed waterline.
- June 7, 2015 – Boat ramp is clearly visible and clear of woody debris. Sediment appears to overtop and mostly bury the boat ramp from approximately 21 m to approximately 38 m seawards of the parking lot. A dark line along the north side of the boat ramp seawards of the woody debris area suggests a steep (erosional) drop from ramp to beach surface. No dark patches were observed on the south side but a hollow is observed in the south side of the boat ramp surface at approximately 45 m seawards of the parking lot. From approximately 46 m to the terminus of the boat ramp at approximately 59 m seawards of the parking lot, the boat ramp surface appears covered with marine vegetation. No waves were observed. A low tide level is inferred based on the observed waterline.

Based on the review of the imagery, it is clear that over the period of record (2004 to 2015) the boat ramp has experienced episodes of blockage by woody debris and burial by longshore transported beach sediments. Erosion along the edges of the boat ramp were observable since at least 2011 indicating that the erosion observed during the site visit is likely related to long term coastal effects (e.g., wave related erosion several years) on the boat ramp and are not related to recent storm activity (i.e., over the last few months).

The extent of the littoral cell was review using available imagery. Deflection of streams and accumulation of beach sediments on the south side of obstacles and structures are observable along the shoreline from Mount Douglas Park to Cordova Spit. These features are indicative of northwards dominant sediment transport and help to identify the littoral cell which contains the park.

Offshore of the beach at the park, a shore parallel bar was observed at a distance of approximately 60 to 100 m and a second bar was observed offshore at a distance of approximately 150 to 300 m (GoogleEarth™ 2015). These sediment bars are long-crested and are indicative of littoral transport of sediment in both the longshore and cross-shore directions. The furthest offshore identified bar appears to be attached to the base of Cowichan Head and is inferred to be transporting sediments derived from the coastal bluffs in the littoral cell south of Cowichan Head. These observations indicate that the littoral cell, and the zone of sediment sources for the park and Cordova Spit, extends further southwards than Cowichan Head, as implied in the Coastal Processes Summary (CRD 2015) and the report by Randhawa et al. (2012).

4.4 Water Level

Water levels at Island View Beach are based on published Canadian Hydrographic Service tide tables (F&OC 2016). Tidal water levels are based on estimates for the secondary port of Saanichton Bay (ID#7255), located approximately 3 km north of the boat ramp. Predictions of Saanichton Bay tidal water levels are based on the nearest reference station. The nearest tidal reference station is Fulford Harbour (ID#7330), located approximately 23 km north-northeast of the boat ramp. Predicted water levels are summarized in Table 1. Higher High Water Large Tide (HHWLT) is the highest normal tide in a given year; Lower Low Water Large Tide (LLWLT) is the lowest normal tide in a given year.

Table 1: Summary of Predicted Tidal Water Elevations (Saanichton Bay, Station #7255)

	Reported Water Level (m Chart Datum)	Reported Water Level (m Geodetic Datum)
Recorded extreme high	4.4*	2.2*
HHWLT (higher high water large tide)	3.7	1.5
HHWMT (higher high water mean tide)	3.1	0.9
Mean Sea Level	2.2	0.0
LLWMT (Lower low water mean tide)	0.8	-1.4
LLWLT (Lower low water large tide)	0.1	-2.1
Recorded extreme low	-0.5*	-2.7*

* Extreme values derived from Fulford Harbour (Station #7330)

The boat ramp and park are subject to a semi-diurnal tide with typically two high tides and two low tides each day. Mean sea level at the boat ramp is expected to be 2.2 m Chart Datum or 0.0 m Geodetic Datum based on the predictions for Saanichton Bay. The maximum recorded extreme water level at Fulford Harbour is 4.4 m Chart Datum. The water level at the boat ramp associated with higher high water mean tide (HHWMT) is 3.1 m Chart Datum and the water level associated with lower low water mean tide (LLWMT) is 0.8 m Char Datum.

Future tidal water elevations may increase due to the effects of sea level rise. Sea level rise occurs in response to a number of factors. Example contributors to sea level rise include an increase in the volume of water present in the ocean and the thermal expansion of the water such that the water rises relative to the land. This type of sea level rise is called eustatic rise. Additionally the downwarping (dropping) of the earth's crust through tectonic activity and/or the accumulation of sedimentary deposits can depress the crust such that the land drops relative to the ocean. This type of sea level rise is called isostatic rise. These processes are often combined and difficult to separate. The east side of Vancouver Island is subject to both eustatic and isostatic sea level changes (Thomson *et al.* 2008).

The combined effects of the various contributors to sea level rise have been estimated for the park area to be in the order of 0.94 m (Victoria) by the year 2100 (Ausenco Sandwell 2011). This estimate was considered to be appropriate given the uncertainty in the calculation and available data (Ausenco Sandwell 2011). A typical expectation is that sea level rise will exacerbate existing coastal flooding and erosion problems. Increased coastal erosion would be due to exposure of land to higher water levels and wave action. Changes in coastal sedimentation processes are also to be expected.

4.5 Bathymetry and Topography

The bathymetry of Haro Strait is characterized by a relatively deep canyon with a steep eastern side off the coast of San Juan Island (CHS 1997). The average depth of Haro Strait is of the order of 200 m. The deepest parts of the channel are approximately 300 m deep and these are bounded to the west by a relatively shallow region that includes the area of the park. A local rise extends south of James Island for a distance of approximately 3 km and approximately 2 to 4 km. offshore of the park. Water depths either side of the rise are approximately 37 m and the crest of the rise has water depths of the order of approximately 2 m to approximately 8 m. A longer ridge extends south of Sidney Island towards and through D'Arcy Island. Water depths either side of the ridge are approximately 200 m to the east and approximately 37 m to the west. The crest of the ridge is approximately at 10 m water depth in the channels between the small islets and reefs that occur near D'Arcy Island. Hughes Passage is located between Sidney Island and D'Arcy Island with average depths of approximately 25 m. The depths of water in Haro Strait appear to be sufficient to allow the propagation of deep water waves close to the shore.

Available topographic data (NRCAN, NTS 1:50,000 sheet "Sidney") shows a low-lying coastal area that extends between to the base of steep bluffs and the park shoreline. The bluffs front much of the littoral cell between Mount Douglas Park and Saanichton Bay with the exception of a triangular low-lying area at the base of Cowichan Head and the lowlands of the park. These bluffs typically vary in height from 20 to 40 m.

In the lowland area, the park includes a beach area which appears to have an average width of 20 to 40 m. The beach at the boat ramp is approximately 20 m wide (GoogleEarth™ 2015).

4.6 Wind Analysis and Wave Hindcast

Available wind data from the airport (Climate ID #: 1018620) for the period January 1953 to December 2015 was summarized into monthly wind rose summaries. These summaries are presented in Figure 4. Wind data at the airport are recorded at an elevation of 19.5 m Geodetic Datum. These winds were adjusted to a 10 m elevation wind using a log wind profile to accommodate the fact that the boat ramp is at sea level. Wind roses indicate the direction from which the wind is blowing relative to true north. The results of the wind analysis are summarized in Table 3.

Based on the data reviewed, storm winds in the summer typically occur from the west to northwest and from the southeast to south in the winter. The dominant storm winds are from southeast during winter. Occasional strong winds occur in spring and summer from the southeast. Low-magnitude winds occur frequently year round, predominantly from the west and from the south through east but these winds do not dominate the coastal processes as they generate typically small waves and currents.

Using the wind results, a wave hindcast was carried out. Wind-generated waves are typically limited by the length of the fetch, defined by the distance of open water over which the wind can blow, and the windspeed under conditions where water depth is great enough to not affect wave generation. Haro Strait has an average depth of 100 m. The fetches relevant to the boat ramp are summarized in Table 2.

Table 2: Summary of Estimated Fetch Distances (measured from GoogleEarth™)

Fetch Direction	Estimated Distance (km)
South through Northwest	0
Southeast (to Puget Sound)	70
East (to San Juan Island)	14
Northeast (to Sidney Island)	5.5
North (to James Island)	4

Based on the available fetch data, the dominant fetch is to the southeast (100-170 degrees true north) with a length of approximately 70 km. Thus fetch limited conditions dominate, even to the southeast. An estimate of wind speed by return period was determined for the southeast winds from the wind analysis by developing a Weibull probability distribution function (Leenknecht et al. 1995) making use of the 63 annual wind speed maxima from 1953 to 2015. The Weibull probability density function was used to derive the wind speeds related to the following series of return periods: 1, 2, 5, 10, 20, 50, 100 and 200 years. The results of the wave hindcast (predicted significant wave heights and wave periods) are summarized in Table 3.

The results of the wind-wave hindcast show that wave heights from the southeast vary from approximately 1 to 3 m over a range of windspeeds. Significant wave heights for a 1-in-10 year storm are of the order of 2.4 m and 2.9 m for 1-in-100 year storm. Large waves from the southeast are significant for sediment transport processes occurring at the park.

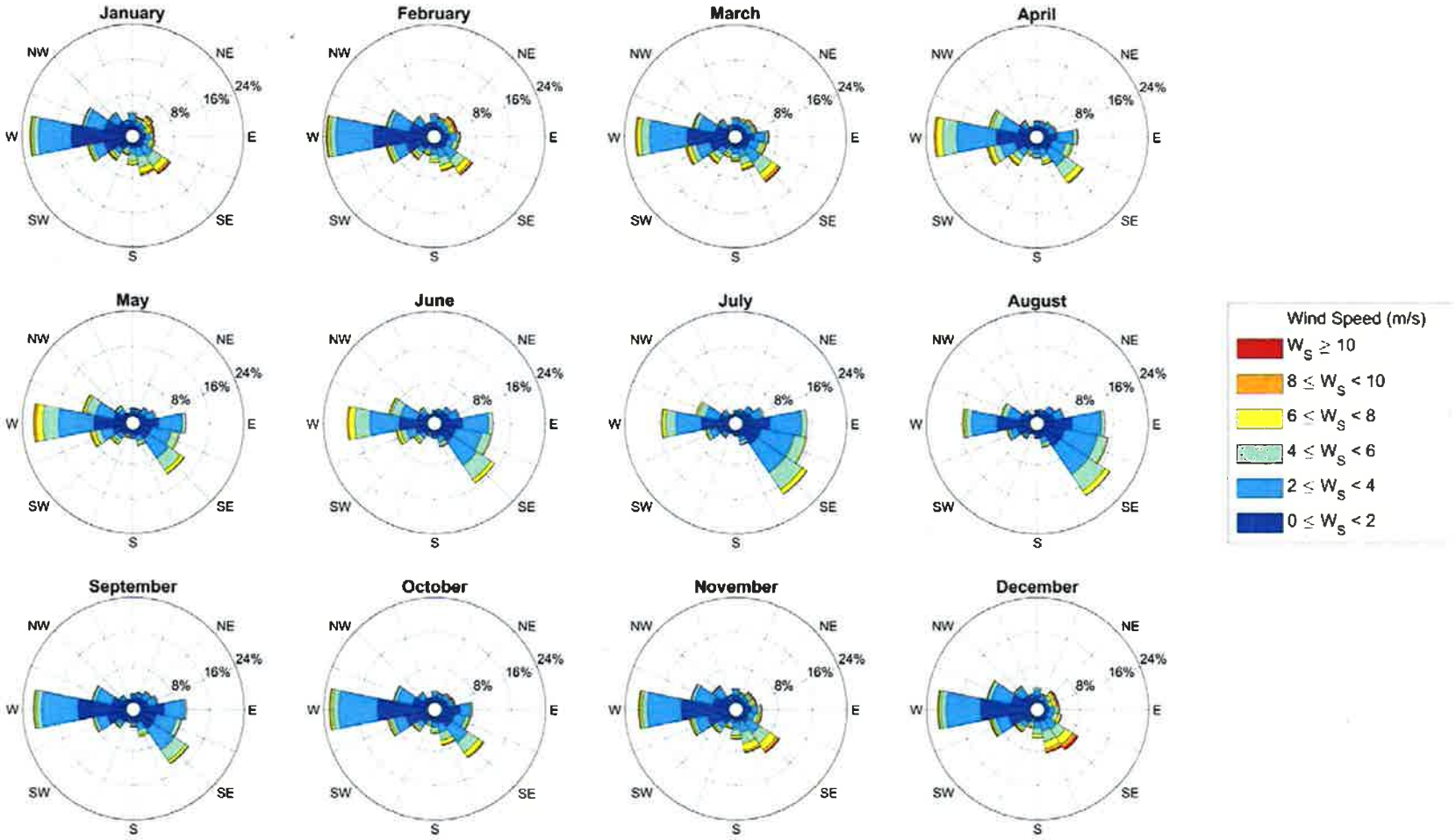

Figure 4: Monthly wind roses (climatology by month) based on the hourly wind data recorded at the Victoria International Airport weather station from January 1, 1953 to December 31, 2015

Table 3: Results of Wind-Wave Hindcast for the Southeast Direction (100 to 170 deg TN; 70-km fetch).

Return Period (years)	Wind speed (m/s) [95% Confidence Limits]	Significant Wave Height (m) [95% Confidence Limits]	Significant Wave Period (s) [95% Confidence Limits]
1	6.7 [6.0 - 7.4]	1.1 [1.0 - 1.2]	4.2 [4.0 - 4.4]
2	10.9 [9.8 - 12.0]	1.8 [1.7 - 1.9]	5.3 [5.1 - 5.4]
5	12.9 [11.6 - 14.2]	2.2 [2.0 - 2.3]	5.8 [5.6 - 5.9]
10	14.0 [12.6 - 15.4]	2.4 [2.2 - 2.6]	6.0 [5.8 - 6.2]
20	14.9 [13.4 - 16.4]	2.6 [2.4 - 2.8]	6.2 [6.0 - 6.5]
50	15.9 [14.3 - 17.5]	2.8 [2.5 - 3.0]	6.5 [6.2 - 6.7]
100	16.6 [14.9 - 18.3]	2.9 [2.7 - 3.2]	6.6 [6.3 - 6.9]
200	17.3 [15.6 - 19.0]	3.1 [2.8 - 3.4]	6.8 [6.4 - 7.1]

5.0 COASTAL PROCESSES SUMMARY

The shoreline of the park is part of a littoral system that transports sand and gravel from the coastal "feeder" bluff source areas in the south, northwards to the deposition area of Cordova Spit. The natural development of the shoreline has been driven by a balance between wave energy in Haro Strait, tidal water levels and availability of sand and gravel for transport. Winds in Haro Strait are typically from the southeast in winter. These winds, and the resulting waves, drive northwards transport of sand and gravel. Sea level has been at or near modern levels for the past few thousand years. Thus the geologic processes that result in the terrain presently occupied by the park have been active for at least several millennia.

The natural development of the coastal area of the park likely progressed through development of a spit that enclosed the area now occupied by wetland with the modern barrier beach. The spit likely advanced northwards to the present location of Cordova Spit resulting in natural drainage of the modern wetland area to the north. The elongation of the spit would have resulted in the formation of the sandy-gravelly barrier beach backed by a series of coastal sand dunes or dune ridges. This coastal barrier beach and dune system would have included elevated areas separated by low-lying wetter areas. The elevated areas would not necessarily have been at an elevation sufficient to control flooding of the wetland areas to the west. The development of the barrier beach would have been controlled through wind and wave-driven exchange of sand between the beach and dune areas punctuated by episodic overtopping of the beach and dunes during high tide and storm events. Flooding of the wetlands landward of the barrier beach would naturally have occurred through breaching of the beach and also by ocean waters entering the wetland area from the opening to the north.

In general, littoral sediments are transported in summer from offshore storage areas (sediment bars) and brought onshore by relatively gentle wave activity dominated by waves from the south east that propagate over the longest fetch. These south easterly waves refract (change direction) as they move onshore and strike the shoreline at an angle that develops a shore-parallel current and northwards sediment transport. In winter, the waves are larger than in summer and reach the shoreline with a steeper wave profile. This steeper profile leads to erosion of the beach and transport of sediments offshore to be stored in the sediment bars in the nearshore. As with the summer waves, the waves from the south east dominate and result in northwards transport of sediment.

In some areas of the existing park, the modern low-lying ground is separated from the ocean by a constructed trail on top of a berm. The elevation of the berm does not appear to have been engineered to manage coastal flooding, and generally follows the high points of the barrier beach. Sections of the trail have some degree of erosion

protection in the form of a riprap blanket on the seaward side. Portions of the berm exposed at surface suggest that it contains clean sandy soil although it also appears to contain unknown fill material (e.g., concrete rubble, tree stumps and construction debris). The majority of the berm within the park appears to have been constructed by others prior to 1987. It has been maintained by CRD and local stakeholders as recently as 2010. Historical land use activities have included development of drainage ditches for agricultural purposes in the land enclosed by the barrier beach. These ditches drain south and east to a flap gate that holds back the water at high tide and discharges it offshore at low tide.

A summary of coastal processes and the coastal environment is shown in Figure 4.

6.0 ISLAND VIEW BEACH REGIONAL PARK BOAT RAMP

Golder completed an assessment of the boat ramp located within the park. The boat ramp acts as an interruption to the net sediment transport direction which is directed northwards. This interruption has resulted in the formation of an accumulation of sediment to the south of the ramp (Photograph 8) and an eroded area of beach to the north (Photograph 7). The eroded area of beach on the northern side of the boat ramp has led to the undermining and erosion of the boat ramp structure along its north side. Additionally, log debris brought in by southeasterly waves has likely resulted in impact to the boat ramp on the south side. An eroded depression in the boat ramp surface was observed, which may have been caused or exacerbated by wave-drive log impacts. The eroded depression appears to limit use of the ramp by blocking vehicle access to the lower elevation sections of the ramp.

Island View Beach Park is a poor location for an unprotected boat ramp. The situation of the park within the coastal environment means that the present boat ramp is:

- highly exposed to the wave activity, including the direction of dominant waves;
- subject to erosion on the north side;
- subject to wave-borne debris impacts on the south side;
- episodically covered by sediment; and
- blocked by wood debris in the winter, sometimes as frequently as every two weeks.

In general, typical design guidelines for boat ramps include selecting locations that are protected or afford protection from waves so that boaters can load and unload their boats in calm water, do not interrupt or minimize their effect on the longshore sediment transport so that they are not buried by sediment, do not need regular cleaning of debris which blocks access and extends to at least 1 m below the elevation of the lowest normal tide. The design of the boat ramp is intended to minimize times when it is un-useable.

Based on site observations and the review of available data, the current boat ramp appears to be un-useable:

- during periods of high waves;
- due to erosion of the ramp surface;
- on occasion when blocked by wood debris; and
- at the lowest tides because the boat ramp appears to end at an elevation of -1.0 m Geodetic instead of -3.1 m Geodetic, or 1 m below LLWLT.

Based on our assessment and discussions onsite with CRD staff on October 30, 2015, Golder identified the following options for addressing the current condition of the boat ramp:

- leave as is;
- repair in current configuration;
- rebuild in a different configuration; and
- replace in a different location.

These four options do not include the option of decommissioning and removal of the boat ramp because the objective of this assessment was to look at the options for repair of the boat ramp.

6.1 Leave As Is

The boat ramp would be left as is. No repairs would be undertaken other than maintenance of the woody debris and sediment to enable access. Under this scenario, costs related to the boat ramp management would remain consistent with the present rate of expenditure but the use of the boat ramp would degrade over time.

6.2 Repair in Current Configuration

The boat ramp would be repaired in its current configuration. This would involve renovating the existing structure. It would not be lengthened or improved to provide protection from waves, debris and sediment. Under this scenario, CRD could expect to spend order of magnitude costs in the hundreds of thousands of dollars on the repairs plus the costs of ongoing maintenance of access. The boat ramp would not address the typical design guidelines presented above and would likely be unusable several times throughout the year. Furthermore, additional repairs could be expected within five years unless the boat ramp was completely replaced. Complete replacement is likely to cost approximately twice the amount of the cost of repairs as the existing structure would need to be removed and a whole new structure installed.

6.3 Rebuild in a New Configuration.

The boat ramp would be rebuilt in its current location but in a new configuration. The new configuration would be designed to address the typical design guidelines presented above. It would need to be protected from the dominant waves, protected from debris and sediment transport and be lengthened to provide access at all tide levels. An example configuration of a potential concept is provided in Figure 5 to illustrate the type of infrastructure that would be required to build a boat ramp that would be useable and have an adequate design life.

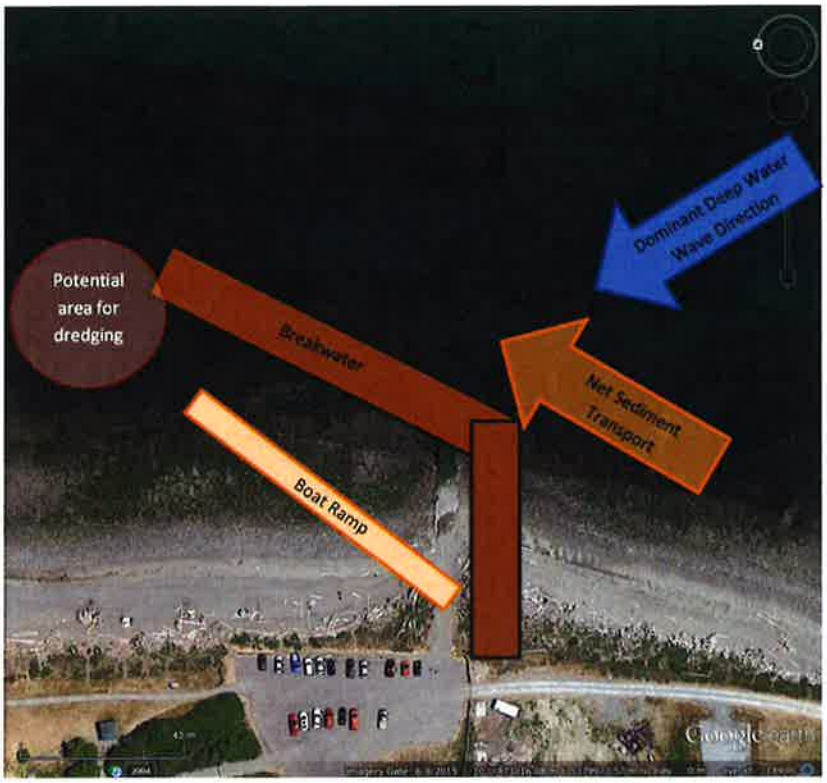

Figure 5: Potential concept for a replacement boat ramp at the present location (GoogleEarth™) that would address the principal coastal processes

In this example, the boat ramp would be extended and realigned to a water depth of -3.1 m Geodetic. A breakwater would be installed to protect the now longer boat ramp from the dominant southeasterly wind and wave direction. The breakwater would be oriented such that it would protect the boat ramp area, but this would result in offshore deflection of northwards directed sediment transport. The deflection of sediment transport would result in accumulation of sediment off the northwards tip of the breakwater and would likely result in the need for regular dredging to maintain boat access to the ramp. The deflection of sediment offshore would likely result in sediment starvation northwards along Island View Beach and increased erosion due to loss of sediment. This erosion could be partially managed by placement of the dredged material on the shore to the north of the new boat ramp, but some erosion would be expected due to offshore losses of sediment.

Using this example concept as a basis for comparison with the preceding two options, CRD could expect to spend order of magnitude costs of the order of millions of dollars on the construction the various components. The re-designed boat ramp would address the typical design guidelines presented above and would be useable throughout the year. However, maintenance costs for dredging would have to be included as well as erosion management costs within the park to the north. This example is for comparison purposes only and would require further studies to develop to an appropriate level of design.

6.4 Replace in a New Location

The boat ramp would be replaced by a new boat ramp in a new location. The new location would be selected to address the typical design guidelines presented above. It would need to be protected from the dominant waves, protected from debris and sediment transport and be long enough to provide access at all tide levels. The engineering and ecological design of this boat ramp is beyond the scope of this study and further studies would be needed to develop a concept for which a cost could be developed. Additionally, issues of land ownership, access rights and ecological impacts would need to be evaluated to assess the feasibility of replacing the boat ramp. However, it is likely that a suitable alternative to rebuilding in the current location could be identified that did not include the same erosional impacts to the park.

These four options are summarized in Table 4.

Table 4: Comparison of Boat Ramp Options and Order of Magnitude Level of Cost

Criteria	1) Leave As Is	2) Repair	3) Rebuild	4) Replace
Cost	As current	Hundreds of thousands	Millions	Undefined
Maintenance	Regular, Ongoing	Regular, Ongoing	Annual Dredging	Undefined
Impact to Park	As current	As current	Erosion of shore	Limited to negligible
Use	As current	Limited at times throughout year	Year round use	Year round use[1]

[1]The level of use would be a design criterion for the selection of a suitable location

7.0 RECOMMENDATIONS

On the basis of this assessment, Golder recommends that the CRD not undertake repairs to the boat ramp in its current configuration (Option 2). The boat ramp is in a poor location and is in sufficiently poor condition that the cost of repairs is expected to be significant (i.e., in the hundreds of thousands of dollars) compared with the potential life of potential repairs.

Golder further recommends that the CRD not rebuild the boat ramp at this location (Option 3). Rebuilding the boat ramp to a specification that meets typical design guidelines for boat ramps has a high likelihood of resulting in deleterious impacts in the form of erosion along the park shoreline

If the Leave As Is option (Option 1) is not acceptable, then Golder would recommend that CRD consider building a replacement boat ramp at another location (Option 4). The development of a suitable boat ramp design at an alternative location is beyond the scope of the present study. Further studies will be required to confirm and develop an appropriate design at a new location.

If none of the options included in this report are acceptable to the CRD, then it is recommended that the boat ramp be decommissioned and removed. Other boat ramps are available for use within 10 km to the north (in Sidney) and 15 km to the south (in Saanich). If the boat ramp was to be decommissioned it is expected that the natural sediment transport processes along the park shoreline would gradually result in the shoreline returning to a more natural state in keeping with the management directive of CRD Parks. Preparation of cost estimates for removal of the boat ramp was beyond the scope of this study.

8.0 CLOSURE

We trust that this report meets your present needs. Should you have any questions, please contact the undersigned at 250 881 7372.

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Attachments: Figure 1 – Key Plan
Figure 2 – Coastal Process Summary

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9.0 REFERENCES

Blundon., D. 2013. *Salt Marsh Stewardship.*, Environmental Technology Program Camosun College, Victoria, BC.

Canadian Hydrographic Service (DFO). 1998. *CHS Chart 3462 – Version 8.0.1019 with Nautical Data Integration™, (NDI)* Digital Ocean Electronic Charts.

Canadian Hydrographic Service (DFO). 2015. *Canadian Tide and Current Tables: Volume 5, Juan de Fuca Strait and Strait of Georgia.*

CRD (Capital Regional District). 2015. *Coastal Processes at Island View Beach Regional Park.* Online: http://issuu.com/capitalregionaldistrict/docs/ivbnep-coastalprocess?e=2590922/10796152. Accessed January 2015.

CRD. 2015. *Natural History – The Distant and Not So Distant Natural History of Island View Beach.* Online: http://issuu.com/capitalregionaldistrict/docs/ivbnep-naturalhistory?e=2590922/10796099. Accessed January 2015.

DeVries, K., N. Fisk, P. Jones, and P. LeCouffe. *Hydrology Characterization of Island View Beach Saltmarsh.* Environmental Technology Program Camosun College, Victoria, BC.

Environment Canada. 2015. *Historical Climate Data*. Online: http://climate.weather.gc.ca/. Accessed January 2015.

Fried, S and J. Dhaliwal. 2013. *A Study of Mosquito Populations at Island View Beach Regional Park and Adjacent Tsawout First Nations Land.* Environmental Technology Program Camosun College, Victoria, BC.

Golder Associates. 2013. Island View Beach Regional Park Site Visit and Coastal Berm Review for CRD Parks and Recreation, Doc: 1214760066-001-L-RevA

Google Earth Pro. 2015. [Viewed January 2016].

Mathworks (The MathWorks, Inc.) 2015. MATLAB Release 2015b [software], Natick, Massachusetts, United States.

Natural Resources Canada. 2000. National Topographic System Map 92 B/11, "Sidney".

Page, N., P. Lilley, I.J. Walker, and R.G. Vennesland. 2011. *Status report on coastal sand ecosystems in British Columbia*. Report prepared for the Coastal Sand Ecosystems Recovery Team.

Radnhawa, G.G., J. Gendall, and J. Webb. 2012. *Historical and Successional Baseline Study of Island View Beach.* Victoria: Camosun College Environmental Technology.

Sandwell, A. 2011. *Climate Change Adaptation Guidelines for Sea Dikes and Coastal Flood Hazard Land Use.* Draft Policy Discussion Paper.

Thomson, R.E. 1981. *Oceanography of the British Columbia Coast*, Can. Spec. Publ. Fish. Aquat. Sci. 56:291 p.

Usipiuk, G., R. Luo, and M. Chomik. 2013. *Evaluation of Carbon Storage in Coastal Wetlands: Central Saanich, James Island, and Sidney Island, BC.* Environmental Technology Program Camosun College, Victoria, BC.

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Soil, Rock and Groundwater Conditions: Classification and identification of soils, rocks, and geologic units have been based on commonly accepted methods employed in the practice of geotechnical engineering and related disciplines. Classification and identification of the type and condition of these materials or units involves judgment, and boundaries between different soil, rock or geologic types or units may be transitional rather than abrupt. Accordingly, Golder does not warrant or guarantee the exactness of the descriptions.

Special risks occur whenever engineering or related disciplines are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain subsurface conditions. The environmental, geologic, geotechnical, geochemical and hydrogeologic conditions that Golder interprets to exist between and beyond sampling points may differ from those that actually exist. In addition to soil variability, fill of variable physical and chemical composition can be present over portions of the site or on adjacent properties. **The professional services retained for this project include only the geotechnical aspects of the subsurface conditions at the site, unless otherwise specifically stated and identified in the report.** The presence or implication(s) of possible surface and/or subsurface contamination resulting from previous activities or uses of the site and/or resulting from the introduction onto the site of materials from off-site sources are outside the terms of reference for this project and have not been investigated or addressed.

Soil and groundwater conditions shown in the factual data and described in the report are the observed conditions at the time of their determination or measurement. Unless otherwise noted, those conditions form the basis of the recommendations in the report. Groundwater conditions may vary between and beyond reported locations and can be affected by annual, seasonal and meteorological conditions. The condition of the soil, rock and groundwater may be significantly altered by construction activities (traffic, excavation, groundwater level lowering, pile driving, blasting, etc.) on the site or on adjacent sites. Excavation may expose the soils to changes due to wetting, drying or frost. Unless otherwise indicated the soil must be protected from these changes during construction.

Sample Disposal: Golder will dispose of all uncontaminated soil and/or rock samples 90 days following issue of this report or, upon written request of the Client, will store uncontaminated samples and materials at the Client's expense. In the event that actual contaminated soils, fills or groundwater are encountered or are inferred to be present, all contaminated samples shall remain the property and responsibility of the Client for proper disposal.

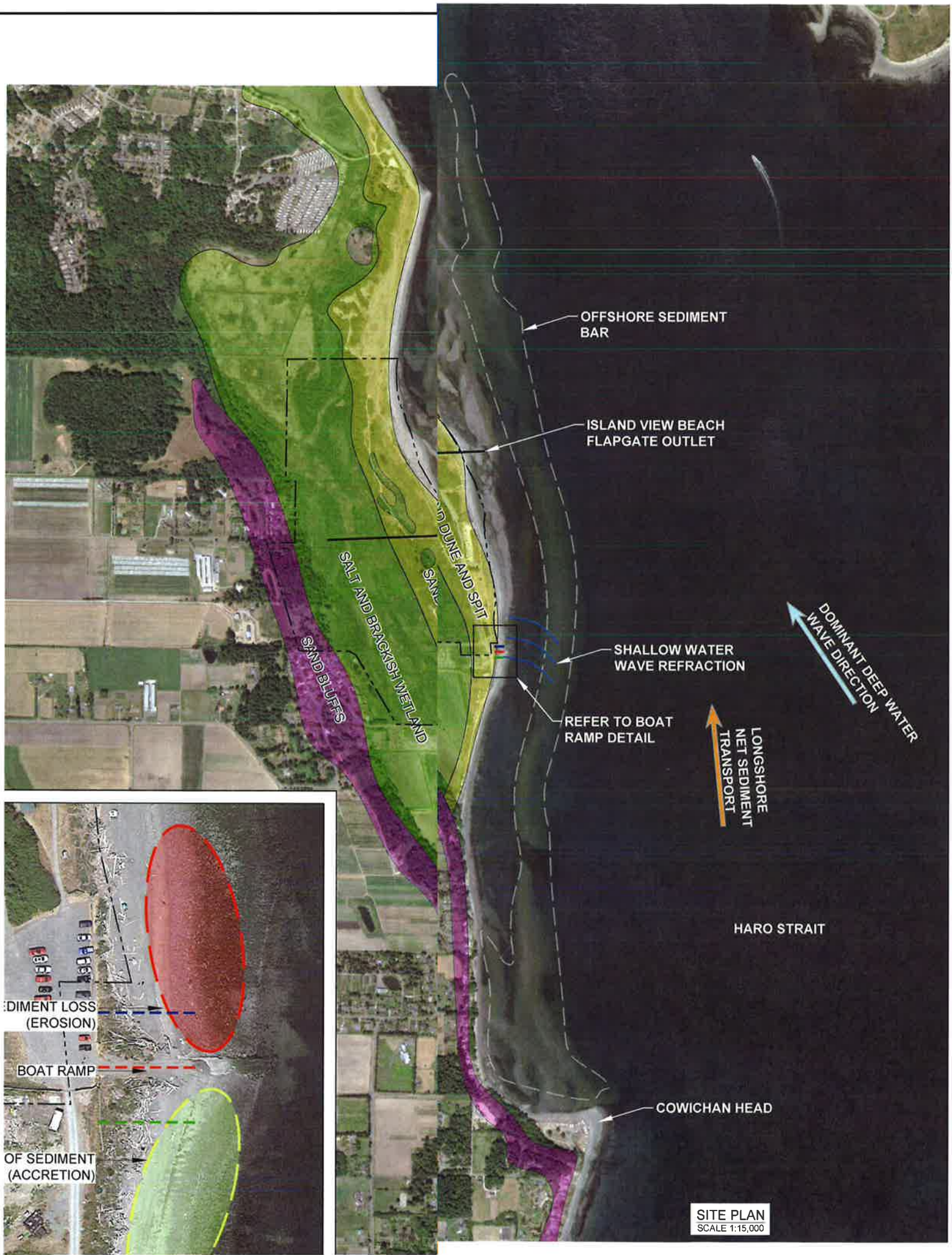
Follow-Up and Construction Services: All details of the design were not known at the time of submission of Golder's report. Golder should be retained to review the final design, project plans and documents prior to construction, to confirm that they are consistent with the intent of Golder's report.

During construction, Golder should be retained to perform sufficient and timely observations of encountered conditions to confirm and document that the subsurface conditions do not materially differ from those interpreted conditions considered in the preparation of Golder's report and to confirm and document that construction activities do not adversely affect the suggestions, recommendations and opinions contained in Golder's report. Adequate field review, observation and testing during construction are necessary for Golder to be able to provide letters of assurance, in accordance with the requirements of many regulatory authorities. In cases where this recommendation is not followed, Golder's responsibility is limited to interpreting accurately the information encountered at the borehole locations, at the time of their initial determination or measurement during the preparation of the Report.

Changed Conditions and Drainage: Where conditions encountered at the site differ significantly from those anticipated in this report, either due to natural variability of subsurface conditions or construction activities, it is a condition of this report that Golder be notified of any changes and be provided with an opportunity to review or revise the recommendations within this report. Recognition of changed soil and rock conditions requires experience and it is recommended that Golder be employed to visit the site with sufficient frequency to detect if conditions have changed significantly.

Drainage of subsurface water is commonly required either for temporary or permanent installations for the project. Improper design or construction of drainage or dewatering can have serious consequences. Golder takes no responsibility for the effects of drainage unless specifically involved in the detailed design and construction monitoring of the system.

SITE LOCATION
LITTORAL CELL
HARO STRAIT
RANGE
CHAMP DE TIR
DÉTROIT DE HARO
DND/MDN
SAANICH
PENINSULA
(VANCOUVER ISLAND)
(ÎLE DE VANCOUVER)
ISLANDS
SIDNEY
ISLAND
JAMES
ISLAND
SIDNEY CHANNEL
CORDOVA CHANNEL
MINERS CHANNEL
CORDOVA
BAY
SIDNEY SPIT
PROVINCIAL
MARINE PARK
Sidney
VICTORIA
INTERNATIONAL
AIRPORT
Saanichton
Brentwood
Bay
Keating
KEATING RIDGE
Island View
Beach
Cordova
Spit
Cordova Bay
ELK-BEAVER LAKE
REGIONAL
PARK
Prospect
Lake
Beaver
Lake
Royal Oak
JOHN DEAN PROVINCIAL
PARK
Ardmore
D'Arcy
Island
Gooch Island


OFFSHORE SEDIMENT BAR
ISLAND VIEW BEACH FLAPGATE OUTLET
SAND DUNE AND SPIT
SALT AND BRACKISH WETLAND
SAND BLUFFS
SHALLOW WATER WAVE REFRACTION
REFER TO BOAT RAMP DETAIL
DOMINANT DEEP WATER WAVE DIRECTION
LONGSHORE NET SEDIMENT TRANSPORT
HARO STRAIT
COWICHAN HEAD
DIMENT LOSS (EROSION)
BOAT RAMP
OF SEDIMENT (ACCRETION)
SITE PLAN
SCALE 1:15,000

Making a difference...together

REPORT TO REGIONAL PARKS COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 25, 2026

SUBJECT **Regional Parks Trail Repair Program Update**

ISSUE SUMMARY

To provide an overview of the Regional Parks Trail Repair Program and to showcase the valuable and important work being produced.

BACKGROUND

Trails within regional parks are the cornerstone of the outdoor recreational opportunities provided by the Regional Parks Division and are highly valued by park visitors. Park trails lead visitors into some of the region's most unique landscapes, offering access to rare ecosystems and unforgettable outdoor experiences. The trail system includes 311 official trails, totalling 371 kilometres in length, with natural-surface trails representing 87% of the network. In 2024, the Capital Regional District's (CRD) regional parks system received more than 5 million visits, highlighting its popularity and the use of the trail system.

Most of the current trails within regional parks predate park acquisitions and were created through informal or industrial use. As a result, many trails were not designed to meet modern trail standards for safety, environmental sustainability or high visitor use. Rising visitation levels, combined with the effects of climate change, place significant pressure on these legacy trails. Many trail sections now exhibit pronounced wear, erosion and structural deterioration. These conditions can diminish the quality of a visitor's experience and may also create unsafe conditions or negatively impact surrounding ecosystems.

Historically, staff focused maintenance on core needs, including removing windfalls, repairing trail infrastructure such as boardwalks and signs, cutting back vegetation and repairing gravel surface trails where visitation is highest. In 2023, to strengthen this work and begin focusing on natural-surface trails, the Regional Parks Division launched the Trail Repair Program. The program takes a systematic approach to trail repair projects by focusing efforts on areas that have a combination of high use and poor conditions. The program aims to restore and upgrade trails by consistently applying trail standards and using modern sustainable construction practices. This approach improves a visitor's experience while reducing safety risks and environmental impacts.

The program team is led by one regular full-time staff position and supplemented with three auxiliary staff who collectively contribute over 5,000 hours annually to trail enhancement projects. This work is primarily carried out during the spring and fall when ground conditions are most suitable to undertake the work.

Trail repair work is physically demanding but highly rewarding for staff, who regularly receive positive feedback from visitors in the field. This strong public support is reflected in CRD social media channels, where posts about the program generate high engagement. A summary of program statistics and social media metrics is provided in Appendix A.

Trail Repair Program Highlights

- Thetis Lake Regional Park – Upper Thetis Lake Trail (2023-2024): Upgraded trail segments to improve the trail surface to create a more user-friendly trail and align surface quality with the Lower Thetis Trail.
- Mt. Work Regional Park – Summit Trail (2024): Repaired over 40 deficiencies, including constructing a reroute to eliminate hazardous terrain.
- Bear Hill Regional Park – Summit Trail (2024): Collaborated with conservation staff to stabilize sensitive habitat areas to protect federally listed species at risk, including Yellow Montane Violet and White-top Aster.
- Francis/King Regional Park – Centennial Trail (2025): Worked with a cultural monitor and constructed a new trail segment to eliminate a persistent muddy section of the trail. Removed two boardwalks, eliminating the need for repairs and replacement, while improving sustainability and user experience.
- Sea to Sea Regional Park – Mt. Quimper Summit Trail (2025): Addressed erosion issues and redirected water off the trail surface while also aligning the trail with equestrian use standards. The work connects with and complements work done by the Sooke Mountain Bike Club on the Grouse Trails to provide adaptive cycling opportunities.

2026 Trail Repair Program Work Plan

- Witty's Beach Trail, Witty's Lagoon – Address damages done to the trail in late 2025 and address ongoing maintenance and sustainability challenges of the trail in its current location. Reroute the trail from Sitting Lady Falls to the lower estuary and naturalize the old section of trail.
- Quimper Summit Trail (South), Sea to Sea – Complete trail repairs on the Quimper Summit Trail to the Quimper Connector Trail so we don't leave repairs to trails partially complete.
- Sunset Bridal Trail, Horth Hill – Address water issues and bring the trail up to equestrian standard.
- Coast Trail, East Sooke – Reroute eight areas with potential fall hazards. Whether this gets completed in 2026 will depend on the findings in the Heritage Site Review.

These efforts demonstrate a coordinated approach to trail rehabilitation that balances visitor needs, operational efficiency and ecological integrity, and align with priorities identified in the CRD Regional Parks and Trails Strategic Plan 2022-2032.

IMPLICATIONS

Financial Implications

The Regional Parks Trail Repair Program is funded through the core operating budget. The program is allocated one full-time position and is supplemented by 3,120 hours of auxiliary staff time with minor operating expenses totalling $12,461. The overall budget impact is $267,000, representing 1.7% of the Regional Parks operating budget.

CONCLUSION

The Regional Parks Trail Repair Program is an important investment in the long-term sustainability and resilience of the trail system within regional parks. By applying consistent

standards and focusing on areas with the greatest need, the program takes a proactive approach to building a trail system that can better withstand increasing environmental and visitor use pressures. This approach helps protect natural values while supporting high-quality visitor experiences across the regional parks system.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Mike MacIntyre, Senior Manager, Regional Parks
Concurrence:	Luisa Jones, MBA, General Manager, Parks, Recreation & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Regional Parks - Trail Repair Program - Summary
Presentation: Regional Parks Trail Repair Program

APPENDIX A

Regional Parks - Trail Repair Program - Summary

Regional Parks Committee
February 25, 2025

Trail Repair Information 2023 - 2025			
Park Name	**Trail Name**	**Number of Deficiencies Repaired**	**Metres of Trail Repaired**
Mt. Work	Summit Trail	44	560
Bear Hill	Summit Trail	7	20
East Sooke	Coast Trail	4	50
Mill Hill	Calypso Trail	2	5
Thetis Lake	Upper Thetis Lake Trail	30	885
Sea to Sea	Quimper Summit Trail	15	1,285
Francis/King	Centennial Trail	5	140
	Total	107	2,945

Staff Resources 2023 - 2025	
Total Days Repairing Trails	**Total Hours Repairing Trails**
1,720 staff days	13,760 staff hours

Sensitive Habitat Protection	
2 Federally Listed Species at Risk Protected	**White-top Aster** **Yellow Montane Violet**

Trail Infrastructure 2023 - 2025				
Added	**Replaced**	**Reduced**	**Deleted**	**Upgraded**
4 Culverts	1 Boardwalk	1 Boardwalk	1 Boardwalk	6 Culverts

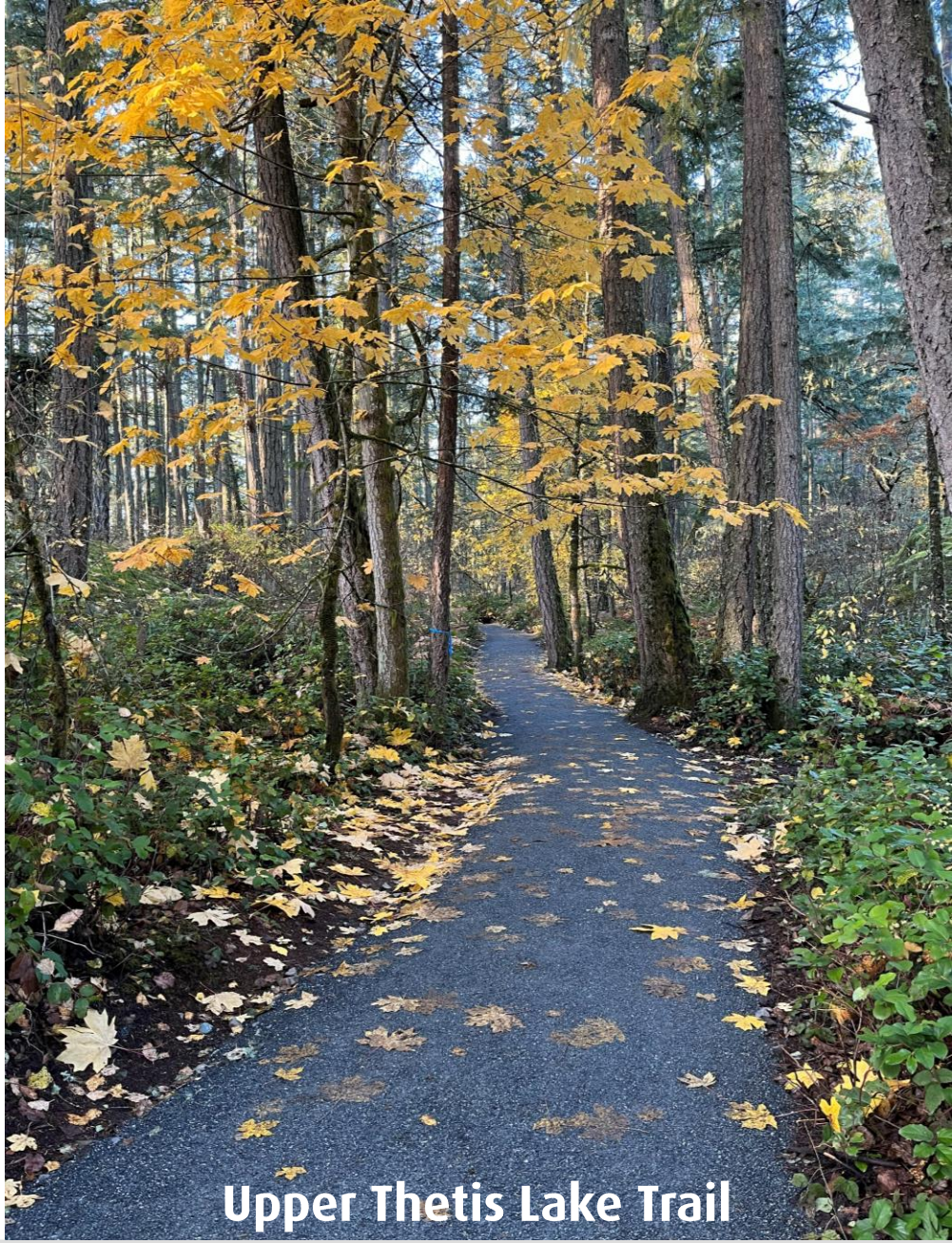
Social Media Metrics 2023 - 2025						
Posts	**Platform**	**Views**	**Likes**	**Comments**	**Saves**	**Shares**
2 Social Media Posts	Instagram	7,089	304	4	6	3
	Facebook	14,202	225	23	11	1
	Total	21,201	529	27	17	4

Regional Parks Trail Repair Program

Regional Parks Committee
February 25, 2026

Presentation Outline

- Overview of trails in regional parks
- Background on the Trail Repair Program
- Showcase program results
- 2026 Trail Repair Program work plan



Overview of Regional Park Trails

- Trails in all 34 regional parks span throughout 13,300+ hectares of land.
- This includes 311 official trails spanning over 371 kilometres.
- 87% are natural surface trails.


Mt. Work - Summit Trail

Trail Impacts

- Trail design
- Visitation levels
- Climate events

Switch Back Repair
Sea to Sea
Mt. Quimper Summit Trail

Trail Repair Program Background

- The Trail Repair Program started in 2023.
- The focus is to maintain a safe and sustainable trail system while protecting cultural and environmental values.
- Trail repairs are prioritized based on inspection results.
- Project planning incorporates Environmental Impact Assessments, Archaeology Heritage Site Reviews and park management plan direction.

Trail Repair Program Resources and Statistics

- One full-time park technician
- Three auxiliary support staff (3,120 hours combined)
- Spring and fall construction season


Staff Training Day
Thetis Lake - Fairedge Trail

Park Name	Trail Name	Number of Deficiencies Repaired	Metres of Trail Repaired
Mt. Work	Summit Trail	44	560
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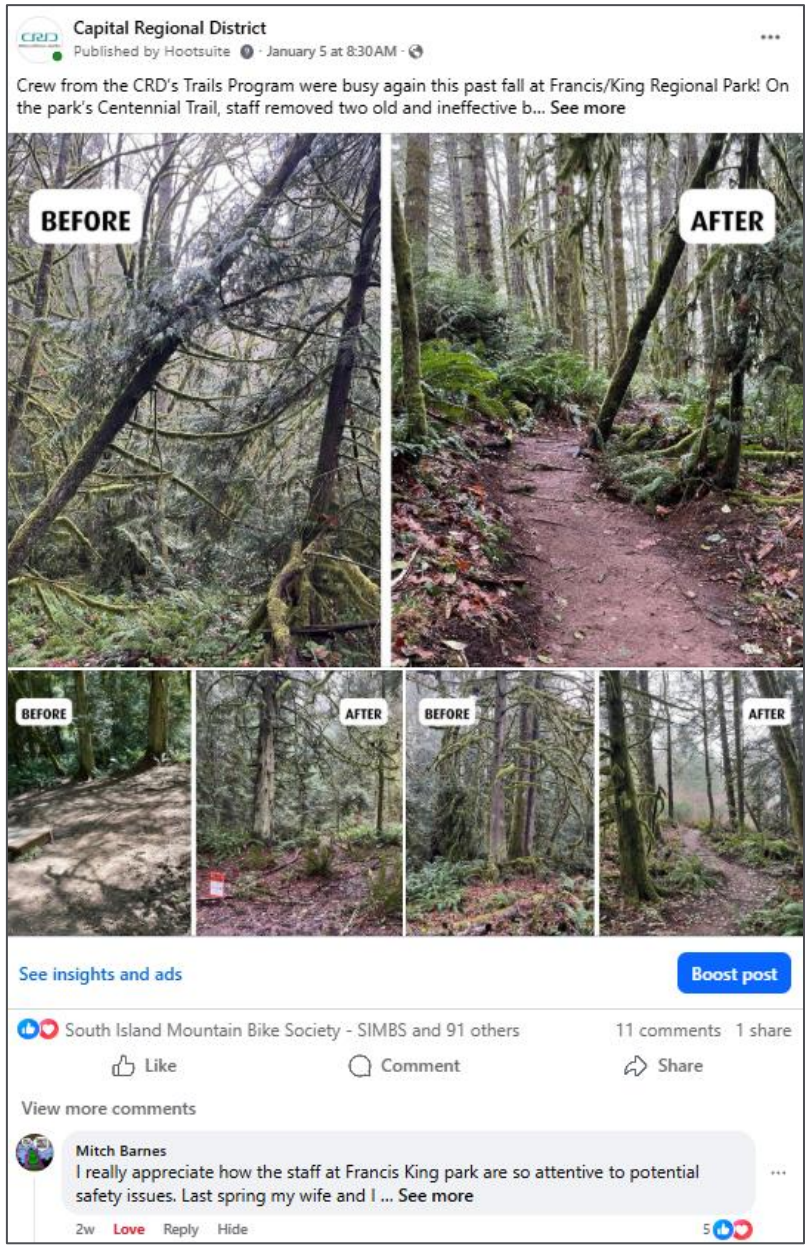
Francis/King	Centennial Trail	5	140
	Total	107	2,945

Trail Repair Program Social Media Metrics

Post	Social Media Platform	Views	Likes	Comments	Saves	Shares
Two social media posts (insights as of Jan. 12)	Instagram	7,089	304	4	6	3
	Facebook	14,202	225	23	11	1
Total	-	21,201	529	27	17	4




Mt. Work – Summit Trail
Old Route


Mt. Work – Summit Trail
Reroute

Visitor Safety Improvements

- Rerouting completed on the Summit Trail in Mount Work Regional Park.
- The existing trail was moved from a section of bedrock, resulting in a more desirable slope with adequate drainage and proper out-slope to shed water from the trail.

Visitor Experience Improvements

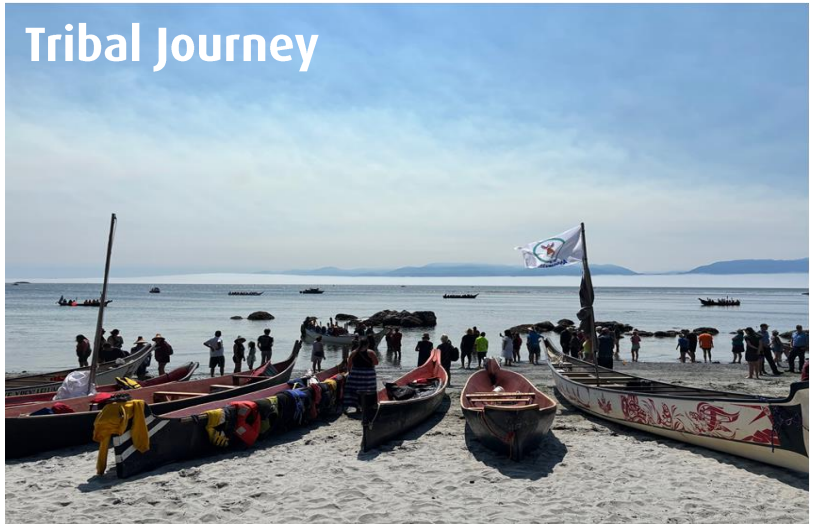
- Repairs were made to the Mt. Quimper Summit Trail in Sea to Sea Regional Park.
- Redistributed the large cobbly rocks and capped them with mineral soil from ditch creation.
- Created a smoother surface for park visitors and directed water from the trail, enhancing the experience.

Natural & Cultural Area Protection

- Enhanced trail tread and mitigated further erosion.
- Filled voids with mineral soil and seeded it with native grass seed.
- Installed fencing to protect the area from trampling.
- Enhanced protection for rare plants: Yellow Montane Violet and White-top Aster.

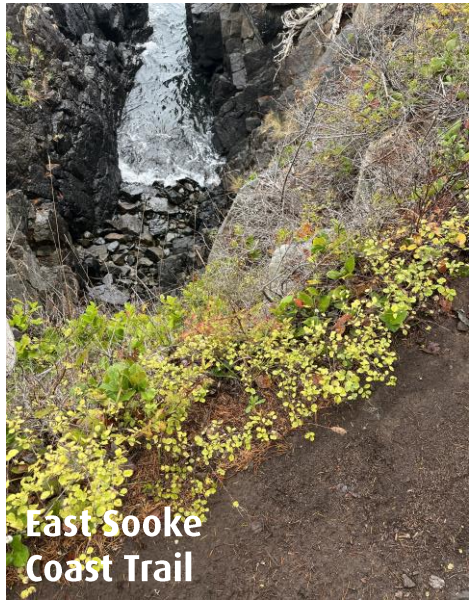
Special Event Support

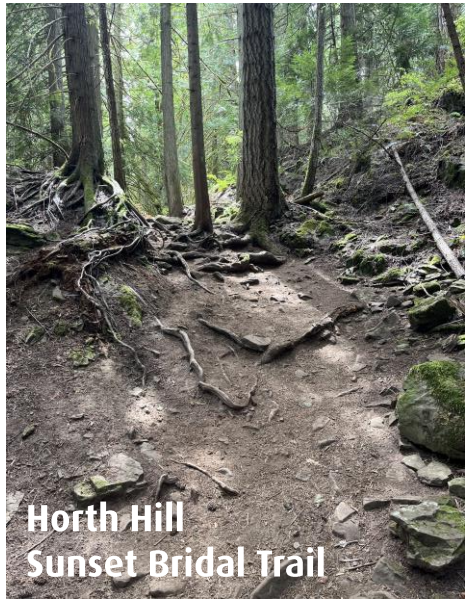
- Created improved beach access for the Tribal Journeys Event at Aylard Farm in East Sooke Regional Park.



2026 Trail Repair Program Work Plan

- Witty's Lagoon– Beach Trail
- Horth Hill – Sunset Bridal Trail
- Sea to Sea – Quimper Summit Trail
- East Sooke – Coast Trail





Thank You

Questions?

Capital Regional District

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