



Galiano Island Local Trust Committee Regular Meeting Agenda

Date: March 7, 2022
Time: 12:30 pm
Location: Electronic Meeting

			Pages
1.	CALL TO ORDER	12:30 PM - 12:50 PM	
2.	APPROVAL OF AGENDA		
3.	TRUSTEE REPORT		
4.	CHAIR'S REPORT		
5.	TOWN HALL AND QUESTIONS	12:50 PM - 1:10 PM	
6.	COMMUNITY INFORMATION MEETING		
	None		
7.	PUBLIC HEARING		
	None		
8.	MINUTES	1:10 PM - 1:20 PM	
8.1.	Local Trust Committee Minutes Dated February 7, 2022 (for Adoption)		4 - 13
8.2.	Section 26 Resolutions Without Meeting Report - None		
8.3.	Advisory Planning Commission Minutes - None		
9.	BUSINESS ARISING FROM MINUTES		
9.1.	Follow-up Action List Dated Feb 2022		14 - 15
10.	DELEGATIONS		
11.	CORRESPONDENCE	1:20 PM - 1:40 PM	
<i>Correspondence received concerning current applications or projects is posted to the LTC webpage</i>			

11.1.	Wiser Projects re Affordability of Georgia View Affordable Housing (Rezoning Application GL-RZ-2019.1)	16 - 17
12.	MEETING BREAK - COMMUNITY UPDATE	
13.	APPLICATIONS AND REFERRALS	1:40 PM - 2:40 PM
13.1.	GL-RZ-2021.1 (GALI) – Staff Report (attached)	18 - 26
13.2.	GL-RZ-2014.1 (Crystal Mountain) - Staff Report (attached)	27 - 61
14.	LOCAL TRUST COMMITTEE PROJECTS	2:40 PM - 3:00 PM
14.1.	Groundwater Sustainability Implementation Project – Staff Report (attached)	62 - 79
15.	REPORTS	3:00 PM - 3:10 PM
15.1.	Work Program Reports (attached)	
15.1.1.	<u>Top Priorities Report Dated Feb 2022</u>	80 - 80
15.1.2.	<u>Projects List Report Dated Feb 2022</u>	81 - 82
15.2.	Applications Report Dated Feb 2022 (attached)	83 - 88
15.3.	Trustee and Local Expense Report Dated Dec 2021 (attached)	89 - 89
15.4.	Adopted Policies and Standing Resolutions (attached)	90 - 93
15.5.	Local Trust Committee Webpage	
15.6.	Islands Trust Conservancy Report - None	
16.	NEW BUSINESS	3:10 PM - 3:40 PM
16.1.	Rogers Communications Letter re CREST Tower	94 - 96
16.2.	Shoreline Protection Model Bylaw Report - Briefing	97 - 149
16.3.	Advisory Planning Commission Vacancies	
17.	UPCOMING MEETINGS	
17.1.	Next Regular Meeting Scheduled for April 4, 2022 at the Galiano South Community Hall, Galiano Island	
18.	TOWN HALL	3:40 PM - 4:00 PM
19.	CLOSED MEETING	
	None	

20. ADJOURNMENT

4:00 PM - 4:00 PM



Galiano Island Local Trust Committee

Minutes of Regular Meeting

Date: February 7, 2022

Location: Electronic Meeting

Members Present: Dan Rogers, Chair
Jane Wolverton, Trustee
Tahirih Rockafella, Trustee

Staff Present: Brad Smith, Island Planner
Robin Ellchuk, Staff
Carly Bilney, Recorder

Public Present: There were approximately 44 members of the public.

1. CALL TO ORDER

Chair Rogers called the meeting to order at 12:30 pm. He acknowledged that the meeting was being held in the traditional territory of the Coast Salish First Nations.

2. APPROVAL OF AGENDA

The following additions to the agenda were presented for consideration:

- Item 16.2 – Support letter for the Galiano Health Centre and a proposal for an urgent primary care facility; and
- Under item 16.1, (Shoreline Protection Model Bylaw Report – Briefing) a heritage commission or Advisory Planning Commission (APC) that comes out of the Shoreline Protection Model Bylaw.

By general consent the agenda was approved as amended.

3. TRUSTEE REPORT

Trustee Wolverton reported on the following:

- There has been a lot of correspondence, meetings and inquiries since the Local Trust Committee (LTC) last met;

- The ecofootprint project led by the Galiano Conservancy Association was supposed to have been reported on in March, but will be delayed until May or June when a presentation will be made at the Yellow House; and
- The level of intolerance for opposing views including personal attacks on social media, stolen signs, etc. is troubling.

Trustee Rockafella reported on the following:

- The deadline for the budget survey has passed and results will be shared at the March Trust Council.

4. CHAIR'S REPORT

Chair Rogers reported on three main issues the Trust is currently dealing with including:

- The budget, including fixed expenses related to staffing, administration and insurance;
- Trust Council's Governance Review to come out in March; and
- The new engagement plan related to the Trust Policy Statement review that is receiving lots of attention and will include both digital and in-person engagement.

5. TOWN HALL AND QUESTIONS

Town hall was held and the following comments were made:

- Opposition was expressed for GL-RZ-2014.1 (Crystal Mountain) and the LTC was requested to withdraw the proposed bylaw amendment;
- It was noted that a variance would be needed to put water tanks within setbacks;
- A question was raised about what innovation David Marlor, Director of Local Planning Services at the Islands Trust, was recently awarded for;
- Support was expressed for proposed changes to the Trust Policy Statement;
- The 2018 housing needs assessment is the most recent for the Trust area as a whole and an updated one should be completed in the next two years;
- Support was expressed for both affordable housing projects and for any effort put toward providing long-term rental stock on the island;
- Trustees pay attention to the changing demographics on the island as represented in the census;
- A lack of affordable housing on Galiano has impacted every family and organization;
- It is difficult to set up a rent structure for affordable housing developments before confirming the kind of funding that will drive the project;
- Timelines for the affordable housing projects are often determined by where the LTC is at in the process and what is left to do;
- Both affordable housing agreements can be achieved within the remaining term of the current LTC and when outstanding items are complete the LTC can direct staff to schedule a Community Information Meeting (CIM) and a Public Hearing;

- It is important to ensure that rents are a combination of the lower end of market rents and rent geared to income; and
- Community members can contribute to the progress of the affordable housing proposals by working with the proponents and sharing their views with the LTC.

Trustee Rockafella recused herself from the meeting at 1:39 pm due to conflict of interest with GL-RZ-2021.1 (GALI). The following comments were made:

- Support was expressed for the GALI application and the LTC was urged to move it forward as soon as possible.

Trustee Rockafella returned to the meeting at 1:46 pm. Trustee Wolverton recused herself from the meeting at 1:46 pm due to conflict of interest with GL-RZ-2019.1 (GIGARHS).

- Trustees should not feel responsible for the time and money spent by applicants;
- We are in a crisis and need bold leadership from the Trustees; and
- Support was expressed for an expedient approach to the GIGARHS application.

Trustee Wolverton returned to the meeting at 1:59 pm.

6. COMMUNITY INFORMATION MEETING

None

7. PUBLIC HEARING

None

8. MINUTES

8.1 Local Trust Committee Minutes Dated December 6, 2021 (for Adoption)

The following amendments to the minutes were presented for consideration:

- Item 13.3 GL-RZ-2014.1 (Crystal Mountain) Staff Report (in the Minutes of the Galiano LTC meeting on December 6, 2021 and on page 8 of the current agenda package) notes *The LTC has received commentary from people who say that because the CMS application cannot be restricted to a non-profit it should not fall under the "Economic Activity" section of the OCP.* The commentary should instead note that it "should fall" under the Economic Activity section of the OCP; and
- Item 13.4 GIGARHS Update, (in the Minutes of the Galiano LTC meeting on December 6, 2021 and on page 9 of the current agenda package) the third bullet from the bottom should note: A "conditional" water license has been issued by the Province.

Discussion was held about the accuracy of the statement, "The Province has allocated less water than GIGARHS requested."

By general consent the minutes were adopted as amended.

8.2 Section 26 Resolutions Without Meeting Report Dated Jan 2022

Received for information.

8.3 Advisory Planning Commission Minutes - None

9. BUSINESS ARISING FROM MINUTES

9.1 Follow-up Action List Dated Jan 2022

Received for information.

10. DELEGATIONS - None

11. CORRESPONDENCE

Correspondence received concerning current applications or projects is posted to the LTC webpage

Discussion was held about the letter sent by the LTC to Rogers Corporation to which a response has not yet been received.

12. MEETING BREAK - COMMUNITY UPDATE

A meeting was held between 2:13 and 2:20 pm.

13. APPLICATIONS AND REFERRALS

13.1 GL-RZ-2019.1 (GIGARHS) – Staff Report

Trustee Wolverton recused herself from the meeting at 2:20 pm due to conflict of interest with GL-RZ-2019.1 (GIGARHS).

Planner Smith reviewed the Staff Report related to the GIGARHS application. A presentation was given by Eleni Gibson of Wiser Projects. Discussion was held and the following comments were made:

- The proposed rent structure does not specify a maximum income permitted for residents of the proposed development;
- Technical studies have been completed and various funding options are being explored;
- The increasing cost of construction makes it hard to predict capital costs of the project;
- The rent structure is difficult to specify in a housing agreement as it could change based on the funding context as different funders stipulate different rental requirements;
- A housing agreement requires flexibility;
- Funders view approved rezoning as a major step forward;

- The LTC needs to ensure that residents can live on Galiano within their means; and
- The applicants need to ensure affordability is included in the proposed rent structure.

GL-2022-009

It was Moved and Seconded,

that the Galiano Island Local Trust Committee has reviewed the Islands Trust Policy Statement Directive Policies Checklist and determined that proposed Bylaw No. 276 and 277 are not contrary to or at variance with the Islands Trust Policy Statement.

CARRIED

GL-2022-010

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to enter a new cost recovery agreement with the applicant for the legal costs to review and complete the section 219 covenant and housing agreement for application GL-RZ-2019.1 (GIGARHS).

CARRIED

GL-2022-011

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to include recommendations of the professional arborist report in the section 219 covenant for application GL-RZ-2019.1 (GIGARHS).

CARRIED

GL-2022-012

It was Moved and Seconded,

that the Galiano Island Local Trust Committee request that the GL-RZ-2019.1 (GIGARHS) applicants make amendments to their draft housing agreement to reflect concerns around affordability raised by the Local Trust Committee.

CARRIED

GL-2022-013

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to schedule a separate Community Information Meeting and Public Hearing conditional upon receipt of an affordable housing agreement, a Section 219 Covenant, and a water management plan, to the satisfaction of staff.

CARRIED

Trustee Wolverton returned to the meeting at 4:09 pm.

13.2 GL-RZ-2021.1 (GALI) – Staff Report

Trustee Rockafella recused herself from the meeting at 4:09 pm due to conflict of interest with GL-RZ-2021.1 (GALI).

Planner Smith reviewed the Staff Report related to the GALI application. Discussion was held and the following comments were made:

- The applicants are looking for flexibility in the proposed housing agreement;
- It is the primary goal and purpose of the Galiano Affordable Living Initiative Society to provide affordable housing;
- The engineer designing the septic system must complete test excavations on site before confirming the adjusted design; and
- Residents of Page Drive are supportive of the application.

GL-2022-014

It was Moved and Seconded,

that the Galiano Island Local Trust Committee Bylaw No. 280, cited as “Galiano Island Official Community Plan Bylaw No. 108, 1995, Amendment No. 3, 2021,” be read a first time.

CARRIED

GL-2022-015

It was Moved and Seconded,

that the Galiano Island Local Trust Committee has reviewed the Islands Trust Policy Statement Directive Policies Checklist and determined that draft Bylaw No. 280 is not contrary to or at variance with the Islands Trust Policy Statement.

CARRIED

GL-2022-016

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to seek a legal opinion on the updated rent structure proposal as provided by the applicant for consistency with the Galiano Island Official Community Plan No. 108. 1995.

CARRIED

GL-2022-017

It was Moved and Seconded,

that the Galiano Island Local Trust Committee direct staff to schedule a separate Community Information Meeting and Public Hearing conditional upon receipt of an affordable housing agreement, a septic report and a Section 219 Covenant, to the satisfaction of staff.

CARRIED

Trustee Rockafella returned to the meeting at 5:00 pm.

13.3 Salt Spring Island Local Trust Committee Referral for Proposed Bylaw No. 521 (for response)

GL-2022-018

It was Moved and Seconded,

that the interests of the Galiano Island Local Trust Committee are unaffected by Bylaw No. 521 (Salt Spring Islands Trust Area).

CARRIED

13.4 Salt Spring Island Local Trust Committee Referral for Proposed Bylaw No. 526 (for response)

GL-2022-019

It was Moved and Seconded,

that the interests of the Galiano Island Local Trust Committee are unaffected by Bylaw No. 526 (Salt Spring Islands Trust Area).

CARRIED

14. LOCAL TRUST COMMITTEE PROJECTS

14.1 Galiano Island Local Trust Committee Fees Bylaw No. 281 (for consideration)

GL-2022-020

It was Moved and Seconded,

that the Galiano Island Local Trust Committee Bylaw No. 281, cited as "Galiano Island Local Trust Committee Fees Bylaw, 2021," be given First Reading.

CARRIED

GL-2022-021

It was Moved and Seconded,

that the Galiano Island Local Trust Committee Bylaw No. 281, cited as "Galiano Island Local Trust Committee Fees Bylaw, 2021," be given Second Reading.

CARRIED

GL-2022-022

It was Moved and Seconded,

that the Galiano Island Local Trust Committee Bylaw No. 281, cited as "Galiano Island Local Trust Committee Fees Bylaw, 2021," be given Third Reading.

CARRIED

GL-2022-023

It was Moved and Seconded,

that the Galiano Island Local Trust Committee Bylaw No. 281, cited as “Galiano Island Local Trust Committee Fees Bylaw, 2021”, be forwarded to the Secretary of the Islands Trust for approval by the Executive Committee.

CARRIED

14.2 DL 62, 68, 72, 87 Rezoning Project – Staff Report w Project Charter

GL-2022-024

It was Moved and Seconded,

that the Galiano Island Local Trust Committee:

- a) Endorse the attached District Lot (DL) 64, 68, 72 and 87 rezoning project charter and associated scope of work, timelines and budget; and
- b) Direct staff to begin working on District Lot (DL) 64, 68, 72 and 87 rezoning project deliverables.

CARRIED

15. REPORTS

15.1 Work Program Reports

15.1.1 Top Priorities Report Dated Jan 2022

Received for information.

15.1.2 Projects List Report Dated Jan 2022

Received for information.

15.2 Applications Report Dated Jan 2022

Received for information.

15.3 Trustee and Local Expense Report Dated Nov 2021

Received for information.

15.4 Adopted Policies and Standing Resolutions

Received for information.

15.5 Local Trust Committee Webpage

15.6 Islands Trust Conservancy Report Dated November 2021

Received for information.

16. NEW BUSINESS

16.1 Shoreline Protection Model Bylaw Report – Briefing

GL-2022-025

It was Moved and Seconded,

that the Galiano Island Local Trust Committee request staff that the Shoreline Protection Model Bylaw be received and brought back to the next Local Trust Committee meeting.

CARRIED

16.2 Support letter for the Galiano Health Centre and proposal for an urgent primary care facility

GL-2022-026

It was Moved and Seconded,

that the Galiano Local Trust Committee write a letter of support regarding the Galiano Health Care Centre's application for designation as a community health centre urgent primary care site.

CARRIED

17. UPCOMING MEETINGS

17.1 Next Regular Meeting Scheduled for March 7, 2022 at the South Community Hall, Galiano Island

18. TOWN HALL

Town hall was held and the following comments were made:

- Rogers Corporation already installed an antenna on the tower and may therefore not respond to the letter sent by the LTC.

Trustee Wolverton recused herself from the meeting at 5:16 pm due to conflict of interest with GL-RZ-2019.1 (GIGARHS). The following comments were made:

- The LTC is under so much pressure to rush the GIGARHS housing proposal and this is not good;
- The LTC has worked through the GIGARHS application in a deliberate and considerate manner; and
- Disappointment was expressed that affordable housing has not been built on Galiano in twenty years.

Trustee Wolverton returned to the meeting at 5:27 pm.

19. CLOSED MEETING (Distributed Under Separate Cover)

Galiano Local Trust Committee
Regular Meeting Minutes
February 7, 2022

DRAFT

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19.1 Motion to Close the Meeting

GL-2022-027

It was Moved and Seconded,

that the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, s. 90(1)(a)(d) for the purpose of considering:

- Adoption of In-Camera Meeting Minutes Dated April 12, 2021 and June 14, 2021;
- Appointment of APC Members;

AND that the recorder and staff attend the meeting.

CARRIED

19.2 Recall to Order

19.3 Rise and Report - None

20. ADJOURNMENT

By general consent the meeting was adjourned at 5:40 pm.

Dan Rogers, Chair

Certified Correct:

Carly Bilney, Recorder



Follow Up Action Report

Galiano Island

06-Dec-2021

Activity	Responsibility	Dates	Status
1 13.2 GL-RZ-2021.2 (Gaylor) - Staff to initiate early engagement with First Nations re RZ proposal	Brad Smith Lisa Wilcox	Target: 21-Jan-2022	In Progress
2 13.2 GL-RZ-2021.2 (Gaylor) - Staff to initiate discussions with provincial agencies re: DL 85/86 and 87	Brad Smith	Target: 21-Jan-2022	Completed
3 13.3 Crystal Mountain - Staff to develop draft bylaw amendment re maximum 35 people day use limit	Brad Smith	Target: 21-Jan-2022	Completed

07-Feb-2022

Activity	Responsibility	Dates	Status
1 8.1 Dec 6, 2021 LTC meeting minutes adopted as amended	Robin Ellchuk	Target: 25-Feb-2022	Completed
2 13.3/13.4 SSI BL 521 and 526 - respond that interests are unaffected	Jas Chonk	Target: 25-Feb-2022	Completed
3 14.1 Fees Bylaw No. 281 given 1st, 2nd, 3rd reading- update bylaw, send to EC secretary for final approval	Brad Smith Jas Chonk Robert Kojima	Target: 25-Feb-2022	In Progress
4 14.2 DL 62, 68, 72 87 project charter adopted as presented, staff to initiate work including engagement with BC Parks and First Nations, and make amendments to BL 231 and 232	Brad Smith	Target: 15-Mar-2022	In Progress

Follow Up Action Report

Galiano Island

07-Feb-2022

Activity	Responsibility	Dates	Status
5 13.2 GALI - Initiate legal opinion on OCP consistency with updated rent structure options.	Brad Smith	Target: 25-Feb-2022	Completed
6 13.1 GIGARHS - Establish new CRA for HA and s. 219 covenant with applicant	Brad Smith	Target: 28-Feb-2022	In Progress
7 13.1 GIGARHS - Send arborist recommendations to legal counsel for covenant drafting	Brad Smith	Target: 04-Mar-2022	In Progress
8 13.2 GALI - BL 280 given 1st reading, update draft bylaw, post on webpage	Jas Chonk Robin Ellchuk	Target: 25-Feb-2022	Completed
9 16.1 Shoreline Protection bylaw - defer to March 7 agenda	Jas Chonk	Target: 28-Feb-2022	Completed
10 13.1 GALI - Establish CRA for HA and s. 219 covenant with applicant	Brad Smith	Target: 25-Feb-2022	In Progress
11 In-camera meeting minutes of April 12, 2021 and June 14, 2021 adopted as presented.	Robin Ellchuk	Target: 25-Feb-2022	Completed



Local Trust Committee
Islands Trust – Galiano Island Trust Area
Sent via email

February 25, 2022

RE: Affordability of Georgia View Affordable Housing (Rezoning Application GL-RZ-2019.1)

Dear Trustees,

This letter is a follow up to correspondence dated January 19, 2022 and the subsequent discussion at the February 7th LTC Meeting, regarding the affordability of the Georgia View Project proposed by GIGARHS, and the associated Housing Agreement to secure affordability.

Considering the comments from staff and Trustees on February 7th, GIGARHS has reviewed previous housing agreement drafts and would like to propose the following metrics of affordability:

- A minimum of 70% of the units will be secured as “affordable units”; the remainder will be “affordable market units”.
 - This structure ensures the project is viable for both BC Housing (which has required 70% of units to be deeply subsidized or affordable and 30% to be affordable market) and CMHC (which requires the average affordability of the project to be 80% or less of the Median Market Rent [MMR]).
- “Affordable units” will have rental rates limited through BC Housing’s Housing Income Limits (HILs). Affordable units will not be rented at more than 30% of the HIL (calculated as a monthly amount).
 - The gross household income of tenants of affordable units must not exceed the HIL.
- Affordable market unit rental rates will be tied to current market conditions and approved by the affordable housing funder.
 - BC Housing and CMHC have slightly different parameters for what is considered affordable market, leading to the need for a broad requirement in the housing agreement that can be narrowed and clarified in subsequent agreements with the housing funder.
- All tenants of any dwelling unit (whether affordable or affordable market) must be eligible as per requirements set out in the housing agreement.
 - Priority is given to current residents of Galiano Island or Indigenous peoples with ties to Galiano Island or who are members of First Nations with rights and responsibilities in and around what is known as Galiano Island.
 - Should any units be unable to be filled as per the criteria above, previous residents of Galiano Island, a person who is hired at least half-time on Galiano Island, or a person with immediate family living on Galiano Island may be considered.



Wiser Projects

Competent. Creative. Committed.

We feel that these requirements meet the needs of both GIGARHS and the Islands Trust, by:

- Securing a minimum level of affordability, which is tied to local conditions.
- Allowing for enough flexibility that potential funders will not see risk in the project; and allowing GIGARHS to pursue a range of funding options.
- Allowing for enough flexibility for GIGARHS to respond to future market and financing conditions.
- Restricting tenancy of affordable units to people who really need it (through income limits).
- Ensuring the project meets OCP goals for affordable housing by linking affordability to incomes.

In parallel to this letter, GIGARHS is in the process of updating a previous draft of a Housing Agreement to reflect the metrics and requirements outlined above. While not finished at the time of writing this letter, it may have been sent to staff for review by the time the March LTC meeting is held. We hope that this letter provides clarity on the intent of GIGARHS in terms of affordability and that GIGARHS and the Islands Trust can move forward with mutually beneficial housing agreement as quickly as possible.

Thank you,

Eleni Gibson

Eleni Gibson, on behalf of the GIGARHS Board
Project Planner
Wiser Projects

Cc: Brad Smith, Island Planner
Robert Kojima, Regional Planning Manager
GIGARHS Board

DATE OF MEETING: March 7, 2022

TO: Galiano Island Local Trust Committee

FROM: Brad Smith, Island Planner
Southern Team

COPY: Robert Kojima, Regional Planning Manager

SUBJECT: Rezoning Application GL-RZ-2021.1 – Affordable Housing Bylaw and S. 219 Covenant

Applicant: Galiano Affordable Living Initiative (GALI) Society

Location: 409 Porlier Pass Road, Galiano Island

RECOMMENDATIONS

1. That the Galiano Island Local Trust Committee direct staff and legal counsel to draft a Housing Agreement based on the proposed Option 2 “rent structure” as described in the March 7, 2022 staff report for application GL-RZ-2021.1 (GALI), and including Housing Income Limits based on low to moderate income limits as determined periodically by BC Housing.
2. That the Galiano Island Local Trust Committee direct staff and legal counsel to draft a Land Title Act s. 219 covenant based on the staff recommendations in Attachment 1 of the March 7, 2022 staff report for application GL-RZ-2021.1 (GALI).

REPORT SUMMARY

The purpose of this staff report is to seek direction from the Galiano Island Local Trust Committee (LTC) on next steps with respect to the development of a Housing Agreement and a *Land Title Act* section 219 (s.219) covenant for application GL-RZ-2021.1 (GALI).

The above recommendations are supported as:

- The ‘Option 2’ rent structure has been determined to be consistent with the affordable housing policies of the OCP as a whole;
- The proposed inclusion of BC Housing Housing Income Limits (HILs) provides further assurance that affordability will be maintained over the long term;
- Staff have completed a comprehensive review of all of the recommendations of the associated professional reports and have worked with the applicant to come to agreement on what s. 219 conditions are appropriate to include; and,
- The LTC have already directed staff to enter a Cost Recovery Agreement (CRA) with the applicant for the legal work required to draft a housing agreement and s. 219 covenant.

BACKGROUND

A rezoning application for the subject property located at 409 Porlier Pass Road was submitted to the Islands Trust in February 2021 by the property owner, the Galiano Affordable Living Initiative (GALI) Society. The intent of the rezoning proposal is to allow for the development of up to 20 units of affordable housing on the subject property, along with associated infrastructure to service the 20 units.

The LTC gave direction to draft an amending bylaw for the proposed rezoning at the June 1, 2021 meeting. Draft bylaw No. 280 was received by LTC at the November 2, 2021 meeting for information and given 1st reading at the February 7, 2022 meeting. Staff are now seeking further direction from the LTC with respect to the associated housing agreement and s. 219 covenant.

Background information, including staff reports, professional reports, draft Bylaw No. 280 and correspondence for the application can be found here: <http://www.islandstrust.bc.ca/islands/local-trust-areas/galiano/current-applications/current-application-documents/>

ANALYSIS

Legal Review of Proposed Rent Structure

At the February 7, 2022 LTC meeting, staff presented two additional rent structure options brought forward by the applicant that are intended to increase flexibility with respect to potential funders and rent structures.

Option 1

- CMHC National Housing Co-Investment Fund – supports a mixed-income approach consisting of a minimum of 30% of units with rents set below 80% of CMHC's published Median Market Rents for the area or closest area for which rental data is available (e.g., Victoria BC).

Option 2

- 30% of Representative Median Household Income – units will, on average, have rents set at or below 30% of the before tax Median Household Income for the Southern Gulf Islands Electoral Area as reported by Statistics Canada for representative household types.

At that meeting, the applicant asked the LTC consider this broader range of affordable rent structures than just the BC Housing Community Housing Fund formula in the context of their rezoning application and associated housing agreement.

Upon review of the two new options, the LTC directed staff to seek a legal opinion on the updated rent structure proposals for consistency with the Galiano Island Official Community Plan No. 108. 1995 (OCP).

Through further discussion with legal counsel and the applicant, the applicant is now seeking to use only Option 2 as the basis for their housing agreement. The applicant is of the view that this rent structure is broad enough to meet the requirements of any affordable housing funder, including BC Housing and CMHC.

In consultation with legal counsel, staff conclude that the Option 2 rent structure is consistent with the OCP as a whole, in particular given the fact that the median income measure is linked directly to the South Gulf Islands Electoral Area and as such, it is very likely that rents capped at 30% of average household income will in fact be below average market rents for the region.

To further ensure affordability is maintained, the applicant is also proposing to include HILs in the housing agreement, based on low to moderate income limits as determined periodically by BC Housing. In 2021, the BC Housing HILs were set at:

- For residential units with fewer than two bedrooms, a gross household income that does not exceed the median income for couples without children in B.C., as determined by BC Housing from time to time. For 2021, this figure is **\$75,730**.
- For residential units with two or more bedrooms, a gross household income that does not exceed the median income for families with children in B.C., as determined by BC Housing from time to time. For 2021, this figure is **\$117,080**.

Staff are of the view that a housing agreement based on the Option 2 rent structure described above, and including BC Housing HILs, would provide reasonable assurance that affordability would be maintained.

The LTC has already authorized staff to enter into a cost recovery agreement with the applicant allowing Islands Trust legal counsel to prepare a draft housing agreement for the application. If the LTC decides to proceed with consideration of Option 2 as the primary basis for allowable rent structure along with the inclusion of HILs, staff will initiate the development of a draft housing agreement as a next step in the rezoning process.

Section 219 covenant Update

Staff have compiled all recommendations from professional reports associated with the application in consideration of a *Land Title Act* s. 219 covenant. Those reports include:

- Ecological Assessment
- Groundwater Reports
- Water Management Plan
- Geotechnical Report
- Arborist Report
- Surveyed site plans

The summary table in Attachment 1 captures all of the recommendations from those reports, and includes staff considerations as to whether to include in covenant or not.

The LTC has already authorized staff to enter into a cost recovery agreement with the applicant allowing Islands Trust legal counsel to prepare a s. 219 covenant for the application. If LTC decides to proceed at this time based on the recommendation of staff in Attachment 1, staff will initiate a CRA to complete this work as a next step.

Rationale for Recommendation

Based on the foregoing, the recommendations on page 1 are supported as:

- The 'Option 2' rent structure has been determined to be consistent with the affordable housing policies of the OCP as a whole;
- The proposed inclusion of BC Housing HILs provides further assurance that affordability will be maintained over the long term;
- Staff have completed a comprehensive review of all of the recommendations of the associated professional reports and have worked with the applicant to come to agreement on what s. 219 conditions are appropriate to include; and,
- The LTC have already directed staff to enter a CRA with the applicant for the legal work required to draft a housing agreement and s. 219 covenant.

The LTC may consider the following alternatives to the staff recommendations:

1. Request further information

The LTC may request further information prior to making a decision. If selecting this alternative, the LTC should describe the specific information needed.

Resolution:

That the Galiano Island Local Trust Committee request that the applicant submit to the Islands Trust _____.

2. Hold the application in abeyance

The LTC may choose to hold the application in abeyance pending completion of a significant study or OCP process, etc.

Resolution:

That the Galiano Island Local Trust Committee hold application GL-RZ-2021.1 (GALI) in abeyance.

3. Deny the application

The LTC may deny the application.

Resolution:

That the Galiano Island Local Trust Committee proceed no further with application GL-RZ-2021.1 (GALI).

NEXT STEPS

With direction from the LTC, staff will:

- Initiate CRA for drafting of housing agreement and s. 219 covenant
- Direct legal counsel to proceed with work when CRA is finalized

Submitted By:	Brad Smith, Island Planner	February 25, 2022
Concurrence:	Robert Kojima, Regional Planning Manager	February 28, 2022

ATTACHMENTS

1. S. 219 Covenant Conditions Summary

Covenant Topic	Requirement/Recommendation	Source/Report	Staff Recommendation: Condition Needed?	Staff Comments
Permanent Conditions - to apply in perpetuity				
Ecological Protection - Ecological Assessment	No trails to be constructed within the 30m 'Stream Protection and Enhancement Area'	Ecological Assessment Report	Yes	Link in covenant to Site Plan Schedule A showing SPEA boundary
	No stormwater may be discharged directly into the SPEA	Ecological Assessment Report	Yes	
	Run off from buildings and services must be infiltrated into the ground and not discharged directly into the SPEA	Ecological Assessment Report	Yes	
	Retain large diameter trees (approaching or exceeding 1m in diameter) and protect their Critical Rooting Zones whenever possible.	Ecological Assessment Report	Yes	Critical rooting zones for subject trees captured in TPZ map schedule 3. Mapping informed by Arborist report and associated comments from applicant re tree removal.
	Retain as much forest structure and natural vegetation cover as possible within and around the development area. Retain large diameter coarse woody debris, including old stumps and dead standing trees (snags) whenever possible to provide wildlife habitat	Ecological Assessment Report	Yes	Applicant seeking a clause akin to 'Make every reasonable effort to...
	Within the development, minimize the area of impervious surfaces.	Ecological Assessment Report	Yes	Applicant is planning to Include only pervious surface in parking lots as road surface may need paving for fire dept requirements; staff view this as reasonable to achieve minimization of impermeable surfaces while also meeting operational needs for applicant
	Create bioswales rather than ditches where required along driveways and parking areas and other impervious surfaces to slow surface runoff and promote infiltration back into the groundwater system.	Ecological Assessment Report	Yes	
Water Management Plan	Minimum 90,850 L (24,000 USGal) of dedicated water storage to meet fire demand requirement	Draft Water Management Plan, August 2021	Yes	General WMP note: Could be other advice from legal counsel and/or requests from LTC on what else to include from WMP
	Minimum 2,875 L of dedicated water storage to meet balancing storage requirement	Draft Water Management Plan, August 2021	Yes	
	Minimum 35,000 L of dedicated water storage to meet emergency storage requirement	Draft Water Management Plan, August 2021	Yes	
	System shall include totalizing water flow meter on well discharge to monitor well usage with a water level sounding tube installed for taking periodic water level measurements in the well.	Draft Water Management Plan, August 2021	Yes	
	Unit blocks shall be provided domestic water meters.	Draft Water Management Plan, August 2021	Yes	
	Irrigation demand provided with implementation of rainwater harvesting from a cistern adjacent to each building.	Draft Water Management Plan, August 2021	Yes	
	Water system (Section 4) and Stormwater design (s 6) and criteria applied consistent with WMP	Draft Water Management Plan, August 2021	Yes	S4 and 6 of WMP provide majority of critical design criteria and staff are of the view that this design criteria should be explicitly pointed to in covenant as well as report appended - lawyer to provide additional comment
Schedule 1 - Site Plan	Development to be consistent with LTC approved site plan. Site plan to be included as a schedule to covenant.	Draft Site Plan	Yes	Staff open to clause that allows for some flexibility in final design eg. <i>subject to alterations that are reasonably contemplated by or aligned with Schedule XX and any existing permits or approvals for the development</i>
Schedule 2 - Site Servicing Plan	Site servicing Plan to be included as a schedule to covenant.		Yes	Staff open to clause that allows for some flexibility in final design eg. <i>subject to alterations that are reasonably contemplated by or aligned with Schedule XX and any existing permits or approvals for the development</i>

Covenant Topic	Requirement/Recommendation	Source/Report	Staff Recommendation: Condition Needed?	Staff Comments
Schedule 3 - Tree Protection Zone Map	Tree protection zones as mapped/recommended in ecological/arborist report to be included as a schedule to covenant.	Draft Water Management Plan, August 2021	Yes	Informed by Arborist report and associated comments from applicant re tree removal; final map needs to be updated to accurately identify proposed trees for removal and protection
Schedule 4 - Professional Reports	Ecological Assessment, Water Reports, Water Management Plan attached as schedules to covenant		TBD	Applicant seeking to minimize report appending as much as possible to reduce length/minimize redundancy - Lawyer to provide comment on what reports need to be appended to covenant and rationale for why
Interim Conditions - to be removed from covenant following completion of construction				
Construction Management - from Ecological Assessment	Establish temporary high visibility fencing around the perimeter of large diameter tree critical rooting zones (in proximity to development) prior to site preparation or construction.	Ecological Assessment Report	Yes	
	Establish temporary high visibility fencing along the upper boundary of Ecological Community O2a to prevent storage of excavated materials, fill, construction materials and entry by workers or vehicles/machinery.	Ecological Assessment Report	Yes	EC O2A shown on site plan
	Minimize impacts to vegetation during the construction process. Include measures such as the erection of temporary fencing (snow fence) to ensure construction activities and storage materials do not encroach into areas that are to remain natural.	Ecological Assessment Report	Yes	
	Minimize soil compaction to areas outside of the infrastructure footprint during the construction phase. For example, ensure the storage of equipment, machinery, excavated material, soil, fill, and construction materials occurs only within the building footprint or in areas designated (on plan) for parking or driveway.	Ecological Assessment Report	Yes	
	There must be no deposit of excavated materials into the SPEA. If there is any storage of excavated soil materials near the SPEA boundary there must be a silt fence installed to prevent erosion.	Ecological Assessment Report	Yes	Covenant should define a specific distance for fencing requirement
	Ensure any imported soil or aggregate materials are sterile and do not contain viable seeds of exotic invasive plants.	Ecological Assessment Report	Yes	
	Any soils exposed or deposited for a period of greater than two (2) weeks should be covered and maintained by means of tarps in good repair and/or hydromulch (without seeds).	Ecological Assessment Report	Yes	
	The use of machinery and equipment should be restricted to the minimum area for the construction of the development.	Ecological Assessment Report	Yes	
	Contractors should inspect their equipment and vehicles to ensure they do not transport invasive plant species seeds onto or off the property, paying special attention when accessing areas near naturally open woodland DPAs. All equipment should be washed prior to arrival. Manual removal of weeds should be performed on a regular basis.	Ecological Assessment Report	Yes	
	All machinery and equipment should be inspected for leaks prior to operation.	Ecological Assessment Report	Yes	
	Machinery and equipment should ideally be refuelled offsite or at a designated location on an impermeable surface where spills can be contained. A spill response kit is to be on site during all periods when machinery is being operated and all operators are to be trained in the use of the spill kit.	Ecological Assessment Report	Yes	
	Site clearing should not be completed during sensitive breeding season, generally from late February through August for most species.	Ecological Assessment Report	Yes	
	Site clearing should be undertaken during dry weather and not during periods of prolonged rainfall.	Ecological Assessment Report	Yes	

Covenant Topic	Requirement/Recommendation	Source/Report	Staff Recommendation: Condition Needed?	Staff Comments
	Manually remove Scotch broom, holly, and spurge laurel (and Himalayan blackberry (Rubus armeniacus) / evergreen blackberry (Rubus laciniatus) within and around the development footprint, including access and parking areas, prior to site clearing. Repeat to remove any regenerating exotic invasive vegetation during the construction process and during the next growing season after completion.	Ecological Assessment Report	Yes	Manually is intended by biologist to mean without use of chemicals, machine removal is ok
Tree Protection (Arborist Report)	Remove trees that cannot be preserved before construction	Arborist Report	Yes	
	Maintain grades to current levels around trees	Arborist Report	Yes	
	Evaluate all the preserved trees once construction is complete.	Arborist Report	Yes	
	Excavation inside the TPZ should be avoided. If excavation is required inside the TPZ, it should be supervised by a Certified Arborist to minimize damage to the tree root zone	Arborist Report	Yes	
	Construction during the summer is not recommended as the loss of roots impacts the tree's ability to obtain water and nutrients. If summer construction is the only option, preserved trees should receive supplementary irrigation	Arborist Report	Yes	
	To minimize compaction, avoid driving heavy equipment, trucks or excavators in the TPZ. If driving of heavy equipment, trucks or excavators is required inside the TPZ, it should be supervised by a Certified Arborist to minimize damage to the tree root zone.	Arborist Report	Yes	
Sediment control - from WMP	Install runoff management systems prior to site disturbance and construction activities;	Draft Water Management Plan, August 2021	Yes	Ensures runoff systems are in place priority to any development activity
	Install a site access pad (crushed gravel before driveway road access) to prevent tracking mud offsite.	Draft Water Management Plan, August 2021	Yes	From 8.1 of WMP
	Backfill foundations as soon as possible following approval of perimeter drainage;	Draft Water Management Plan, August 2021	Yes	From 8.2 of WMP
	Inspect the construction site daily to ensure erosion control measures are working	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
	Use berms or swales to divert runoff from entering the site;	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
	Use silt fencing around stockpiled and sloped areas;	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
	Install filter cloth, drain rock or straw bales to protect ditches and catch basins;	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
	Collect runoff for treatment in a sediment trap;	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
	Ensure containment and proper disposal of concrete waste water;	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
	Properly dispose of construction wastes (build materials, paints, etc.) off-site;	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
Restoration - from Ecological Assessment	Do not wash soils or sediments onto the street or into the storm sewer.	Draft Water Management Plan, August 2021	Yes	From 8.3 of WMP
	Remediate compacted soils and temporary access routes in all areas outside of the development footprint. Use the 'rough and loose' method.	Ecological Assessment Report	Yes	Will only apply to areas within the "Developable Area" as defined in the covenant
	Areas where soil has been disturbed and remediated, or where sterile soil has been imported, or where native vegetation has been cut or cleared should be replanted with native species appropriate to the ecological community.	Ecological Assessment Report	Yes	
	Specifically: a. The upper wastewater drainage line should be constructed in the early fall through to early spring to reduce seeding of invasive exotic vegetation in freshly disturbed soils. Seed the imported fill and remediated access route immediately with a native grass mix that includes Melica subulata, Elymus glaucus and Bromus vulgaris as well as a native wildflower mix that includes Erythronium oregonum. See plant list for EC02 for additional species.	Ecological Assessment Report	Yes	
	b. If a lower wastewater drainage line is required, seed the imported fill and remediated access route immediately with native grass mix as above and plant with Polystichum munitum, Gaultheria shallon, and Mahonia nervosa. See plant list for ECO3 for additional species.	Ecological Assessment Report	TBD	May not be required if wastewater drainage is moved to upper bench
	c. Areas in Ecological Community 01a where temporary clearing of vegetation is required for construction can be remediated with native vegetation as above in b). See plant list for EC01 for additional species	Ecological Assessment Report	Yes	

Covenant Topic	Requirement/Recommendation	Source/Report	Staff Recommendation: Condition Needed?	Staff Comments
	Consider using native vegetation in landscaped areas including species that area considered 'Firesmart'. Avoid planting of junipers, conifers, rosemary, and other highly flammable plants near buildings.	Ecological Assessment Report	Yes	
Monitoring - from Ecological Assessment	A qualified environmental monitor should be retained to evaluate, and if necessary, prescribe further mitigation measures during all phases of the development and construction process. The monitor should verify that recommendations are implemented and provide a signed letter of confirmation	Ecological Assessment Report	Yes	
Report Recommendations not to be included in Covenant				
Groundwater Report	As a precautionary measure against any future potential sources of coliform bacteria, water from the well should be treated with an appropriately designed and maintained ultraviolet irradiation (UV) treatment system.	Groundwater Report	No	Already required by Island Health
	Elevated levels of manganese may be treated with an appropriately designed and maintained point-of-entry (POE) water treatment system including aeration.	Groundwater Report	No	Already required by Island Health
	Further examination of the potential water treatment options for the well water should be considered. Hy-Geo Consulting does not design or install water treatment systems.	Groundwater Report	No	Water treatment addressed in WMP
	Consideration should be given to equipping the discharge line from the well with a totalizing water flow meter to monitor and record the well use with time and having a water level sounding tube installed for taking periodic water level measurements in the well	Groundwater Report	No	Addressed in WMP requirements
Ecological Protection	Minimize new road construction required for development.	Ecological Assessment Report	No	Addressed in site plan
	Install rainwater catchment and storage systems to reduce roof runoff and reduce pressure on groundwater resources	Ecological Assessment Report	No	Addressed in WMP requirements
	Consider adjusting site plan to accommodate the retention of trees where critical rooting zones overlap with the infrastructure footprint.	Ecological Assessment Report	No	Site plan has already been adjusted to consider arborist recommendations
	In these cases, consult with a certified arborist to determine the potential impacts to tree health, identify potential safety issues of retaining the tree, and determine appropriate site / tree specific protection or, removal recommendation	Ecological Assessment Report	No	Arborist recommendations already considered
	Retain some large diameter coarse woody debris material from areas that are cleared for the development footprint to use for restoration or enhancement of natural areas outside the footprint.	Ecological Assessment Report	No	Staff view this as out of scope for covenant, would require significant planning to identify areas to be restored; some of these areas are in/near SPEA
	Incorporate 'wildlife zones' into the design where no ongoing use occurs.	Ecological Assessment Report	No	Addressed with SPEA boundary
Restoration	Also consider restoring areas in proximity to the development footprint that were historically disturbed and compacted (skid roads, logging landing sites) from logging activities and are not required for ongoing use	Ecological Assessment Report	No	Staff view this as out of scope for covenant, would require significant planning to identify areas to be restored; some of these areas are in/near SPEA
Geotech Report	Site Preparation	Geotech report - jan 2021	No	Technical requirements considered at BP stage; Soil management and restoration considered in sections above
	Foundations and Bearing Capacity	Geotech report - jan 2021	No	Technical requirements considered at BP stage
	Seismic Design of foundations	Geotech report - jan 2021	No	Technical requirements considered at BP stage
	Slab-on-grade floors	Geotech report - jan 2021	No	Technical requirements considered at BP stage
	Site and foundation drainage systems	Geotech report - jan 2021	No	Technical requirements considered at BP stage
	temporary excavations	Geotech report - jan 2021	No	Technical requirements considered at BP stage
	Utility design and installation	Geotech report - jan 2021	No	Technical requirements considered at BP stage
	On site roads and parking	Geotech report - jan 2021	No	Applicant to use pervious surfaces on parking lots
	Slope stability	Geotech report - jan 2021	No	Technical requirements considered at BP stage
Arborist Report	Validate if it is practical to preserve questionable trees.	Arborist Report	No	TPZ map includes trees assessed by arborist and detemined to be preserved or removed

Covenant Topic	Requirement/Recommendation	Source/Report	Staff Recommendation: Condition Needed?	Staff Comments
	Focus tree preservation on healthy young or semi-mature trees and trees in groups	Arborist Report	No	TPZ map includes trees assessed by arborist and determined to be preserved or removed with these considerations in mind
	Large and mature trees can be preserved but need a large root zone protection area	Arborist Report	No	TPZ map establishes TPZ requirements
	Tree protection fencing should be erected before construction starts.	Arborist Report	No	Already considered in ecological report recommendations



Memorandum

Date: March 7, 2022

File Number: GL-RZ-2014.1 (Crystal Mountain)

To: Galiano Island Local Trust Committee

From: Brad Smith, Island Planner
Southern Team

CC: Robert Kojima, Regional Planning Manager

Re: GL-RZ-2014.1 (Crystal Mountain) – Application Updates and LTC Information Requests

Purpose

The purpose of this staff memo is to provide an update to the Galiano Island Local Trust Committee (LTC) on application GL-RZ-2014.1 (Crystal Mountain), and to provide responses to LTC information requests.

Application Updates

BL 257 – Definition of Retreat User

At the December 6, 2021 LTC meeting, the LTC directed staff to include a definition of *retreat user* in proposed Bylaw No. 257. An amended Bylaw No. 257 is included as Attachment 1 with this definition added.

Restrictions on Maximum Day Use

At the December 6, 2021 LTC meeting, the LTC directed staff to draft language for Bylaw 257 to set daily visitor use at 35 subject to a once-a-year exception where notification to the community is provided in advance.

If the LTC decides to include this limit on day use, staff suggest the following bylaw amendments:

Permitted Density

- 8.7.4 Permanent structures are not to exceed a total area of 1063 m²
- 8.7.5 Total lot coverage is not to exceed 1.55 %.
- 8.7.6 Overnight accommodation for retreat users is not to exceed 17 sleeping huts and 5 tent platforms, nor exceed a total of 22 persons.
- 8.7.7 Daily visitor use is not to exceed 35 persons, including retreat users, subject to a once-a-year exception where written notification to the Local Trust Committee is provided in advance.
- 8.7.7.8 Not more than one accessory dwelling is permitted with a maximum floor area of 80 m².

The applicant has submitted a request to the LTC to consider expanding the number of days where a 35 person limit can be exceeded to six days per year instead of one (Attachment 2).

It is now up to the LTC to decide 1) if day use limits are to be included in proposed Bylaw No. 257 and 2) if consideration will be given to allowing for up to six days/year where a 35 person maximum can be exceeded instead of only one day/year.

Section 219 Covenant

Staff have worked with the applicant and legal counsel to develop a s.219 covenant based on the direction provided by the LTC (Attachment 3). The scope of the proposed conditions consider:

- Recommendations of ecological assessment reports;
- Recommendations of water study reports and draft Water Management Plan;
- Maintenance of forest cover;
- Tree protection zone mapping;
- Site plan including list of structures; and,
- Demonstration of potable water requirement prior to development of upper hooked lot.

The summary table included as Attachment 4 describes how these items are addressed in the draft covenant.

Groundwater Data Logger Report

As directed by LTC in September 2021, the applicant has completed a data logger well monitoring study for the proposed source well.

The study was conducted between September 17, 2021 and January 3, 2022. The study included data logger installation in Observation Well WID 23229 and Central Well WID 23227, which is the proposed water source for the development. The summary report of findings is included as Attachment 5.

The report reaches four conclusions:

1. Water levels in both wells behaved in a similar fashion rising approximately 3.5 m during the monitoring period in response to the cumulative effects of fall and early winter rains. Individual precipitation events do not appear evident in the water level hydrographs.
2. Water levels in Observation Well WID 23229 showed periodic tidal effects of about 5 cm.
3. On close examination, water levels in the Central Well WID 23227 showed periodic variations with fluctuations ranging from 4 to 8 cm. These did not correspond to any tidal influence. The cyclic nature of these fluctuations may reflect minor effects of pumping from neighbouring wells in the region.
4. The monitoring results obtained are consistent with the observations, assumptions and results reported on the pumping test carried out on the Central Well WID 23227 in 2015.

The report provides no further recommendations for additional groundwater study.

Water Management Plan

The applicant has submitted an amended version of their WMP with updates based on comments provided by staff in December 2021. Staff have not had a detailed review of this version, but the staff comments are reflected, and all of the important plan components that staff have been seeking now appear in the plan.

Staff will provide any further comments to the applicant shortly and a further revised draft will be brought to LTC at that time, likely with specific recommendations for additional WMP requirements to be considered in the s. 219 covenant. LTC could also provide comment at this time on the current draft version.

The latest draft Water Management Plan, including appendices, can be accessed [here](#).

Statutory Right of Way Update

The applicant is still in consultation with the Capital Regional District (CRD) on securing terms of a statutory right of way (RoW) for emergency access across the lands including consideration of long-term maintenance.

A draft agreement will be brought to LTC for consideration when agreed to by the applicant and the CRD.

Islands Trust Policy Statement Checklist

The Islands Trust Policy Statement Checklist was presented to LTC with a staff recommendation for endorsement at the September 7, 2021 LTC meeting. At that time, the LTC decided to hold off on endorsing the checklist, citing questions remaining, in particular with respect to water supply and the potential impact of habitat fragmentation due to the proposed hooked lot configuration.

Staff include the ITPS checklist in this memo, as Attachment 6, in case the LTC wants to further consider whether to endorse the ITPS checklist at this time. LTC could also direct the applicant and/or staff to collect more information before the ITPS checklist is considered again.

NEXT STEPS

With direction from LTC, staff will:

- Provide further comments to the applicant on draft water management plan
- Make any required amendments to proposed Bylaw 257

Attachment 1. Bylaw No. 257

Attachment 2. Request from Applicant re: Day Use Limit

Attachment 3. Draft s219 Covenant

Attachment 4. Summary Spreadsheet – Covenant Conditions

Attachment 5. February 2022 Hydrogeologist Report

Attachment 6. ITPS Checklist

PROPOSED

GALIANO ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 257

A BYLAW TO AMEND GALIANO ISLAND LAND USE BYLAW 127, 1999

The Galiano Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Galiano Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as “Galiano Island Land Use Bylaw 127, 1999, Amendment No. 1, 2016”.

2. Galiano Island Land Use Bylaw 127, 1999, is amended as follows:

2.1 Part 4 (Creation and Extension of Zones) Section 4.1 is amended by:

- 1) inserting a new zone in Column 1 named “Crystal Mountain Spiritual Education Retreat” directly below ‘Community Housing 1’ and directly above ‘Utility Service’
- 2) Inserting a new zone abbreviation in Column 2 named “(SE1)” directly below ‘(CH1)’ and directly above ‘(U)’

2.2 The following is inserted after section 8.6, as a new Section 8.7:

“8.7 Crystal Mountain Spiritual Education (SE1) Zone

Permitted Uses

8.7.1 The following uses and no others are permitted in the SE1 Zone:

- 8.7.1.1 contemplative, spiritual or meditative education retreat uses
- 8.7.1.2 contemplative, spiritual or meditative educational activities and facilities with accessory overnight accommodation and camping
- 8.7.1.3 accessory dwelling unit for a person or persons acting as a caretaker for the spiritual education retreat.

Buildings and Structures

8.7.2 The following buildings and structures and no others are permitted in Area A on Schedule D – Plan 6:

- 8.7.2.1 2 sleeping huts, each with a maximum floor area of 21 square metres;
- 8.7.2.2 12 sleeping huts, each with a maximum floor area of 15 square metres;
- 8.7.2.3 one meditation hall restricted to contemplative, spiritual or meditative education uses only with a maximum floor area of 125 square metres;

- 8.7.2.4 one dining/kitchen building with a maximum floor area of 125 square metres;
 - 8.7.2.5 one communal bathroom and laundry building with a maximum floor area of 70 square metres;
 - 8.7.2.6 one storage/workshop structure with a maximum floor area of 80 square metres;
 - 8.7.2.7 one office with a maximum floor area of 70 square metres;
 - 8.7.2.8 one accessory dwelling unit with a maximum floor area of 80 square metres, and
 - 8.7.2.9 five tent platforms, each with a maximum floor area of 14 square metres.
- 8.7.3 The following buildings and structures and no others are permitted in Area B on Schedule D – Plan 6:
- 8.7.3.1 three sleeping huts, each with a maximum floor area of 21 square metres;
 - 8.7.3.2 one communal kitchen/bathroom/laundry building with a maximum floor area of 36 square metres; and
 - 8.7.3.3 one storage building with a maximum floor area of 10 square metres.

Permitted Density

- 8.7.4 Permanent structures are not to exceed a total area of 1063 m²
- 8.7.5 Total lot coverage is not to exceed 1.55 %.
- 8.7.6 Overnight accommodation for retreat users is not to exceed 17 sleeping huts and 5 tent platforms, nor exceed a total of 22 persons.
- 8.7.7 Not more than one accessory dwelling is permitted with a maximum floor area of 80 m².

Permitted Height

- 8.7.8 The maximum height of an accessory dwelling unit is 9 metres.
- 8.7.9 The maximum height of a sleeping hut, or a building or structure other than an accessory dwelling unit, is 5 metres in height.

Minimum Setbacks

- 8.7.10 All buildings and structures must be sited
 - 8.7.10.1 at least 7.5 metres from front and rear lot lines; and
 - 8.7.10.2 at least 6.0 metres from interior and exterior side lot lines.

Minimum Lot Size

- 8.7.11 No lot having an area less than 6.1 hectares may be created by subdivision.

Parking

8.7.12 Despite Section 14.1, the minimum number of off-street parking spaces is as follows:

- 8.7.12.1 1 parking space per sleeping hut or tent platform; and
- 8.7.12.2 2 parking spaces per accessory dwelling unit.”

2.2 Section 17 (Definitions) is amended by inserting the following as new definitions in alphabetical order and re-numbering subsequent subsections accordingly:

“retreat user” means a person that is a registered participant in a contemplative, spiritual or meditative educational program at a spiritual education retreat who typically stays at the facility for a period of at least 3 days, but in no case for more than 6 months, and is accommodated in a sleeping hut or tent platform.

“spiritual education retreat” means a facility that provides contemplative, spiritual or meditative educational opportunities for retreat users who typically stay at the facility for a period of at least 3 days, but in no case for more than 6 months, and are accommodated in sleeping huts or tent platforms, but does not include, offer, or provide any form of commercial short term or temporary accommodation for the travelling public, or any restaurant or other forms of food service to the general public.

“sleeping hut” means a single-occupancy hut with a maximum floor area of 21 square metres for sleeping, shelter and the practice of contemplative, spiritual or meditative educational activities, but does not include a kitchen or any cooking or food preparation facilities, or any plumbing fixtures.

“tent platform” means a single-occupancy platform with a maximum floor area of 14 square metres for the erecting of a tent for sleeping, shelter and the practice of contemplative, spiritual or meditative educational activities, but does not include a kitchen or any cooking or food preparation facilities, or any plumbing fixtures, or any semi-permanent or permanent walls and roof coverings.

- 2.3 Schedule “A” – Zoning Map, is amended by changing the zoning classification of Lot 9, District Lot 90, Galiano Island, Cowichan District, Plan 31200 from Rural 2 (R2) to Nature Protection (NP), as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule “A” to Bylaw No. 127 as are required to effect this change.
- 2.4 Schedule “A” – Zoning Map, is amended by changing the zoning classification of Lot A, Districts Lots 88 and 89, Galiano Island, Plan VIP68079 from Forest 1 (F1) to Crystal Mountain Spiritual Education Retreat (SE1) and to Nature Protection (NP), as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule “A” to Bylaw No. 127 as are required to effect this change.
- 2.5 Schedule D is amended by inserting the plan attached to and forming part of this bylaw as Plan No. 2 as a new “Plan 6”.

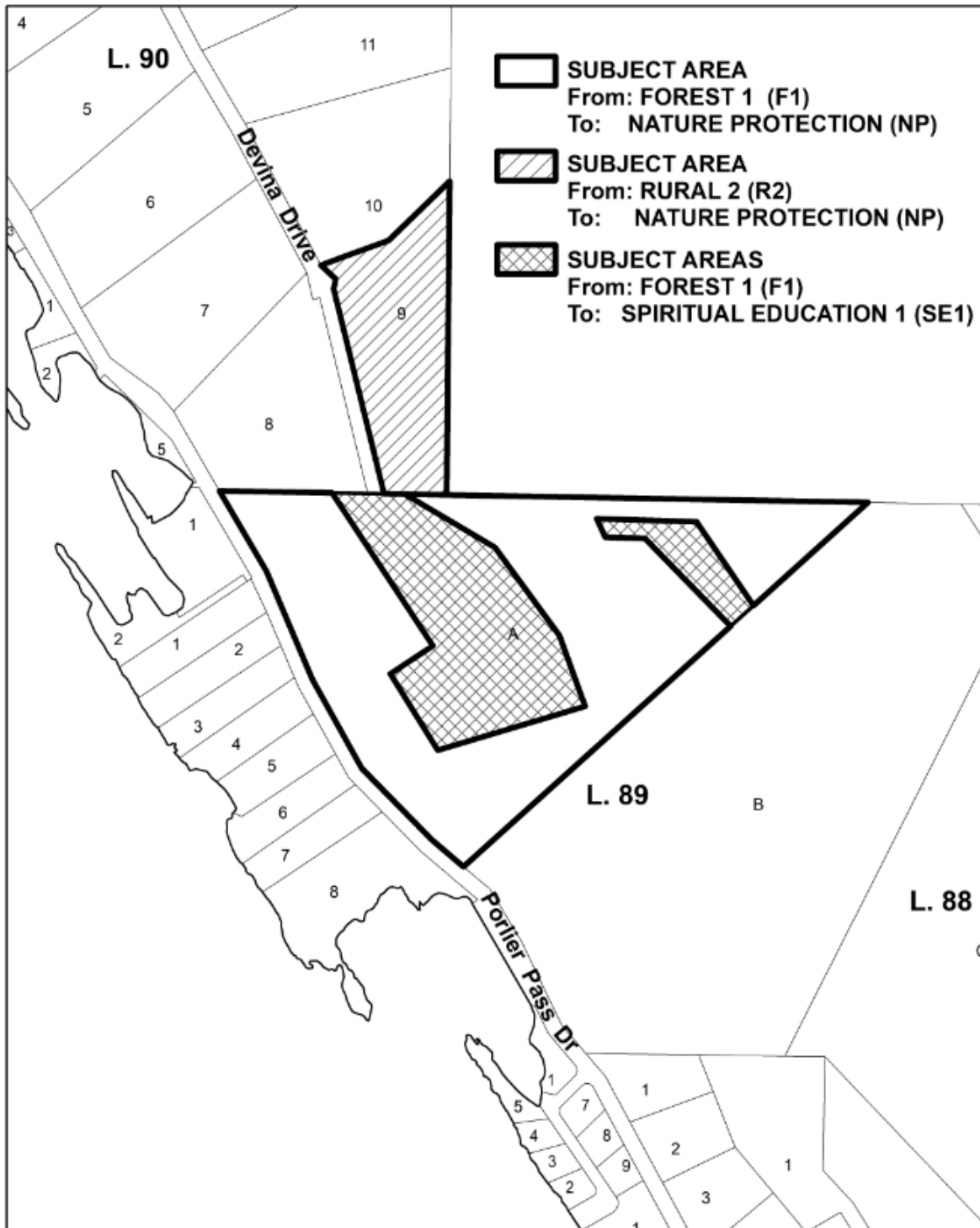
3. SEVERABILITY

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS	7 TH	DAY OF	SEPTEMBER	2021.
PUBLIC HEARING HELD THIS	_____	DAY OF	_____	20____
READ A SECOND TIME THIS	_____	DAY OF	_____	20____
READ A THIRD TIME THIS	_____	DAY OF	_____	20____
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20____
ADOPTED THIS	_____	DAY OF	_____	20____
_____ CHAIR		_____ SECRETARY		

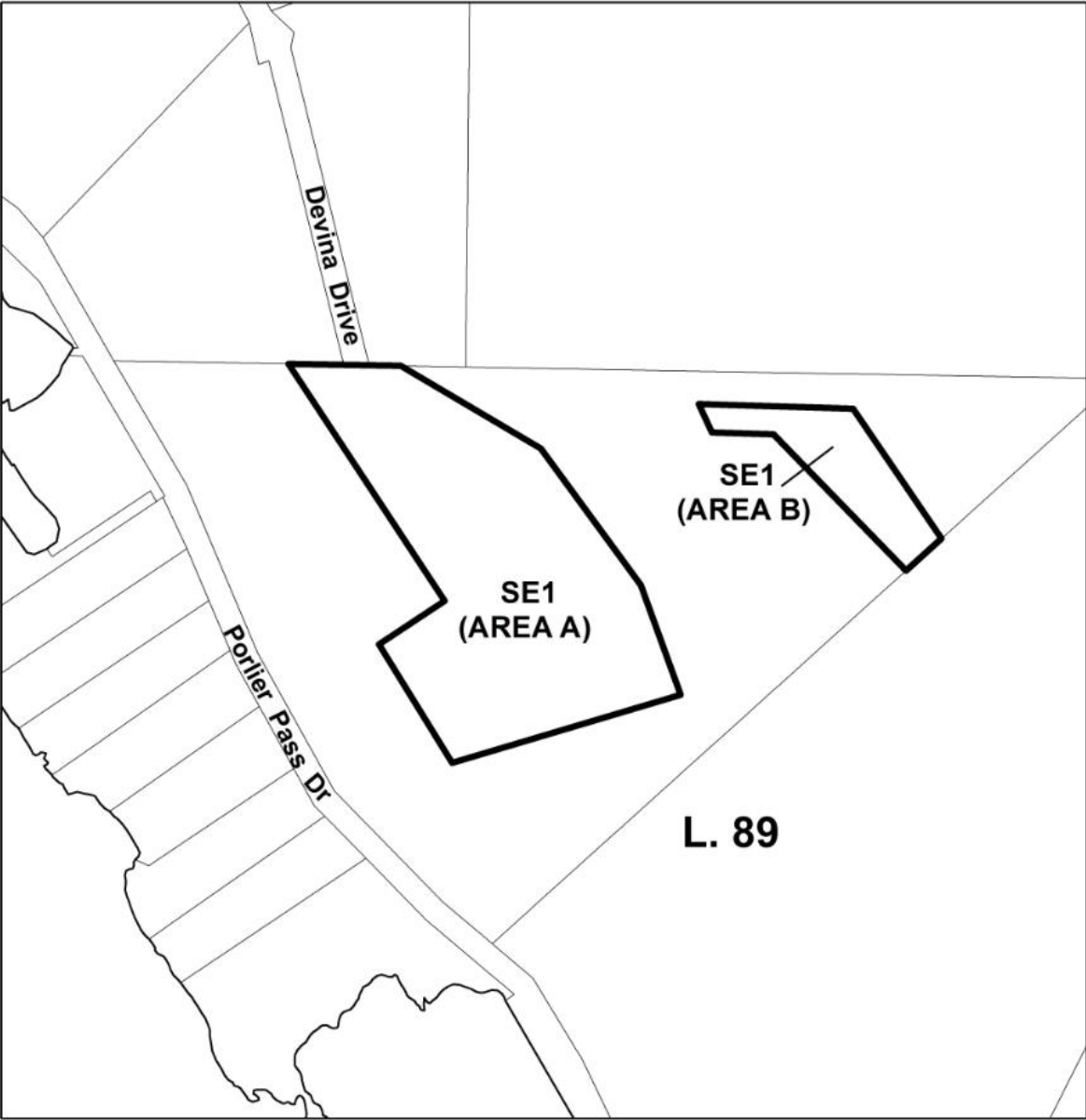
**GALIANO ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 257**

Plan No. 1



GALIANO ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 257

Plan No. 2



From: j oakley <naturealwaysgetsherway@gmail.com>
Sent: Wednesday, February 2, 2022 3:42 PM
To: Dan Rogers
Cc: Tahirih Rockafella; Jane Wolverton; Brad Smith; Leslie Cain; Keith Erickson; Morning Beach
Subject: Crystal Mountain Society Proposal

Hello Trustees and Planner Smith,

In response to the request for a motion brought forward on Dec 6, 2021 regarding day use for the CMS rezoning “*That the LTC staff draft language for bylaw 257 to set daily visitor use at 35 subject to a once a year exception where notification to the community is provided in advance.*”

For special occasions beyond a day use limit of 35, *Crystal Mountain Society proposes that the number of days for permitted special events in the bylaw be 6 per year.*

For the Crystal Mountain Society board and membership, 6 days is adequate to meet future potential needs for such events as special teachings and knowledge sharing that would be in support of the spiritual education mandate of the society.

**Thank you,
Janice Oakley, Leslie Cain, Libby McClelland**

PART 2 – TERMS OF INSTRUMENT

SECTION 219 COVENANT

This Agreement dated for reference the ____ day of _____, 2022 is

AMONG:

CRYSTAL MOUNTAIN - A SOCIETY FOR EASTERN AND WESTERN STUDIES (Incorporation
No. S12799), c/o 300B - 2555 Cook Rd, Galiano Island, BC V0N 1P0

(the "Owner")

AND:

GALIANO ISLAND LOCAL TRUST COMMITTEE
Suite 200, 1627 Fort Street, Victoria, British Columbia, V8R 1H8

(the "Trust Committee")

GIVEN THAT:

- A. The Owner is the registered owner in fee simple of land more particularly described as:

NOTE: This section will be updated to include new legal descriptions before covenant is finalized

PID: 000-851-035

Legal Description: LOT 9 DISTRICT LOT 90 GALIANO ISLAND COWICHAN DISTRICT PLAN
31200

PID: 024-351-041

Legal Description: LOT A DISTRICT LOTS 88 AND 89 GALIANO ISLAND COWICHAN
DISTRICT PLAN VIP68079

(the "Lands");

- B. The Owner has applied to the Trust Committee to amend the Galiano Island Land Use Bylaw to authorize a year-round Spiritual Education centre development on the Lands.
- C. Section 219 of the *Land Title Act* (British Columbia) provides that there may be registered as a charge against the title to land a covenant, whether of a negative or positive nature, in respect of the use of land;
- D. The Owner wishes to grant and the Trust Committee wishes to accept this covenant over the Lands, restricting the use of the Lands in the manner specified.

This Agreement is evidence that in consideration of the premises and covenants herein contained, the payment of two dollars (\$2.00) by the Trust Committee to the Owner, and other good and valuable

consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree pursuant to s. 219 of the *Land Title Act* as follows:

Definitions

1. In this Agreement:

- (a) “Ecological Assessment Report” means the report prepared by Keith Erickson and dated March 2021, a copy of which is attached to this Agreement as Schedule A.
- (b) “Natural Forest Cover” means areas characterized by forest in which natural tree canopy cover is greater than 30%, areas subject to natural disturbance such as disease or landslide, or areas characterized by naturally open ecosystems such as a marsh or meadow.
- (c) “Protected Tree” means any tree marked as a “Protected Live Tree” or a “Protected Dead Standing Tree (dbh > 50 cm)” on the Tree Protection Map.
- (d) “Root Protection Zone” means, in relation to a Protected Tree, any area of land within a distance equal to 12 times the diameter of the trunk of the tree, measured at breast height, or is within a distance a professional arborist determines is necessary to protect the health of the tree.
- (e) “Sensitive Ecosystem Areas” means the areas of the Lands shown on the Site Plan as “Old Forest, Moist Forest, Wetlands, Ridges, Cliffs”; “30m Stream Buffer”, or “Stream”.
- (f) “Site Plan” means the proposed plan for the use and development of the Lands attached to this Agreement as Schedule B.
- (g) “Tree Protection Plan” means the map titled “Covenant Schedule 2 – Protected Trees” and dated January 2022, a copy of which is attached to this Agreement as Schedule C.

Permitted Structures: Siting and Size

2. The Owner shall not construct on or develop any buildings or structures on the Lands except in accordance with the Site Plan, and in the case of a building or structure shown on the Site Plan that is also included in the list of buildings and structures attached to this Agreement as Schedule D, subject to the maximum size set out in that list.

Ecological Protection Measures

3. The Owner shall not construct on or develop the Lands, or otherwise use or alter the Lands, except in accordance with the recommendations of the Ecological Assessment Report, and in particular but without limitation the Owner shall:
- (a) not construct or develop any structures within any of the Sensitive Ecosystem Areas, except that the proposed meditation hall may be sited within the portion of the Sensitive

Ecosystem Areas that is currently occupied by the existing meditation platform, as shown on the Site Plan;

- (b) not construct any roads on the Land other than the Roads shown on the Site Plan;
- (c) not construct utilities unless constructed along existing roads and designated utility routes as shown on the Site Plan;
- (d) not trim, prune, cut down, damage, destroy, move, or remove any Protected Tree, unless a professional arborist has first certified in writing that the Protected Tree poses a risk of harm to people or property, in which case the Owner may prune or cut down the Protected Tree but only to the extent necessary to address the risk;
- (e) not alter, construct or develop within any Root Protection Zone; and
- (f) utilize existing compacted soil areas for siting structures whenever possible.

Maintenance of Forest Cover

- 4. The Owner shall maintain at least 60 percent of the Lands as Natural Forest Cover.

Groundwater Use Restrictions and Monitoring

- 5. The central well located on the Lands, with the well identification number 23227, shall be equipped with a totalizing flow meter and the Owner must maintain records of the total amount of water produced each month. The Owner shall keep these records and shall submit them to the Trust Committee upon request.
- 6. The well located on the Lands, with the well identification number 23229, shall be registered and maintained as a provincial observation well.

Water Storage and Management

- 7. The Lands must not be used or occupied for residential purposes until and unless the owner has installed a dedicated water storage with a capacity of at least 54,600 litres to meet the storage demand requirement.

Potable Water

- 8. The Owner shall not construct on or develop on the upper portion of the hooked lot, identified as "CMS Area 2" on the Site Plan, unless the Owner demonstrates a potable water source that supplies at least 284 liters of water per day.

Costs

- 9. The Owner covenants and agrees to perform all requirements and obligations of this Agreement at the Owner's sole cost and expense.

No Effect on Laws or Powers

10. This Agreement does not:
- (a) affect or limit the discretion, rights, duties or powers of the Trust Committee or the Capital Regional District under any enactment or at common law, including in relation to the use or subdivision of the Lands;
 - (b) impose on the Trust Committee or the Capital Regional District any duty of care or other legal duty of any kind to the Owner or to anyone else;
 - (c) oblige the Trust Committee to enforce this Agreement, which is a policy matter within the sole discretion of the Trust Committee;
 - (d) affect or limit any enactment relating to the use or subdivision of the Lands;
 - (e) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Lands.

Limitation on Obligations

11. The Owner is only liable for breaches of this Agreement caused or contributed to by the Owner or which the Owner permits or allows. The Owner is not liable for the consequences of the requirements of any enactments or law or any order, directive, ruling or government action thereunder. The Owner is liable only for breaches of this Agreement which occur while the Owner is the registered owner of any interest in the Lands and then only to the extent of that interest.

Indemnity

12. Pursuant to section 219(6) of the *Land Title Act*, the Owner hereby indemnifies and saves harmless the Trust Committee and its elected and appointed officials, officers, employees and agents, from and against all loss, damage, cost, actions, suits, debts, expenses and harm of any kind whatsoever which the Trust Committee may at any time suffer or incur arising out of or related to this Agreement or any breach of it.

No Liability in Tort

13. The parties agree that this Agreement creates only contractual obligations. The parties agree that no tort obligations or liabilities of any kind exist between the parties in connection with the performance of or any default under or in respect of this Agreement. The intent of this section is to exclude tort liability of any kind and to limit the parties to their rights and remedies under the law of contract.

Covenant Runs with the Lands

14. Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted under section 219 of the *Land Title Act* (British Columbia) in respect of the Lands. This Agreement burdens the Lands and runs with it and binds the successors in title to the Lands. This Agreement burdens and charges all of the Lands and any parcel into which it is subdivided by any means and any parcel into which the Lands is consolidated.

Registration

15. The Owner agrees to do everything necessary, at the Owner's expense, to ensure that this Agreement is registered against title to the Lands with priority over all financial charges, liens and encumbrances registered or pending registration in the Land Title Office at the time of application for registration of this Agreement.

Waiver

16. An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver by the Trust Committee of a breach of this Agreement by the Owner does not operate as a waiver of any other breach of this Agreement.

Priority

17. The Owner shall cause this Agreement to be registered in the applicable land title office against title to the Land with priority over all financial liens, charges and encumbrances, and any leases and options to purchase, registered or pending registration at the time of application for registration of this Agreement, including by causing the holder of each such lien, charge, encumbrance, lease or option to purchase to execute an instrument in a form required by the Trust Committee under which such holder postpones all of the holder's rights to those of the Trust Committee under this Agreement in the same manner and to the same extent as if such lien, charge, encumbrance, lease or option to purchase had been registered immediately after the registration of this Agreement.

Modification

18. This Agreement may not be modified except by an agreement or instrument in writing signed by the Owner or its successors in title and the Trust Committee or a successor or assignee.

Severance

19. If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.

No Other Agreements

20. This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.

Binding of Successors

21. This Agreement binds the parties to it and their respective successors, heirs, executors and administrators.

Further Acts

22. The Owner must do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.

Governing Law

23. This Agreement shall be governed by and constructed in accordance with the law of the Province of British Columbia, which shall be deemed to be the proper law hereof.

Deed and Contract

24. By executing and delivering this Agreement the Owner intends to create both a contract and a deed executed and delivered under seal.

Execution in Counterparts & Electronic Delivery

25. This Agreement may be executed in any number of counterparts and delivered by e-mail, each of which shall be deemed to be an original and all of which taken together shall be deemed to constitute one and the same instrument, provided that any party delivering this Agreement by e-mail shall also deliver to the other party an originally executed copy of this Agreement.

As evidence of their agreement to be bound by the terms of this instrument, the parties each have executed the Land Title Office Form C which is attached hereto and which forms part of this Agreement.

INSERT SCHEDULES

Schedule A – Ecological Assessment Report

Schedule B– Site Plan

Schedule C – Tree Protection Plan

Schedule D – List of Structures and Cumulative Lot Coverage

INSERT PRIORITY AGREEMENT(s) (if required)

[as of Feb 14, no priority agreements required]

Covenant Topic	Requirement/Recommendation	Staff Rec	Covenant section reference	Source/Report	Staff Comments
List of Structures	List of structures with maximum floor area	Yes	2		To include associated table listing permitted structures for both upper and lower hooked lot portions
Ecological Protection	No structures are permitted in sensitive ecosystems (as defined and shown in this report)	Yes	3(a)	Ecological Assessment Report	
	The existing meditation platform is located on the boundary of an area characterized by a mature forest ridge ecosystem (sensitive). When this existing structure is replaced by the proposed Meditation Hall, siting of the hall will utilize existing footings or be moved away from the ridge (to the northeast).	Yes	3(a)	Ecological Assessment Report	
	b. Two existing meditation huts on the property are in areas characterized by moist soils and are outside of the proposed Crystal Mountain parcel boundaries. These huts will be removed, and their current sites will be remediated (rough and loose decompaction and planting) prior to rezoning.	No		Ecological Assessment Report	covenant will not be registered until rezoning is complete - this work will already be completed
	Minimize hydrological impacts by utilizing existing roads, created by historical logging activities that pre-date Crystal Mountains ownership, for access.	Yes	3(b)	Ecological Assessment Report	Addressed in site plan

	Locate utility corridors (power and water lines) along existing roads that are also used as access routes, whenever possible.	Yes	3(c)	Ecological Assessment Report	Applicant would prefer to add a 'wherever possible' type clause to provide some flexibility, staff are reticent due to enforceability concerns
	Protect remnant old forest structures that were not degraded or removed during the most recent clear-cut. At a minimum, establish critical root protection zones (RPZ) around trees where no buildings may be located, or soil disturbance may occur. The RPZ radius can be calculated using the 'tree diameter method' employing a 12 to 1 ratio – 12 units in radius for every 1 unit in tree diameter at breast height, or, as otherwise advised by an arborist. Significant structures to be protected include: • Mature or old-growth	Yes	3(d) and (e)	Ecological Assessment Report	Applicant to provide schedule 2 tree protection map. Can be a placeholder for now
	Generally, cluster structures together as much as possible and minimize the 'spread' of development into the forest. It is recognized that this criterion will be weighed against development criteria #2 above.	No		Ecological Assessment Report	Addressed in site plan
	Utilize existing compacted soil areas for siting structures whenever possible.	Yes	3(f)	Ecological Assessment Report	Applicant thinks this is too general and not appropriate for a covenant
Maintenance of Forest Cover	Maintenance of % of forest cover	Yes	4	N/A	LTC has directed to proceed with this condition as proposed by applicant. Applicant to provide baseline report for inclusion in covenant. A placeholder can be added for now.

Groundwater Report	All potential sources of contamination in the vicinity of the central well such as grey water discharge from the kitchen, the existing outdoor shower and the outhouse (pit latrine) should be removed and any remaining excavation filled in with clean fill, such as sand and gravel, glacial till or clay, with no boulders.	No		Groundwater Report - 2015	Addressed in Island health regulations
	When put into operation for the new facilities, the central well (WID 23227) should be equipped with a totalizing flow meter and records should be kept of the total amount of water produced each month. These records should also be reviewed on an annual basis to ensure that no excessive water demands are being placed on the well	Yes	5	Groundwater Report - 2015	
	The other two wells at the centre should be retained as observation wells and water levels in these wells taken and compiled on a minimum monthly basis. Wells that are no longer being used, for example, would need to be deactivated or closed in compliance with the Ground Water Protection Regulation (Ministry of Environment, 2015c). This would require filling the well with clean materials such as sand, clay and an effective sealant.	Yes	6	Groundwater Report - 2015	2nd well is on lot 9 which will be transferred to ITC. No well require deactivation

	As a precautionary measure against any future potential sources of coliform bacteria, water from the existing well source should be treated with an appropriately designed and maintained ultraviolet irradiation (UV) or chlorination treatment system.	No		Groundwater Report - 2015	Addressed in Island health regulations
	Water quality from the well should be monitored for bacteria and chemical quality on a regular basis (minimum of once a year) and as directed by the local health authority to detect any changes that might occur with time that may require additional treatment.	No		Groundwater Report - 2015	Addressed in Island health regulations
Water Management Plan	Minimum 54,600 L of dedicated water storage to meet rainwater storage demand requirement	Yes	7		WMP still in draft form - conditions may be alltered and additional conditions may be required as document evolves - placeholder can be added for
	System shall include totalizing water flow meter on well discharge to monitor well usage with a water level sounding tube installed for taking periodic water level measurements in the well.	Yes	5		May be redundant with Line 14 above
Potable Water - Upper Hooked Lot	No development in upper hooked lot until demonstration of minimal potable water supply of 284 l/day	Yes	8		MDD calculated in applicants water report for upper hooked lot
Schedule 1 Site Plan	Development to be consistent with LTC approved site plan. Site plan to be included as a schedule to covenant.	Yes	2		Plan includes surveyed features: existing structures, road centrelines, well locations, utility routes, site plan 'building zones', sensitive ecosystem boundaries

Schedule 2 - Tree Protection Zone map	Tree Protection Zone map	Yes	3(d) (e)		See line 8 above
Schedule 3 - Baseline Report	A baseline report will show the Natural Forest Cover vs. Management areas at the time the covenant is registered. This provides a starting point for monitoring of the Forest Cover clause	Yes	9, 10		

File: 1508141

January 20, 2022

Crystal Mountain Society
Galiano Island BC V0N 1P0

Re: Groundwater Level Monitoring, Crystal Mountain Retreat Centre, Observation Well WID 23229 and Central Well WID 23227, Galiano Island

Monitoring Installation

As requested, arrangements were initially made to install a datalogger in the Central Well WID 23227 on September 17, 2021. Due to a blockage of pump wiring near the top of the well it was not possible to safely install the instrument in WID 23227. It was subsequently decided to install the datalogger in Observation Well WID 23229. A sounding tube was eventually installed in the Central Well WID 23227 later that month to enable a datalogger installation.

Observation Well WID 23229

A Diver™ datalogger Serial No. DG945 was installed in the above well on September 17, 2021 by Hy-Geo Consulting. Well WID 23229 is a 6 inch (15.24 cm) diameter bedrock well, that was drilled in 1994 to a depth of 183 feet (55.78 m) and completed in grey sandstone. The recording interval was set at 10 minutes to detect any water level variations from neighbouring pumping wells and tidal effects. The corrected water level in the well at 9:50 am on September 17, 2021 was 18.460 m below ground. A second Diver™ datalogger Serial No. DF612 was also set near the well to record variations in barometric pressure at the same recording interval of 10 minutes synchronized with datalogger Serial No. DG945.

On January 3, 2022 the above dataloggers were retrieved by Keith Erickson at 11:35 am and delivered to Hy-Geo Consulting on January 4 for downloading, data analysis and interpretation. The corrected water level in the well at 11:30 am on January 3, 2022 was 14.773 m below ground.

Central Well WID 23227

A Diver™ datalogger Serial No. A4482 was installed in the above well on October 7, 2021

by Hy-Geo Consulting. This is a 6 inch (15.24 cm) diameter bedrock well, that was drilled in 1994 to a depth of 125 feet (38.10 m) and completed in shaley and grey sandstone. It is the prime production well for the facility and is equipped with a pump. The recording interval was set at 10 minutes to detect any water level variations from neighbouring pumping wells and tidal effects. The corrected water level in the well at 8:00 am on October 7, 2021 was 12.248 m below ground. The Diver™ datalogger Serial No. DF612 on site was utilized to record variations in barometric pressure at the same recording interval of 10 minutes synchronized with datalogger Serial No. A4482.

On January 3, 2022 datalogger Serial No. A4482 was retrieved by Keith Erickson at 11:15 am and delivered to Hy-Geo Consulting on January 4 for downloading, data analysis and interpretation. The corrected water level in the well at 11:10 am on January 3, 2022 was 8.956 m below ground.

Precipitation Data 2021-22

With the absence of a current climate station on Galiano Island, the Mayne Island climate station may be considered representative of the general longer-term (monthly) precipitation patterns on Galiano Island (Government of Canada, 2022a). The most recent (2021-22) precipitation data for the region is available for climate station 1015638 on North Pender Island (Government of Canada, 2022b).

Precipitation in 2021 as observed at climate station 1015638 on North Pender Island was well below normal from February to August as shown in Table 1.

Table 1. Monthly 2021 precipitation data for North Pender climate station (Climate ID.1015638) compared to 1981-2010 normals for Mayne Island.

Month	Precipitation in 2021 (mm)	Monthly Precipitation Normal (mm)	Percent of Normal	Cumulative Percent of Normal
January	134.1	129.9	103.2	103.2
February	63	87.7	71.8	90.6
March	15	75.4	19.9	72.4
April	17.4	55.3	31.5	65.9
May	22.4	44	50.9	64.2
June	23.9	36.9	64.8	64.3
July	0	21.2	0	61.2
August	10.6	23.8	44.5	60.4
September	66.0	28	235.7	70.2
October	91.8	79.9	114.9	76.3
November	252.1	135.4	186.2	97.0
December	93.3	124.5	74.9	93.8
Total:	789.6	842		

Data from Government of Canada (2022a and 2022b).

Heavy rains beginning in September through November resulted in above normal monthly precipitation. Overall precipitation in 2021 of 789.6 mm was 93.8 percent of the annual normal (842 mm) for Mayne Island.

Monitoring Results

Observation Well WID 23229, September 17, 2021 to January 3, 2022

Given the frequent recording interval of 10 minutes chosen for the monitoring project, a large dataset of over 15,560 water level readings was generated for the above period. A separate hydrograph for this period was prepared to process the large data set and precipitation data was subsequently plotted on a separate graph for comparative purposes.

Figure 1 shows the water level below ground in Well WID 23229 from September 17 to January 3, 2022 compared with precipitation data from the North Pender Island climate station (Climate ID.1015638). Water level data shown has been corrected for barometric effects. The raw data for the September 17 to January 3, 2022 monitoring period is provided in Excel[®] spreadsheet titled “Crystal Mtn Obs Well September to Jan2022.csv”.

The hydrograph in Figure 1 shows water levels relatively static in September and then rising steadily about 3.7 m through October to late December. Individual rain events do not appear evident in the water level hydrograph. Water levels in the well likely respond to the cumulative effects of the fall rainfall events.

Figure 2 in more detail, shows the water level fluctuations and trend in Observation well WID 23229 from September 30 to October 7, 2021 compared with predicted tidal fluctuations. There is a good visual correlation between the rising water levels and daily tidal fluctuations. The effect of the tidal fluctuation on the water level in the well is only about 5 cm. This relationship in well WID 23229 was reported previously (Kohut, 2015).

Central Well WID 23227, October 7, 2021 to January 3, 2022

Given the frequent recording interval of 10 minutes chosen for the monitoring project, a large dataset of over 12,600 water level readings was generated for the above period. A separate hydrograph for this period was prepared to process the large data set and precipitation data was subsequently plotted on a separate graph for comparative purposes.

Figure 3 shows the water level below ground in Well WID 23227 from October 7, 2021 to January 3, 2022 compared with precipitation data from the North Pender Island climate station (Climate ID.1015638). Water level data shown has been corrected for barometric effects. The raw data for the October 7, 2021 to January 3, 2022 monitoring period is provided in Excel[®] spreadsheet titled “Crystal Mtn Central Well October to Jan2022.csv”.

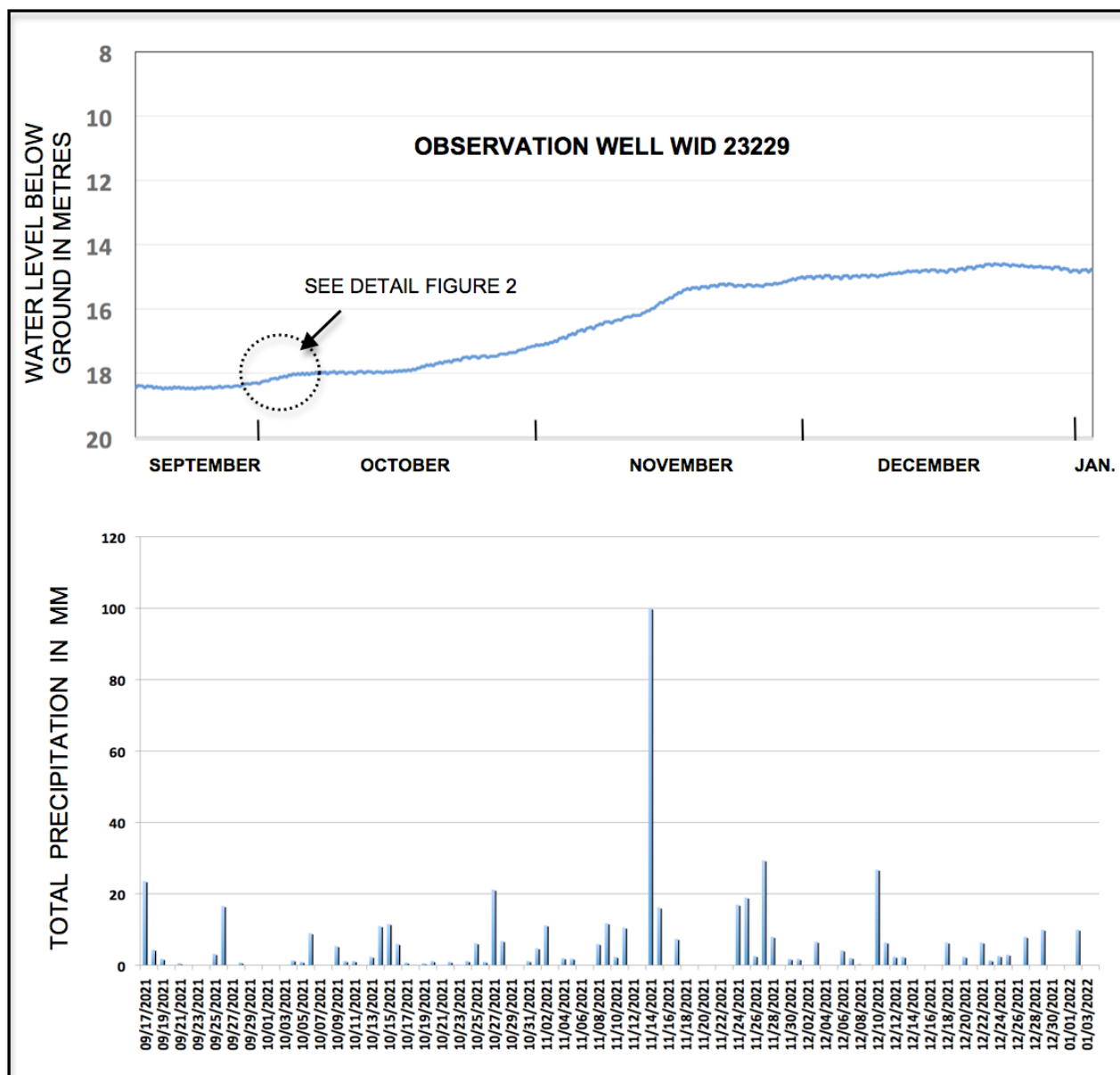


Figure 1. Water level below ground in Observation Well WID 23229 from September 17 to January 3, 2022 compared with precipitation data from North Pender Island climate station (Climate ID.1015638).

The hydrograph in Figure 3 for the Central well shows a very similar long-term trend with the water levels in the Observation well with water levels rising steadily about 3.5 m through October to late December. Individual rain events do not appear evident in the water level hydrograph. Water levels in the well likely respond to the cumulative effects of the fall rainfall events.

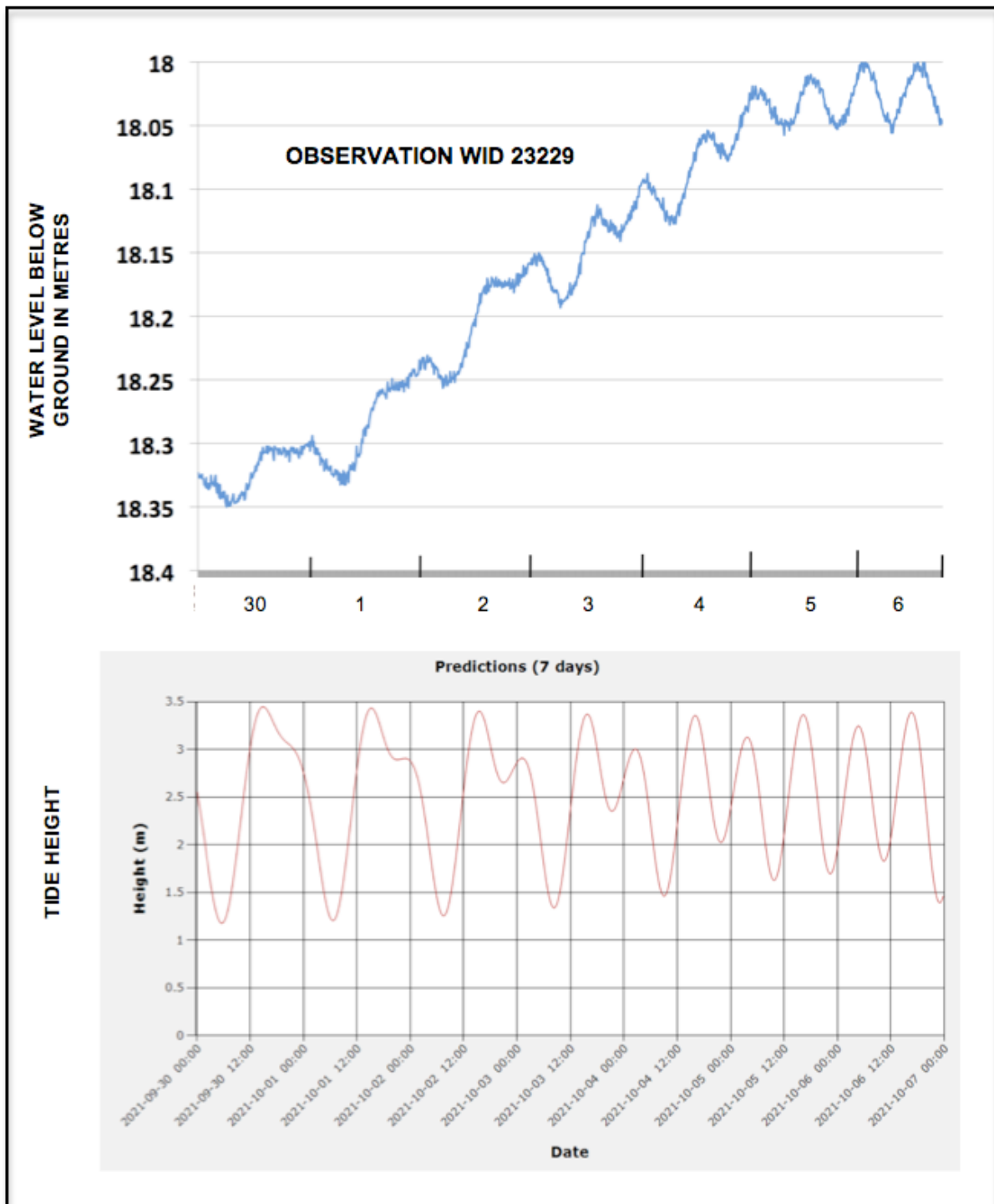


Figure 2. Comparison of water level fluctuations in Observation Well WID 23299 from September 30 to October 7, 2021 with predicted tidal fluctuations at Montague Harbour. Tidal graph adapted from Government of Canada, 2022c.

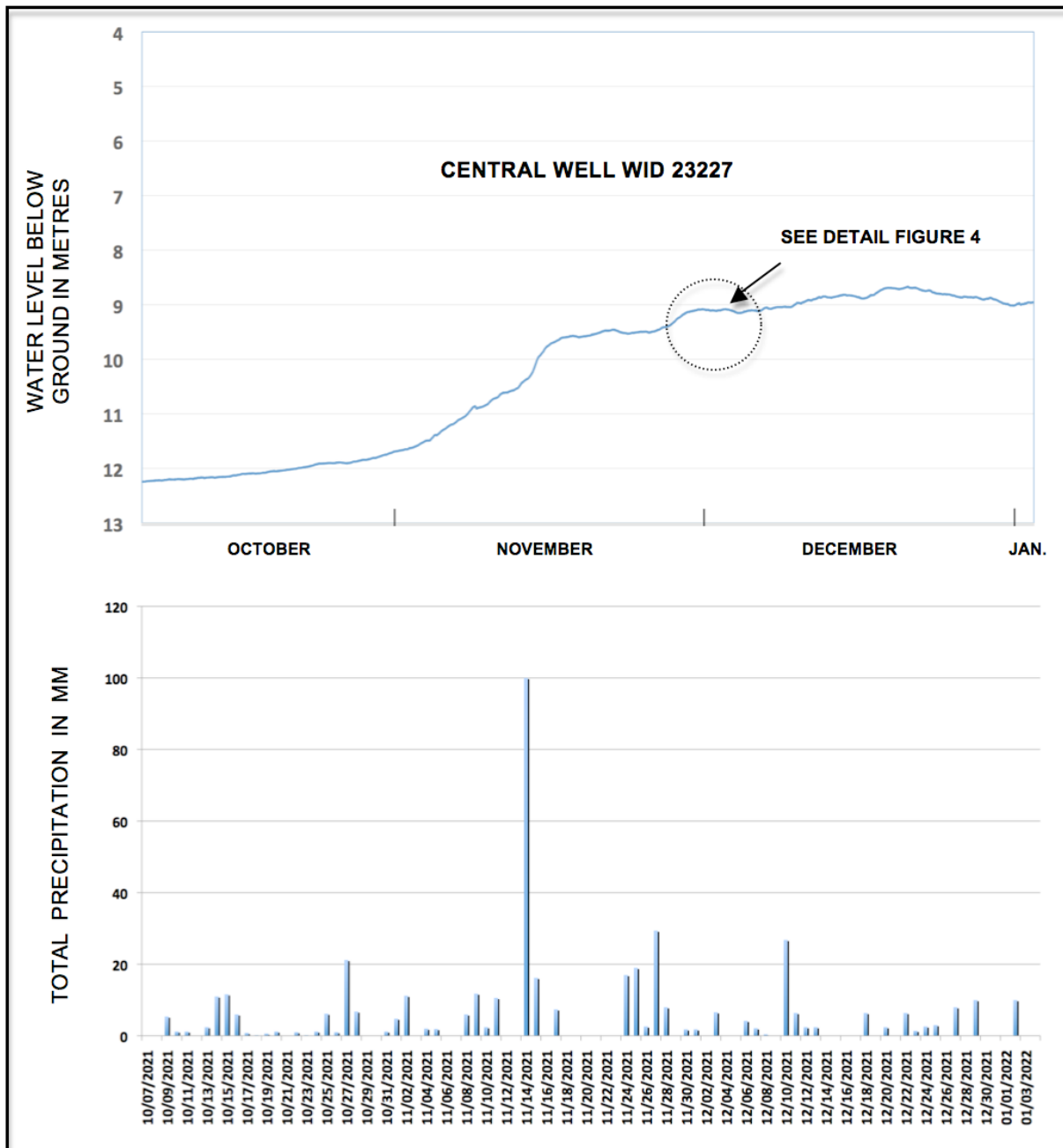


Figure 3. Water level below ground in Central Well WID 23227 from October 7 to January 3, 2022 compared with precipitation data from North Pender Island climate station (Climate ID.1015638).

Figure 4 in more detail, shows the water level fluctuations and trend in the Central well from November 30 to December 7, 2021 compared with predicted tidal fluctuations for the same period. There appears to be some periodic fluctuations ranging from 4 to 8 cm in the water levels although they do not correspond to any tidal influence. The cyclic nature of these fluctuations may reflect minor effects of pumping from neighbouring wells in the region.

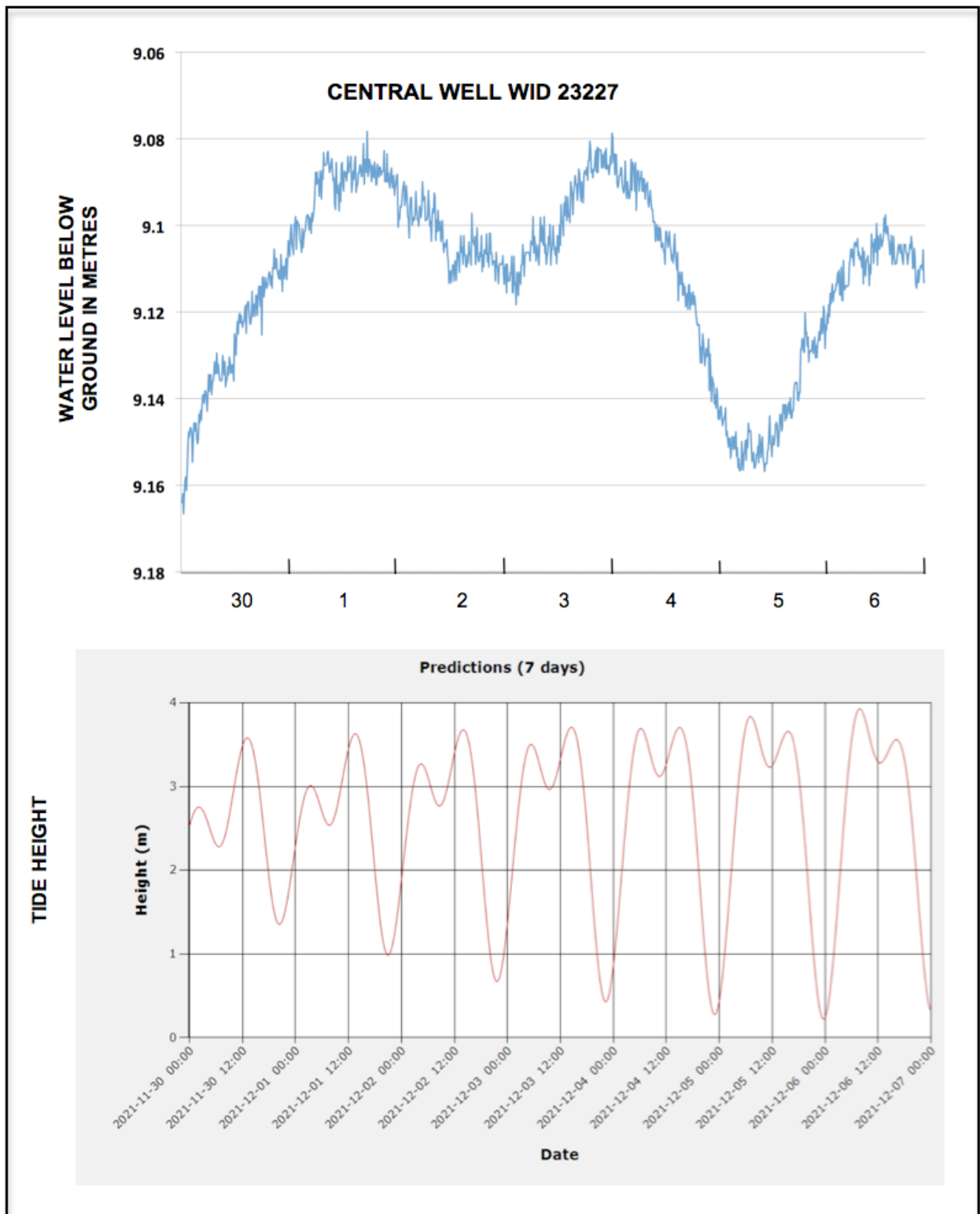


Figure 4. Comparison of water level fluctuations in Central Well WID 23227 from November 30 to December 7, 2021 with predicted tidal fluctuations at Montague Harbour. Tidal graph adapted from Government of Canada, 2022c.

The overall, non-pumping behaviour of the water level in Observation Well WID 23229 and the Central Well WID 23227 during the September 2021 to January 2022 monitoring period is consistent with previous monitoring observed at this site (Kohut, 2015). The monitoring results obtained above are also consistent with the observations, assumptions and results reported on the pumping test carried out on the Central Well WID 23227 in 2015 (Kohut, 2015).

Conclusions

Based on the water level monitoring conducted on Observation Well WID 23229 and the Central Well WID 23227 between September 2021 and January 3, 2022, the following conclusions can be made:

1. Water levels in both wells behaved in a similar fashion rising approximately 3.5 m during the monitoring period in response to the cumulative effects of fall and early winter rains. Individual precipitation events do not appear evident in the water level hydrographs.
2. Water levels in Observation Well WID 23229 showed periodic tidal effects of about 5 cm.
3. On close examination, water levels in the Central Well WID 23227 showed periodic variations with fluctuations ranging from 4 to 8 cm. These did not correspond to any tidal influence. The cyclic nature of these fluctuations may reflect minor effects of pumping from neighbouring wells in the region.
4. The monitoring results obtained are consistent with the observations, assumptions and results reported on the pumping test carried out on the Central Well WID 23227 in 2015.

Respectfully submitted:



Alan P. Kohut, PEng
Senior Hydrogeologist

Hy-Geo Consulting
Permit to Practice Number: 1001034

References

Government of Canada. 2022a. *Canadian Climate Normals*. 1981-2010 Climate Normals & Averages. Internet website http://climate.weather.gc.ca/climate_normals/index_e.html

Government of Canada. 2022b. *Historical Climate Data*. Internet website <http://climate.weather.gc.ca/>

Government of Canada. 2022c. *7 Days Tidal Predictions*. Fisheries and Oceans Canada. Internet website <https://www.tides.gc.ca/eng/station?type=0&date=2021%2F07%2F29&sid=7420&tz=PST&pres=0>

Kohut, A.P. 2015. *Groundwater Assessment Report For Crystal Mountain Retreat Centre, Galiano Island*. Report prepared of Crystal Mountain Society. Hy-Geo Consulting, Victoria, British Columbia.



Islands Trust

POLICY STATEMENT DIRECTIVES ONLY CHECK LIST

Bylaw and File No: 278 (LUB)
SA-6500-20 LUB Technical Amendments
LTC Endorsement:

PURPOSE

To provide staff with the Directives Only Checklist to highlight issues addressed in staff reports and as a means to ensure Local Trust Committee address certain matters in their official community plans and regulatory bylaws and Island Municipalities address certain matters in their official community plans and to reference any relevant sections of the Policy Statement.

POLICY STATEMENT

The Policy Statement is comprised of several parts. Parts I and II outline the purpose, the Islands Trust object, and Council's guiding principles. Parts III, IV and V contain the goals and policies relevant to ecosystem preservation and protection, stewardship of resources and sustainable communities.

There are three different kinds of policies within the Policy Statement as follows:

- Commitments of Trust Council which are statements about Council's position or philosophy on various matters;
- Recommendations of Council to other government agencies, non-government organizations, property owners, residents and visitors; and
- Directive Policies which direct Local Trust Committees and Island Municipalities to address certain matters.

DIRECTIVES ONLY CHECK LIST

The Policy Statement Directives Only Checklist is based on the directive policies from the Policy Statement (Consolidated April 2003) which require Local Trust Committees to address certain matters in their official community plans and regulatory bylaws and Island Municipalities to address certain a matters in their official community plans in a way that implements the policy of Trust Council.

Staff will use the Policy Statement Checklist (Directives Only) to review Local Trust Committee and Island Municipality bylaw amendment applications and proposals to ensure consistency with the Policy Statement. Staff will add the appropriate symbol to the table as follows:

- ✓ if the bylaw is **consistent** with the policy from the Policy Statement, or
- ✗ if the bylaw is **inconsistent (contrary or at variance)** with a policy from the Policy Statement, or
- N/A if the policy is not applicable.

Part III Policies for Ecosystem Preservation and Protection

CONSISTENT	NO.	DIRECTIVE POLICY
	3.1	Ecosystems
✓	3.1.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and protection of the environmentally sensitive areas and significant natural sites, features and landforms in their planning area.
✓	3.1.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning, establishment, and maintenance of a network of protected areas that preserve the representative ecosystems of their planning area and maintain their ecological integrity.
✓	3.1.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the regulation of land use and development to restrict emissions to land, air and water to levels not harmful to humans or other species.
	3.2	Forest Ecosystems
✓	3.2.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of unfragmented forest ecosystems within their local planning areas from potentially adverse impacts of growth, development, and land-use.
	3.3	Freshwater and Wetland Ecosystems and Riparian Zones
✓	3.3.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means to prevent further loss or degradation of freshwater bodies or watercourses, wetlands and riparian zones and to protect aquatic wildlife.
	3.4	Coastal and Marine Ecosystems
N/A	3.4.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of sensitive coastal areas.
N/A	3.4.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for and regulation of development in coastal regions to protect natural coastal processes.

PART IV: Policies for the Stewardship of Resources

CONSISTENT	NO.	DIRECTIVE POLICY
	4.1	Agricultural Land
N/A	4.1.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and preservation of agricultural land for current and future use.
N/A	4.1.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation, protection, and encouragement of farming, the sustainability of farming, and the relationship of farming to other land uses.
N/A	4.1.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of adjacent properties to minimize any adverse affects on agricultural land.

CONSISTENT	NO.	DIRECTIVE POLICY
N/A	4.1.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the design of road systems and servicing corridors to avoid agricultural lands unless the need for roads outweighs agricultural considerations, in which case appropriate mitigation measures shall be required to derive a net benefit to agriculture
N/A	4.1.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address land uses and activities that support the economic viability of farms without compromising the agriculture capability of agricultural land.
N/A	4.1.9	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of Crown lands for agricultural leases.
	4.2	Forests
✓	4.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the need to protect the ecological integrity on a scale of forest stands and landscapes.
✓	4.2.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the retention of large land holdings and parcel sizes for sustainable forestry use, and the location and construction of roads, and utility and communication corridors to minimize the fragmentation of forests.
N/A	4.2.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of forest ecosystem reserves where no extraction will take place to ensure the preservation of native biological diversity.
	4.3	Wildlife and Vegetation
	4.4	Freshwater Resources
✓	4.4.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
✓	4.4.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses
	4.5	Coastal Areas and Marine Shorelands
N/A	4.5.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the needs and locations for marine dependent land uses.
N/A	4.5.9	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the compatibility of the location, size and nature of marinas with the ecosystems and character of their local planning areas.
N/A	4.5.10	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location of buildings and structures so as to protect public access to, from and along the marine shoreline and minimize impacts on sensitive coastal environments.
N/A	4.5.11	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways.
	4.6	Soils and Other Resources
N/A	4.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of productive soils.

PART V: Policies for Sustainable Communities

CONSISTENT	NO.	DIRECTIVE POLICY
	5.1	Aesthetic Qualities
✓	5.1.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of views, scenic areas and distinctive features contributing to the overall visual quality and scenic value of the Trust Area.
	5.2	Growth and Development
✓	5.2.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address policies related to the aesthetic, environmental and social impacts of development.
✓	5.2.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address any potential growth rate and strategies for growth management that ensure that land use is compatible with preservation and protection of the environment, natural amenities, resources and community character.
✓	5.2.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means for achieving efficient use of the land base without exceeding any density limits defined in their official community plans.
✓	5.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of areas hazardous to development, including areas subject to flooding, erosion or slope instability, and strategies to direct development away from such hazards.
	5.3	Transportation and Utilities
N/A	5.3.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of a classification system of rural roadways, including scenic or heritage road designations, in recognition of the object of the Islands Trust.
✓	5.3.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the impacts of road location, design, construction and systems.
N/A	5.3.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of areas for the landing of emergency helicopters.
N/A	5.3.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of land use patterns that encourage establishment of bicycle paths and other local and inter-community transportation systems that reduce dependency on private automobile use.
	5.4	Disposal of Waste
N/A	5.4.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of acceptable locations for the disposal of solid waste.

CONSISTENT	NO.	DIRECTIVE POLICY
	5.5	Recreation
N/A	5.5.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the prohibition of destination gaming facilities such as casinos and commercial bingo halls.

N/A	5.5.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location and type of recreational facilities so as not to degrade environmentally sensitive areas, and the designation of locations for marinas, boat launches, docks and anchorages so as not to degrade sensitive marine or coastal areas.
N/A	5.5.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of sites providing safe public access to beaches, the identification and designation of areas of recreational significance, and the designation of locations for community and public boat launches, docks and anchorages.
N/A	5.5.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and designation of areas for low impact recreational activities and discourage facilities and opportunities for high impact recreational activities.
N/A	5.5.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for bicycle, pedestrian and equestrian trail systems.
	5.6	Cultural and Natural Heritage
N/A	5.6.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification, protection, preservation and enhancement of local heritage.
N/A	5.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation and protection of the heritage value and character of historic coastal settlement patterns and remains.
	5.7	Economic Opportunities
✓	5.7.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address economic opportunities that are compatible with conservation of resources and protection of community character.
	5.8	Health and Well-being
✓	5.8.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address their community's current and projected housing requirements and the long-term needs for educational, institutional, community and health-related facilities and services, as well as the cultural and recreational facilities and services.

POLICY STATEMENT COMPLIANCE	
✓	COMPLIANCE WITH TRUST POLICY
	NOT IN COMPLIANCE WITH TRUST POLICY for the following reasons:

File No.: Long Range Planning: 09-6500-20-2021

DATE OF MEETING: March 7, 2022

TO: Galiano Island Local Trust Committee

FROM: Narissa Chadwick
Southern Team

COPY: Robert Kojima, Regional Planning Manager
Brad Smith, Island Planner
William Shulba, Senior Freshwater Specialist

SUBJECT: Groundwater Sustainability Project: Options for Implementation

RECOMMENDATION

1. That the Galiano Island Local Trust Committee request staff to prepare a draft bylaw to amend the “Galiano Island Official Community Plan Bylaw No. 108, 1995” to include Critical Aquifer Recharge Development Permit Area guidelines, map updates and minor updates to relevant sections as identified in the March 7, 2022 staff report.
2. That the Galiano Island Local Trust Committee request staff to prepare a draft bylaw to amend the Land Use Bylaw to include updates to definitions, addition of cistern requirements for all new builds and updates to subdivision regulations related to potable water.
3. That the Galiano Island Local Trust Committee request staff to identify options for changes to zoning regulations informed by GW Solutions (2021) groundwater availability assessment data.

REPORT SUMMARY

This report presents options for Official Community Plan (OCP) amendments and Land Use Bylaw (LUB) amendments related to the implementation of the groundwater sustainability project. OCP amendment options presented include: proposed guidelines for a Critical Aquifer Recharge Development Permit Area, minor updates to relevant sections, and mapping updates. LUB amendment options include: updates to definitions, addition of cistern requirements for all new builds outside water service areas, and updates to subdivision regulations related to proof of potable water. The report also identifies options for the two most critically vulnerable groundwater regions – GAL 19 (South Galiano) and GAL 20 (Cain Peninsula).

BACKGROUND

At the February 1, 2021 meeting the LTC endorsed a project charter for the implementation phase (Phase 3) of the Groundwater Sustainability Science Program. At the April 12, 2021 meeting the LTC, after considering a number of options, agreed to continue with this phase.

Reports and mapping related to the research phases of the project can be found here: <https://islandstrust.bc.ca/island-planning/galiano/projects/> . This information was shared with the Galiano community in a webinar held on September 7, 2021. The slides from the presentation can be found here: <https://islandstrust.bc.ca/document/ground-water-sustainability-presentation/> .

Options for OCP and LUB amendments identified in this report are informed by the outcomes from the aquifer conceptualization, groundwater recharge potential mapping and groundwater availability assessments which were outcomes of the research phases of the Groundwater Sustainability Science Program. Aquifer vulnerability to saltwater intrusion and intrinsic aquifer vulnerability to surface contamination were also considered.

ANALYSIS

Proposed OCP Amendments

1. Creation of Critical Aquifer Recharge Development Permit Area

A groundwater protection DPA will help to minimize negative impact on the quality and quantity of subsurface water supplies in areas identified to be critical to groundwater recharge. The proposed Critical Aquifer Recharge Development Permit Area policy and guidelines (see Appendix 1) considers the existing Galiano Elevated Groundwater Catchment Development Permit Area, which was developed in 2014 and involved a hydrogeology consultant. The Critical Aquifer Recharge Development Permit Area policy and guidelines is informed by the Groundwater Sustainability Science Program and the Islands Trust Freshwater Sustainability Strategy.

Planning staff are working with the Senior Freshwater Specialist to identify appropriate Critical Aquifer Recharge DPA boundaries. These boundaries will be informed by the groundwater recharge potential mapping completed by GW Solutions in October 2021. This mapping is based on a methodology developed specifically to understand the conditions contributing to groundwater quantity and quality on the Islands. It identifies the potential of different areas to collect groundwater into aquifers. The groundwater recharge potential map for Galiano is contained in Appendix 2. The most critical recharge potential areas will define the proposed DPA boundaries.

2. Minor updates to relevant sections:

Staff have reviewed the OCP in detail and identified the following minor updates:

- Changing references to “groundwater” to “freshwater” where appropriate.
- Emphasizing support for the sustainability of freshwater resources.
- Identifying support for the protection of groundwater resources in land use designation objectives
- Consideration of groundwater vulnerability with respect to policies supporting additional density.
- Update to water supply objectives.
- Updates to water supply policies in line with recent data.
- Updates to water supply advocacy policies in line with Freshwater Sustainability Strategy.

- Add climate adaptation policies related to freshwater sustainability.
- Updating subdivision policies for water use in line with proposed changes to LUB.
- Acknowledging the indigenous traditional knowledge where appropriate.
- Updates to definitions where needed.

If the LTC supports these suggested minor updates, staff will proceed with drafting bylaw amendments.

3. Map Updates:

- Changes to DPA Compilation Map to remove area delegated for Elevated Groundwater Catchment DPA and to include area delegated for Critical Aquifer Recharge DPA.
- Update to Schedule D to previous watershed regions with groundwater regions (See Appendix 5).
- Update to Schedule G DPA 4 Elevated Groundwater Catchment to reflect boundaries for the new DPA 4 Critical Aquifer Recharge DPA (TBD)

Proposed LUB Amendments

1. Updated Definitions – see Appendix 3

Proposed definitions correspond with the update to the subdivision regulations and are consistent with what is being proposed for Salt Spring Island and North Pender Island.

2. Addition of Cistern Requirements –See Appendix 3

Cistern requirements correspond with what is being proposed for North Pender Island. They apply to the addition of secondary suites and all new residential buildings outside of water service areas. Staff have proposed this approach in light of increasing water challenges being experienced in the summer, the increase in fulltime residents and uncertainties related to climate change. Cisterns could be used for the collection and storage of rainwater or groundwater. The water would not be required to be potable. The use of this supply for gardens, toilets and other non potable water uses would help off set the use of potable water. Owners could use cisterns for potable water where treatment systems are installed. The minimum cistern capacity (single cistern of collection of smaller cisterns) would be 18,000 litres. This number is based on the potential for a household, in an emergency, to manage for one week. It also considers the size of cisterns that are commercially available. Staff will be encouraging consistency of cistern size requirements across the Trust Area.

3. Update to Subdivision Regulations related to Potable Water – Appendix 4

The proposed update to the proof of water subdivision regulations is based on a concurrent project for Salt Spring Island Local Trust Area under development by Island Planners in consultation with the Islands Trust's Senior Freshwater Specialist, the Salt Spring Island Watershed Protection Alliance Technical Working Group, and provincial staff. Updates to proof of water bylaws incorporate existing subdivision regulations as well as align with new regulations in the *Water Sustainability Act Drinking Water Protection Act*, and other regulatory guidance documents. Volumes relating to proof of water for non-domestic agricultural, commercial, commercial

guest accommodation, and industrial uses might not be included as this is adjudicated by provincial water authorizations staff. Staff will be looking into this further. Domestic water volumes have been updated to align with deemed rights under the *Water Sustainability Act*.

4. Changes to zoning regulations in critical areas

Proposed changes to zoning regulations in stressed groundwater areas will be primarily informed by the [Islands Trust Area Groundwater Availability Assessment](#) completed by GW Solutions in October 2021. Saltwater intrusion potential and the potential impact of density on increases in sewage (identified through DRASTIC modeling) are also considered.

The GW Solutions (2021c) groundwater availability model estimates monthly potential evapotranspiration, soil moisture storage, actual evapotranspiration, soil moisture deficit, and soil moisture surplus (i.e., runoff and groundwater recharge). Using proxy data from a variety of sources, the model also estimate surface and groundwater use across the study Islands. Using the results from the water balance model, the study estimates the percentage of groundwater use relative to aquifer recharge, per groundwater region. The results reveal the regional disparities in groundwater use across the study Islands. Use in some areas on Mayne Island, North Pender Island and Galiano Island reaches over 10% of groundwater recharge. This likely creates stress on environmental needs and may result in water conflicts.

As identified in the maps in Appendix 5, the groundwater availability assessment data reveals that there are two groundwater regions that are likely to be critical vulnerable – South Galiano (GAL19) and the Cain Peninsula (GAL20). Staff recommend that the LTC focus on these areas for potential zoning regulation changes. Staff note that Gossip Island was not included in the GW Solutions work but is well know to be experiencing groundwater challenges similar to those of the Cain Peninsula.

Groundwater regions that are likely vulnerable to stressed groundwater availability and also have increased risk of saltwater intrusion determined using Simon Fraser University (Allen and Klassen, 2016; see Map 3 in Appendix 2). In coastal areas, freshwater aquifers are in direct contact with the ocean and under normal conditions, fresh groundwater flows towards the ocean. In areas with risk of saltwater intrusion, seawater moves into a freshwater aquifer (Allen and Klassen, 2016). Wells proximal to the coast are at higher risk for saltwater intrusion and when it occurs one or more wells can be impacted making water unpotable and unlawful to operate under the Groundwater Protection Regulation.

The maps in Appendix 6 also reveal increased likelihood of vulnerability to contamination and septic impacts to aquifers. This is determined using intrinsic fractured media aquifer vulnerability mapping (Denny and Allen, 2007). The methodology is known as “DRASTIC”. D = Depth to water; R = Net Recharge; A = Aquifer Media; T = Topography; I = Impact of Vadose Zone (vadose zone is the area above the water table); C = Conductivity of the Aquifer (this refers to how fast the water moves). For more information on DRASTIC mapping for the Gulf Islands see :

https://a100.gov.bc.ca/pub/acat/documents/r42387/DRASTIC_March2014_1396286363816_6285348741.pdf

Focusing on mitigating potential groundwater sustainability risks, options related to zoning include: reducing or transferring current density; limiting existing uses; placing restrictions on size and siting; identify requirements for potable water as a condition of certain uses and/or increases in density; and place limits on impermeable surfaces. The map in Appendix 7, identifies vacant lots and lots with subdivision potential providing insight to areas where potential changes in zoning could have the most impact. Staff will be reviewing options for these specific critical areas that will be presented to the LTC at a subsequent regular meeting.

Staff note that options can also include working with the Province to have aquifer notes written up for select groundwater regions. Provincial aquifer notes record information regarding vulnerable aquifers. These notes can be used to inform the provision of water licences. This action would be supporting the Islands Trust's Freshwater Sustainability Strategy focus on collaborating with other agencies.

Alternatives

1. Request further information

The LTC may request further information prior to making a decision. This may delay aspects of the project. Recommended wording for the resolution is as follows:

That the Galiano Island Local Trust Committee request additional information related to.....

2. Request that staff examine other options and/or aspects not identified in the staff report

The LTC may request that staff consider other types of options and/or aspects that are not covered in the staff report.

That the Galiano Island Local Trust Committee request that staff consider.....

NEXT STEPS

- Staff will present the LTC with options for DPA boundaries
- Staff will develop options for zoning regulation changes in critical areas
- Staff will draft OCP amendments
- Staff will draft LUB amendments

Submitted By:	Narissa Chadwick, RPP	February 24, 2022
Concurrence:	Robert Kojima, Regional Planning Manager	February 28, 2022
Concurrence:	William Shulba, Senior Freshwater Specialist	February 28, 2022

APPENDIX

1. Draft Development Permit Area Guidelines
2. GW Solutions Groundwater Recharge Potential Mapping
3. Land Use Bylaw Definitions and Cistern Requirements
4. Subdivision Standards for Potable Water
5. Groundwater Availability Assessment Map
6. Groundwater Vulnerability Analysis Maps
7. Groundwater Availability, Vacant Lots and Subdivision Potential: Focus Area

APPENDIX 1 - Draft Development Permit Area Guidelines

Development Permit Area 4 – Critical Aquifer Recharge Development Permit Area

4. 1 Description of Area

Development Permit Area 4 includes critical groundwater recharge areas identified on Schedule G. Critical aquifer recharge areas contain hydrogeological conditions that facilitate aquifer recharge and/or transmit contaminants to an underlying aquifer. Factors considered in the identification of critical aquifer recharge areas include topography, remote sensing, satellite multispectral analysis depth to water table, presence of highly permeable soils, land-cover analysis, structural geology, presence of flat terrain, and the presence of more permeable surficial geology.

Authority

The Critical Aquifer Recharge Development Permit Area is designated a development permit area pursuant to Section 488(1)(a) of the *Local Government Act* for the protection of the natural environment, its ecosystems and biological diversity and Section 488(1)(i) of the *Local Government Act* for the establishment of objectives to promote water conservation.

5.2.12.3 Special Conditions and Objectives that Justify the Designation

It is the Object of the Islands Trust to “Preserve and protect the Trust Area and its unique amenities and environment of the Trust Area for the benefit of the residents of the Trust Area, and of British Columbia generally, in cooperation with municipalities, regional districts, improvement districts, other persons and organizations and the government of British Columbia.”

It is Provincial legislation in Section 473(1)(d) of the Local Government Act that an official community plan must include statements and map designations for the area covered by the Plan respecting restrictions on the use of land that is environmentally sensitive to development.

The Islands Trust Council has committed to identifying, protecting and, where possible, restoring or rehabilitating groundwater recharge areas in the Trust Area.

It is policy of the Islands Trust Council that Local Trust Committees address measures that ensure:

- neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, and
- the quality and quantity of drinking water sources for current and future Trust Area residents is preserved and protected, and
- the overall health of watersheds and ground water in the Islands Trust Area is protected.

Mapping of recharge and water balance completed in 2021 for Galiano Island identifies that the island has a number of areas of critical concern with respect to groundwater vulnerability.

The Objectives of the development permit area are:

- to protect and sustain access to a reliable and safe supply of drinking water for groundwater wells
- to protect and sustain the quality and supply of surface and groundwater necessary to the provision of ecological services
- to mitigate the impacts of development and climate change on groundwater supplies

5.2.12.4 Development Approval Information

The Critical Aquifer Recharge DPA is also designated an area for which development approval information (DAI) may be required according to Section 485(1) of the *Local Government Act*. The designation of these areas for this purpose is based on the special conditions or objectives supporting the designation of the DPA. Development approval information means information on the anticipated impact of the proposed activity or development on the community or the natural environment.

5.2.12.5 Applicability

A development permit is required for the subdivision of land, construction of a new residence or commercial or industrial building, land alteration, or the cutting of trees in excess of the number exempted below.

5.2.12.6 Development Permit Exemptions

The following activities are exempt from any requirement for a development permit:

- a) Impacts have been determined by the Islands Trust's Senior Freshwater Specialist or the Regional Planning Manager to be minor in nature.
- b) Repair, maintenance, alteration, additions to, or reconstruction of existing lawful buildings, structures or utilities within the existing footprint, including those that are lawfully non-conforming (a building permit may still be required).
- c) Where the subdivision does not bisect the development permit area as indicated on Schedule X.
- d) Land that is subject to a conservation covenant under section 219(4) of the *Land Title Act* in relation to natural, environmental, wildlife or plant life value relating to the land, granted to the Local Trust Committee or a covenantee designated under section 219(3)(c) of the *Land Title Act*.
- e) Repair and maintenance of existing roads, driveways, paths and trails, provided there is no expansion of the width or length of the road, driveway, path or trail,

and no creation of additional impervious surfacing, including paving asphaltting or similar surfacing.

- f) Removal of invasive species.
- g) Cutting and removal of up to 5 trees per hectare (with a trunk diameter greater than 20 centimetres measured 1.5 metres above the ground) within a 12-month period on any one lot.
- h) Removal of trees that have been examined by an arborist and certified to pose an immediate threat to life or property.
- i) Farm operations as defined in the *Farm Practices Protection (Right to Farm) Act* and farm uses as defined in Section 2(2), (3), (4) and (5) of the Agricultural Land Reserve Use, Subdivision, and Procedure Regulation.
- j) Forest management activities, as defined in the Private Managed Forest Land Regulation, on land classified as managed forest land under the *Private Managed Forest Land Act*.
- k) Land alteration that does not alter the natural contours of the land.
- l) The construction of an accessory building or structure with a lot coverage of less than 100m².
- m) Construction of trails or fences that does not alter contours of the land.
- n) Emergency actions required to prevent, control or reduce an immediate threat to human life, the natural environment or public or private property including:
 - i. Forest fire, flood and erosion protection works;
 - ii. Protection, repair or replacement of public facilities;
 - iii. Clearing of an obstruction from a bridge, culvert, dock wharf or stream; or
 - iv. Bridge repairs.
- o) Works undertaken by a local government or a body established by a local government.
- p) Works authorized under a provincial statute.

5.2.12.7 Guidelines

The *Local Government Act* prohibits construction of buildings and structures and the alteration of land and subdivision in Development Permit Area Eleven unless the owner first obtains a development permit. Development permits will be issued in accordance with the following guidelines.

1. In general, development should minimize negative impacts on the quality and quantity of subsurface water supplies.

2. Where a qualified professional hydrogeologist or engineer has made recommendations for mitigation measures, the permit conditions may include a requirement for security in the form of an irrevocable letter of credit, to ensure the protection of groundwater supply quality or quantity consistent with the measures and recommendations described in the report.
3. Where the qualified professional hydrogeologist or engineer's report describes an area as suitable for development with special mitigating measures, the development permit should only allow the development to occur in compliance with the measures described in the report. Monitoring and regular reporting by a hydrogeologist or other professional at the applicant's expense may be required during construction and development phases, as specified in a development permit.
4. Where an application involves the subdivision of land, layout of the subdivision should be designed to:
 - a) replicate the function of a naturally vegetated watershed;
 - b) maintain the hydraulic regime of surface and groundwater pre-development flow rates;
 - c) minimize interference with groundwater recharge;
 - d) not introduce or remove material where it would cause erosion of or the filling in of natural watercourses or wetlands.
5. Where freshwater collection cisterns are required as a condition of the construction of a building impervious surfaces should be minimized.
6. The use of impervious paved driveways shall be discouraged.
7. Where tree removal which is not exempt from the requirement for a permit:
 - a. Removal of trees from steep slopes should only be allowed where necessary and where replacement vegetation / erosion control measures are established. Plans delineating extent of vegetation / tree removal and location of proposed construction, excavation and / or blasting, may be required.
 - b. All development should be undertaken and completed in such a manner as to prevent the release of sediment to any watercourse. An erosion and sediment control plan, including actions to be taken prior to land clearing and site preparation and the proposed timing of development activities to reduce the risk of erosion, may be required as part of the development permit application.
 - c. Existing, native trees should be retained wherever possible and trees to be retained near development should be clearly marked prior to development, and temporary fencing installed at the drip line to protect them during clearing, grading and other development activities.

- d. If the area has been previously cleared of trees, or is cleared during the process of development, replanting requirements may be specified in the development permit. Areas of undisturbed bedrock exposed to the surface or natural sparsely vegetated areas should not require planting.
 - e. Tree species used in replanting, restoration or enhancement should be selected to suit the soil, light and groundwater conditions of the site, should preferably be native to the area, and should be selected for erosion control and/or wildlife habitat values as needed. Suitably adapted, non-invasive, non-native trees may also be considered acceptable.
 - f. All replanting should be maintained by the property owner for a minimum of 2 years from the date of completion of the planting to ensure survival. This may require removal of invasive, non-native weeds (e.g., Himalayan blackberry, Scotch broom, English ivy) and irrigation. Unhealthy, dying or dead trees should be replaced at the owner's expense in the next regular planting season. Permits may include, as a condition, the provision of security to guarantee the performance of terms of the permit.
- 8. Roads, driveways, trails and pathways should follow the contours of the land and appropriately manage drainage. The construction of roads and utility corridors and other activities involving the disturbance of the soil, must be conducted in such a manner that the productivity of the local groundwater recharge area is not impaired through soil compaction, altered surface drainage patterns, siltation, erosion, or salt water intrusion.
 - 9. Parking areas should be located and constructed so as to minimize erosion and water pollution by controlling storm runoff. Structural measures such as catch basins, oil separators, bio-filtration trenches or swales, unpaved or permeable all-weather surfaces should be considered for this purpose.
 - 10. Permits may include minor variances to subdivision or building and structure siting or size regulations to meet the objectives of the development permit area.

Appendix 2 - Groundwater Recharge Potential



APPENDIX 3 - Land Use Bylaw Definitions and Cistern Requirements

Definitions

“potable” means water that is safe to drink, fit for domestic purposes and meets the Health Canada Guidelines for Canadian Drinking Water Quality or any guidance documents or legislation which may be enacted in substitution.

“pumping test” means a flow test to determine the sustainable productivity of a well, conducted under supervision of a *hydrogeologist*, and that is consistent with the British Columbia Guide to Conducting Pumping Tests, Groundwater Protection Regulation Handbook, other guidance documents which may be issued, and applicable legislation, and consists of pumping groundwater from a well typically for 24 to 72 hours depending on aquifer characteristics.

“Hydrogeologist” means:

- a) an engineer or geoscientist licensed under the *Engineers and Geoscientists Act* or any legislation which may be enacted in substitution; and
- b) has competency in the field of hydrogeology.

“stream” means a stream as defined in the *Water Sustainability Act* or any legislation which may be enacted in substitution.

3.18 Secondary Suites

3.18.7 A building permit for a property outside a water service area shall not be issued for a secondary suite, nor shall a secondary suite be occupied, unless the building that is to contain the secondary suite is equipped with a freshwater catchment and storage system having a capacity of at least 18,000 litres .

3.19 Cistern Requirements

3.19.1 A building permit for a property outside a water service area shall not be issued for a new building to be used as a dwelling, including a cottage, unless the building is equipped with a cistern (or combination of cisterns) for the storage of freshwater having a capacity of at least 18,000 litres.

3.19.2 The floor area occupied by any cistern located in a building and the housing provided for such cistern is excluded from the calculation of the floor area of the building and the lot coverage of the lot on which it is located.

APPENDIX 4 -Subdivision Standards for Potable Water

SUBDIVISION REGULATIONS

4.4 POTABLE WATER

- 4.4.1 Where a subdivision is not proposed to be served by a community water system, each *lot* in a proposed subdivision must be proven to have a supply of *potable water* in accordance with the requirements of this section.
- 4.4.2 Each *lot* in a proposed *subdivision*, not proposed to be served by a community water system, must be supplied with a sufficient quantity of *potable water* to supply the uses permitted on the *lot* by this Bylaw according to the standards set out in Table 1.

TABLE 1 POTABLE WATER SUPPLY STANDARDS FOR SUBDIVISION	
USE Per Lot	VOLUME (litres per day)
<i>One dwelling unit</i>	2000
<i>Each additional dwelling unit, including a cottage</i>	2000
<i>Other uses - TBD</i>	

Information Note: If more than one dwelling unit is connected to the same source of water, the water system may be subject to the Drinking Water Protection Act, British Columbia Ministry of Health regulations of water supply systems, and may be subject to the Water Utility Act.

Information Note: Non-domestic uses serviced by groundwater or a stream may require a licence under the Water Sustainability Act.

- 4.4.4 Where *potable water* is to be supplied from a surface water source, the applicant for subdivision must provide proof of authorization (water licence) indicating the total volume of water granted to the licence holder.
- 4.4.5 Where non-domestic use exists on a lot proposed to be subdivided that requires a licence under the *Water Sustainability Act* the applicant must provide proof of authorization in the form of a water licence. **Staff are reviewing authority relate to this.**
- 4.4.6 Where *potable water* is to be supplied by a drilled well, a *pumping test* shall be carried out on each well in a proposed subdivision by:
- pumping groundwater, at a constant rate, for a minimum period of 12 hours; and
 - withdrawing the daily required volume in accordance with Table 1 within a period of 24 hours; and
 - monitoring the recovery phase until at least 90 percent recovery has been achieved.

- 4.4.7 Where *potable* water is to be supplied by a drilled well a drop pipe or sounding tube and wellhead port must be installed for future water level monitoring.
- 4.4.8 Drilled wells used for the purposes of subsection 4.4.6 must not be located within 50 metres of the natural boundary of the sea.
- 4.4.9 Where *potable* water is to be supplied by a drilled well the applicant for subdivision must provide written certification under seal of a *hydrogeologist* that:
- a. Each well has been constructed in accordance with the *Groundwater Protection Regulation* or any legislation which may be enacted in substitution;
 - b. Each well has been constructed in accordance with Subsections 4.4.7 and 4.4.8;
 - c. Each well has sufficient available groundwater to provide the daily required volume of *potable* water for each lot in accordance with Table 1;
 - d. The pumping test carried out on each well was conducted in accordance with subsection 4.4.6; and
 - e. The extraction of groundwater is not likely to adversely affect the quantity or quality of any existing groundwater or streams.
- 4.4.10 If the daily required volume of *potable* water cannot be supplied in accordance with Subsections 4.2.2 or if the certification referred to in Article 4.2.9(c) cannot be made, the *Approving Officer* may nonetheless approve the *subdivision* if the applicant grants a covenant under the *Land Title Act* to the Galiano Island Local Trust Committee and the Capital Regional District that restricts the development of the subdivision to the uses for which there is a sufficient volume of water or commits the applicant to installing a water storage system capable of holding a volume equal to 30 days of the shortfall between the required and available volumes.
- 4.4.11 Where the *potable* water supply is provided through a drilled well or water licence, the applicant for subdivision must provide written certification under seal of a *hydrogeologist*:
- a. Results of a water quality analysis, completed by an accredited laboratory;
 - b. Certification, based on the accredited laboratory water quality analysis, that the proposed water supply source is *potable*, or can be made *potable*, with a treatment system that is customarily used in a *dwelling unit*;
 - c. Certification, based on the accredited laboratory water quality analysis of chloride concentrations, that each well is not likely to be affected by the intrusion of saline groundwater or sea water in accordance with Government of British Columbia guidance documents;

- d. A plan of the proposed *subdivision* indicating the location where each water sample was taken; and
 - e. A statement that the water samples upon which the water quality analysis was performed were unadulterated samples taken from the locations indicated on the plan.
- 4.4.12 If the water to be supplied is not *potable*, but can be made *potable* with a treatment system that is customarily used in a *dwelling unit*, the *Approving Officer* may nonetheless approve the *subdivision* if the applicant grants a covenant under the *Land Title Act* to the Galiano Island Local Trust Committee and the Capital Regional District that requires on-going treatment of the water to ensure that it is *potable*.
- 4.4.13 Groundwater wells under, or at risk of, saline water intrusion are not permitted sources of potable water for the purposes of subdivision.
- 4.4.14 Alternative *potable* water supplies including, but not limited to, shallow dug wells, rainwater catchment and desalination are not permitted sources of *potable* water for the purposes of subdivision.
- 4.4.15 The requirements of Section 4.4 shall not apply where the proposed subdivision is a boundary adjustment that does not result in an increase in the number of lots or permitted dwelling units provided that all lots in the subdivision are currently serviced by existing groundwater wells, community water system connection or water licence.

APPENDIX 5 - Groundwater Availability Assessment Map: Percentage of Use from Recharge

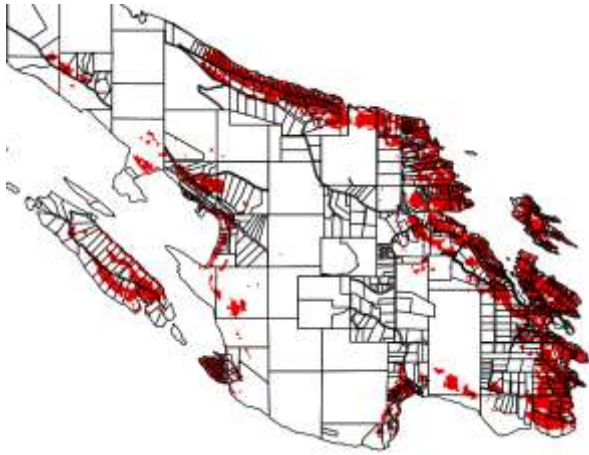
<https://islandstrust.bc.ca/document/southern-gulf-islands-groundwater-availability-assessment-report-ver-2021/>



Island	Groundwater Region ID	Groundwater Region Name	Groundwater Recharge-Normal (dam ³)	Groundwater Recharge-Driest (dam ³)	Groundwater Use (dam ³)	% of Use from Recharge-Normal	% of Use from Recharge-Driest	% of Use from Recharge (Normal-Driest)
Galiano Island	GAL01	North Galiano_Spanish Hills	642	328	22	3.4%	6.7%	3-7%
	GAL02	Dionisio Point	477	253	0.4	0.1%	0.2%	0.1-0.2%
	GAL03	North Georgia Strait	402	216	1	0.2%	0.4%	0.2-0.4%
	GAL04	North Trincomali Channel	1345	700	18	1.4%	2.6%	1-3%
	GAL05	West Galiano	527	272	19	3.6%	7.0%	4-7%
	GAL06	East Galiano	732	392	3	0.4%	0.7%	0.4-0.7%
	GAL07	Greig Creek	583	303	8	1.3%	2.5%	1-3%
	GAL08	Central Georgia Strait	666	348	2	0.3%	0.6%	0.3-0.6%
	GAL09	Quadra Hill_East	614	322	0.5	0.1%	0.2%	0.1-0.2%
	GAL10	Quadra Hill_West	1211	623	10	0.9%	1.7%	1-2%
	GAL11	South Trincomali Channel	261	135	3	1.1%	2.1%	1-2%
	GAL12	Cook Cove	760	397	3	0.5%	0.9%	0.5-0.9%
	GAL13	Finlay Lake	782	411	37	4.7%	9.0%	5-9%
	GAL14	Montague Harbour	759	389	38	5.0%	9.8%	5-10%
	GAL15	Winstanley Point	131	68		0.0%	0.0%	0-0%
	GAL16	Sutcliffe Mountain	477	246	17	3.5%	6.9%	4-7%
	GAL17	Georgeson Bay	365	188	9	2.5%	4.9%	3-5%
	GAL18	Matthews Point	88	45	2	2.0%	3.8%	2-4%
	GAL19	South Galiano	760	391	69	9.1%	17.7%	8-18%
	GAL20	Cain Peninsula	111	57	13	11.0%	22.4%	12-23%
	GAL21	Murchison-Whaler Bay	1828	930	75	4.1%	8.1%	4-8%

Appendix 6 - Groundwater Vulnerability Analysis Maps: Focus Area Breakdown

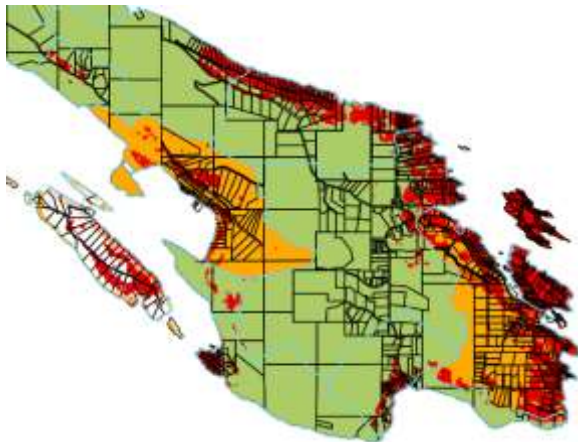
Aquifer Vulnerability to Saltwater Intrusion



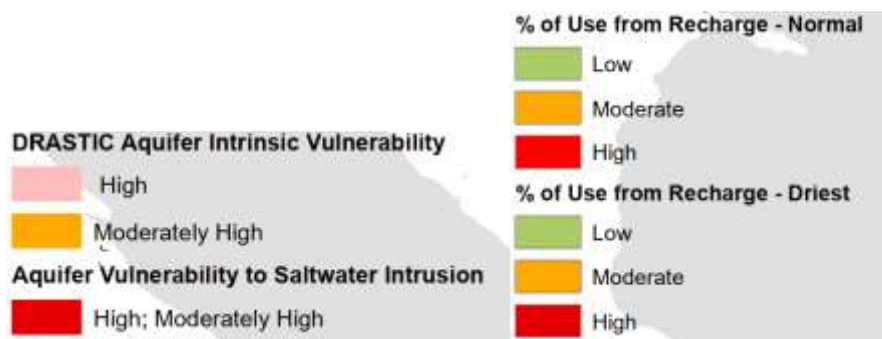
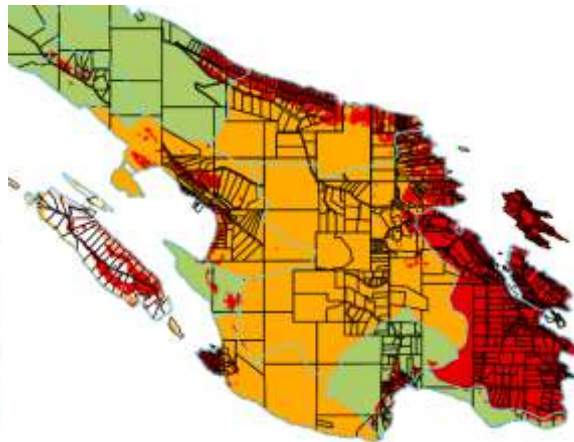
DRASTIC Mapping



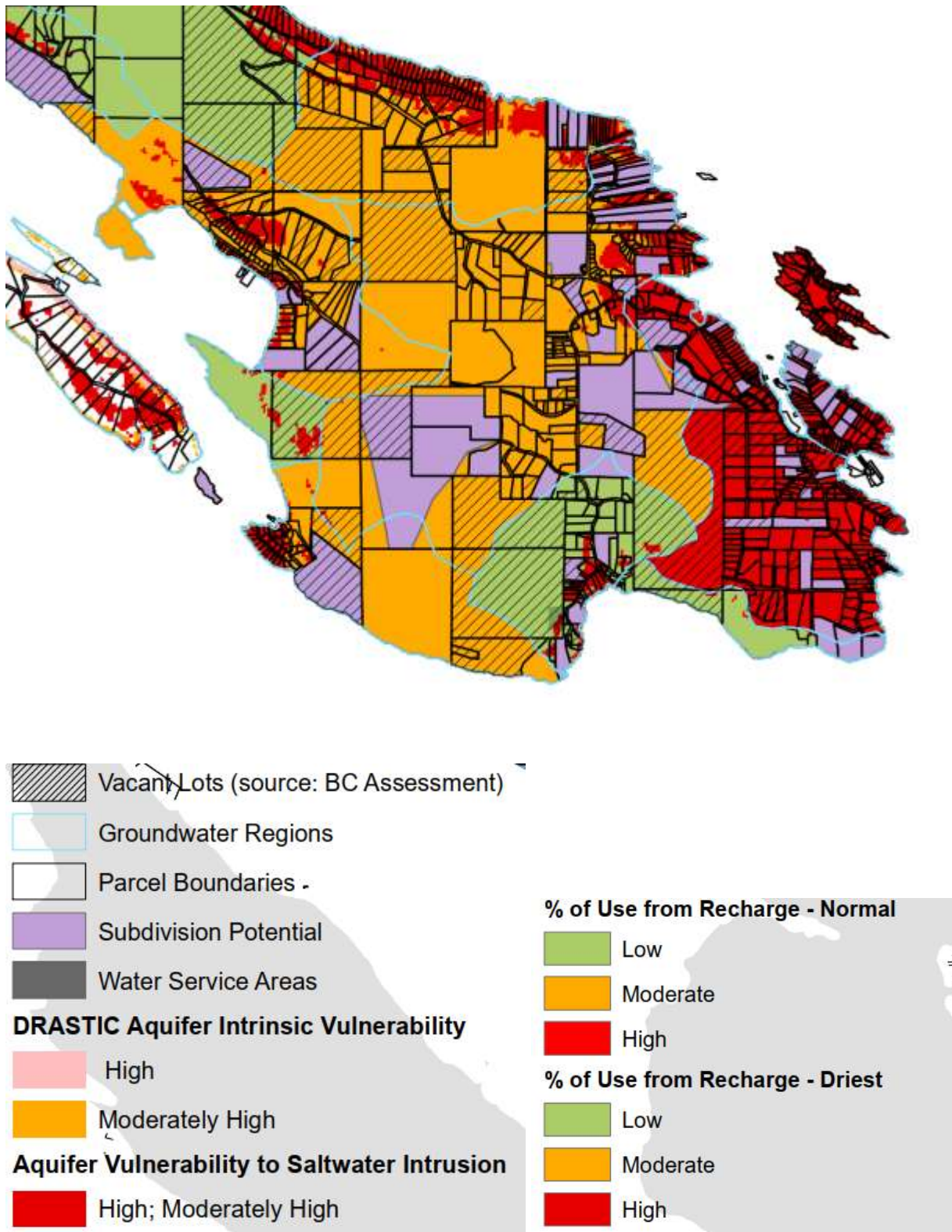
DRASTIC & Saltwater& GW Assessment Normal



DRASTIC & Saltwater& GW Assessment Driest



Appendix 7 - Groundwater Vulnerability, Vacant Lots and Subdivision Potential: Focus Area



Top Priorities Report

Galiano Island

1. *Groundwater Sustainability*

Phase 1 and 2: mapping and data analysis - Completed
Phase 3: Implementation of mapping and data analysis

Responsible

Narrisa Chadwick
William Shulba

Dates

Rec'd: 02-Apr-2019
Target: 30-Sep-2022

2. *Rezoning of DL 64, 68, 72, 87*

Responsible

Brad Smith

Dates

Rec'd: 06-Dec-2021
Target: 30-Nov-2022



Projects Report

Galiano Island

1. *Parking Issues*

Responsible

Date Received

Issue for discussion with MoTI and public parking issues generated from associated islands.

23-Jul-2012

(see correspondence from P. Midgely on agenda of Apr/12)

2. *Light Industrial Zoning*

Responsible

Date Received

A review and inventory assessment of existing and potential light industrial zones.

18-Nov-2013

3. *Coastal Douglas-Fir Protection*

Responsible

Date Received

Review 'Protection of the Coastal Douglas-fir and Associated Ecosystems: An Islands Trust Tool Kit (2018)' and provide recommendations from toolkit.

04-Feb-2019

- LPC is intending to develop a model bylaw in 2021-22.

Include review the Contiguous Forest Mapping in the Islands Trust Area Report.

4. *Cannabis Retail and production*

Responsible

Date Received

Consider review of policies and regulations to address cannabis retail sales and production

05-Mar-2019

5. *Dock review*

Responsible

Date Received

To review policies and regulations relating to private moorage, including suitable locations, siting and size, and incorporating First Nations sites

02-Apr-2019



Projects Report

Galiano Island

6. *Emergency Access Planning*

Responsible

Date Received

Follow-up from CRD emergency planning process - include consideration of developing driveway guidelines for emergency access within land use bylaw

02-Apr-2019

7. *Review of forestry land designations, policies and community benefit approaches*

Responsible

Date Received

Project represents a consolidation of a number of previously identified projects with a similar theme related to forestry zoning on Galiano Island. Project scope within previous projects included: current and potential future approaches to community benefit agreements, use of split zoning, F1 forest lot issues, issues regarding lands without managed forest status, amendments to re-designate and rezone crown owned Forest lots (Bylaws 231, 232 at First Reading)

03-Feb-2020

8. *Review of Road Network Plan*

Responsible

Date Received

Review of Road Network Plan - include December 11th APC memo in review process - meet with MOTI

02-Mar-2020

9. *Review of LUB tiny home/trailer regulations, maximum house sizes and lot coverage*

Responsible

Date Received

01-Jun-2021

10. *Review of LUB water management and cistern regulations*

Responsible

Date Received

02-Nov-2020



Development Permit

File Number	Applicant Name	Date Received	Purpose
GL-DP-2021.5	Neave O'Shaughnessy	17-Aug-2021	835 STURDIES BAY RD - application for a DP for development in a sensitive ecosystem DPA

Planner: Phil Testemale

Planning Status

Status Date: 08-Feb-2022

Applicant is having professional report prepared for geotechnical issues.

Status Date: 19-Jan-2022

E-mail to applicant requiring Geotechnical assessment.

Status Date: 14-Jan-2022

Report from QEP rec'd.

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
GL-DVP-2021.11	Mommsen-Smith, Anik	15-Dec-2021	Renovation of existing building and replacement of septic system. (Note: Stephen Baugh has placed the Building Permit Application in abeyance (GL-BP-2021.30) as a DVP is required.

Planner: Phil Testemale

Planning Status

Status Date: 07-Jan-2022

Sent LTC package to Galiano LTC and copied Jas and Robin.

Status Date: 07-Jan-2022

Sent email to applicants and advised them that their file has been assigned to Planner Phil Testemale.

Status Date: 06-Jan-2022

Anik Mommsen-Smith, one of the applicants, sent an email and stated that there was a typo, and that they are not within 15 metres of the natural boundary of the sea. She discussed it with their engineer, and she sent us a revised copy of the Partial Site Plan. She will send an approved copy from Island Health, when she receives it from them.



Applications

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
GL-DVP-2022.1	The Galiano Club Registered under the Societies Act Planner: Phil Testemale	19-Jan-2022	Building a second storage shed on the property at 141 Sturdies Bay Road
Planning Status			
Status Date: 16-Feb-2022 Received cheque in the amount of \$715.00 in the mail respecting the processing fee.			
Status Date: 16-Feb-2022 Completed receipt (3100) for \$715.00 and recorded in log template. Put cheque in top drawer of Finance and sent Accounts Receivable an email.			
Status Date: 16-Feb-2022 Robert K. assigned the file to Phil.			

Rezoning

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2014.1	Crystal Mountain Society Planner: Brad Smith	28-Oct-2014	20300 PORLIER PASS RD: Application for rezoning to amend the OCP and LUB to allow for a Forest Retreat Centre - Bylaws 256 (OCP) and 257 (LUB)
Planning Status			
Status Date: 28-Feb-2022 Staff memo on March 7 LTC agenda			
Status Date: 17-Feb-2022 Draft covenant received back from legal counsel			
Status Date: 10-Feb-2022 Data logger report received			

**Applications****Rezoning**

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2019.1	GIGARHS	11-Sep-2019	Georgia View Rd: rezoning application for to amend the OCP and LUB to permit an affordable housing development - Bylaws 276, (OCP), 277 (LUB), 274 (Housing Agreement)

Planner: Brad Smith**Planning Status****Status Date:** 25-Feb-2022

Updated version 3 rent structure proposal received by applicant

Status Date: 31-Jan-2022

Staff report on Feb 7 agenda

Status Date: 14-Jan-2022

Updated rent structure proposal received from applicant

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2020.1	KING, FRED & DEBBIE	27-Oct-2020	51 Galiano Way - Application for rezoning to amend the OCP to permit residential use - Bylaw 279 (LUB)

Planner: Brad Smith**Planning Status****Status Date:** 28-Oct-2021

Applicant working on DAI TOR items

Status Date: 31-Aug-2021

Planner to contact applicant for status update

Status Date: 22-Jun-2021

Applicant working on TOR items - no clear timeline for coming back to LTC



Applications

Rezoning

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2021.1	New Commons Development	08-Mar-2021	409 Porlier Pass Road - Application for rezoning to amend the LUB to permit an affordable housing development with a total of 20 units (within 4 buildings). Bylaw 280 (LUB)

Planner: Brad Smith

Planning Status

Status Date: 28-Feb-2022

Staff report on March 7 LTC agenda

Status Date: 17-Feb-2022

List of proposed covenant conditions finalized with applicant for review by the LTC

Status Date: 14-Feb-2022

Updated rent structure sent to legal counsel for legal opinion of consistency with OCP

File Number	Applicant Name	Date Received	Purpose
GL-RZ-2021.2	Andy Gaylor of McElhanney Ltd.	16-Aug-2021	COOK RD - application for rezoning to emend the OCP and LUB to permit a rezoning from F1 to create an F3 zoned parcel, two 2.0 hectare Rural Residential-zoned parcels, and 12+ ha of parkland and road dedication. And to allow a small enclosed sawmill in proposed F3 zoned area.

Planner: Brad Smith

Planning Status

Status Date: 03-Feb-2022

Staff met with BC parks staff to discuss proposal

Status Date: 25-Nov-2021

Preliminary report on Dec 6, 2021 agenda

Status Date: 28-Oct-2021

Preliminary staff report planned to be on Dec 6, 2021 agenda



Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
GL-SUB-2020.1	Mitchell, Glen	19-Dec-2019	GIGHARS - Proposed two lot conventional subdivision referral of Lot 1 District Lots 30 and 31

Planner: Brad Smith

Planning Status

Status Date: 18-May-2021

Applicant has received preliminary conditions approval letter from MOTI - subdivision subject to successful rezoning

Status Date: 19-Feb-2021

Applicant working on referral report items

Status Date: 15-Dec-2020

Referral report reviewed with applicant

File Number	Applicant Name	Date Received	Purpose
GL-SUB-2021.1	Lawrence Waterfall	09-Jul-2021	350 MARY ANN POINT RD - Referral of a subdivision application for 3 new lots

Planner: Phil Testemale

Planning Status

Status Date: 01-Dec-2021

New subdivision layout plan rec'd

Status Date: 17-Sep-2021

Terms of Reference for Hydrogeologist's proof of potable water sent to applicant.

Status Date: 10-Sep-2021

Revised response for updated plan (park dedication removed - 2021-08-08) sent to MoTI. cc'd to LTC, CRD, GIPRC and Freshwater Specialist



Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
GL-SUB-2022.1	Okuda Andersen, Kadek	13-Jan-2022	The subdivision of two lots zoned rural residential into three lots with the same zoning. One of these proposed lots has already been developed and the other two proposed are vacant. The subdivision will not increase density. There are no covenants, easements, rights-of-way, or other charges registered against either title.

Planner: Brad Smith

Planning Status

Status Date: 28-Feb-2022

Staff to initiate review in early March and response to MOTI

Status Date: 31-Jan-2022

Requested 'Subject Property' map from GIS Helpdesk.

Status Date: 26-Jan-2022

E-transfer of \$1,210.00 confirmed by Accounts Receivable.

Islands Trust
LTC EXP SUMMARY REPORT F2022
Invoices posted to Month ending December 2021

625 Galiano	Invoices posted to Month ending December 2021	<u>Budget</u>	<u>Spent</u>	<u>Balance</u>
65000-625	LTC "Trustee Expenses"	331.00	305.80	25.20
LTC Local				
65200-625	LTC - Local Exp - LTC Meeting Expenses	4,771.00	3,251.95	1,519.05
65210-625	LTC - Local Exp - APC Meeting Expenses	370.00	1,125.61	-755.61
65220-625	LTC - Local Exp - Communications	250.00	2,475.81	-2,225.81
65230-625	LTC - Local Exp - Special Projects	294.00	0.00	294.00
TOTAL LTC Local Expense		<u>5,685.00</u>	<u>6,853.37</u>	<u>-1,168.37</u>
Projects				
73001-625-2002	Galiano OCP/LUB	1,500.00	1,106.97	393.03
73001-625-4114	Galiano Groundwater Strategy Implementation	2,500.00	129.15	2,370.85
73001-625-4121	Galiano Healthy Watersheds Initiative	20,000.00	137.27	19,862.73
TOTAL Project Expenses		<u>24,000.00</u>	<u>1,373.39</u>	<u>22,626.61</u>

Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2020-042 (Standing)	Carried	08-Sep-2020
That the Galiano Island Local Trust Committee request that development permit applications where a variance is requested be processed as a combined application with both a development permit and a development variance permit.		
2020-041 (Standing)	Carried	06-Jul-2020
that the Galiano Island Local Trust Committee adopt the following policy on unlawful land uses and planning applications: a. Where an application is received and a use is continuing in contravention of a land use bylaw, staff are directed to request that the applicant cease the use prior to processing the application, and that staff are directed to continue with enforcement until the use is ceased. b. The applicant may request that the Local Trust Committee proceed with consideration of the application while the use is continuing; and, where the Local Trust Committee considers there is a community need to process the application while the prohibited use is continuing, the Local Trust Committee may direct that bylaw enforcement actions, including the issuing of notices, cease. c. Where the Local Trust Committee does not consider that there is a community need, or the applicant has not made such a request of the Local Trust Committee; bylaw enforcement actions, including the issuing of notices, will continue. d. In deciding whether to grant land use approval for a use that was commenced in contravention of a land use bylaw, the Local Trust Committee may consider whether the applicant has suspended the prohibited land use pending a decision on the application.		

Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2020-013 (Standing)	Carried	03-Feb-2020
that the Galiano Island Local Trust Committee request that prior to expiration of Advisory Planning Commission members terms of office, staff write to commissioners asking if they wish to be reappointed and also advertise for expressions of interest for new commissioners.		
2019-053 (Standing)	Carried	03-Jun-2019
that the Local Trust Committee seek to engage in Reconciliation with local First Nations, governments and the island community by honouring the Truth and Reconciliation Commission (TRC) Calls to Action, United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), Draft Principles that Guide the Province of British Columbia's Relationship with Indigenous Peoples, and Islands Trust First Nations Engagement Principles, the Local Trust Committee endeavours to:		
a) Annually, write a letter to First Nations, (re)introducing trustees and staff and provide a schedule of known Local Trust Committee meetings for the upcoming year, as well as, provide an update of current projects and advocacy activities;		
b) For various Local Trust Committee meetings, invite First Nations to attend meetings; as well as, provide a traditional welcome to their territory if they would like;		
c) Work with First Nation governments on cooperative initiatives, including and not limited to, language, place names, territorial acknowledgements, and community education on Coast Salish and local First Nations' cultural heritage and history;		
d) Work with First Nation governments on engagement principles for inclusive land use, marine use, and climate change planning; advocacy, protection and stewardship; and knowledge and information sharing protocols;		
e) Establish and maintain government-to-government dialogue with First Nations, now and into the future, based on respect and recognition of Aboriginal rights and title, treaty rights, and First Nations' traditional territories within the Islands Trust Area.		



Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2019-014 (Standing) that the Galiano Local Trust Committee adopt the following standing resolution with respect to the processing of non-medicinal cannabis retail license applications: - Proposed or amended licenses for non-medicinal cannabis retail establishments require an application to the local trust committee. - The application process shall comprise a public consultation component, which includes at least one notification to neighbours, one public meeting, posting of public notices and one advertisement in a local periodical. - The public consultation process shall be determined by the local trust committee after initial review of the proposal. - However, as a minimum, the local trust committee will mail or otherwise deliver a notice to all owners and residents of properties within a 500 metre radius of the subject property where the establishment is proposed at least 10 days before adoption of a resolution providing comment on the application. The required notice shall include the following information: - o Name of the applicant and a description of the proposal in general terms - o The location of the proposed establishment and the subject site - o The place where, and date and time when, both a public meeting will be held and a resolution of the local trust committee considered. - o The name and contact information of the Islands Trust planning staff member who can provide copies of the proposed or amended license application - o How public comments may be submitted to the local trust committee.	Carried	04-Mar-2019
2018-064 (Standing) that the Galiano Island Local Trust Committee endorses the Telecommunication strategy Project Charter dated June 22, 2016	Carried	04-Jun-2018
2014-029 (Standing) That the Galiano Island Local Trust Committee will consider as a community benefit for all rezoning applications where there is an increase in density, the establishment of an instrumented observation well.	Carried	07-Apr-2014



Standing Resolutions Log

Galiano Island

Resolution Number	Action	Date
2014-000 (Standing)	Carried	03-Feb-2014
On properties where there is an open bylaw enforcement file, planning staff should refer planning applications to the Bylaw Enforcement Manager for comment where one or more of the following circumstances exist: 1. There have been significant delays or longer than typical timelines in the enforcement process 2. The LTC is considering on-going, relevant policy or regulatory changes that could impact enforcement 3. Litigation has been recommended 4. Legal counsel has been involved (beyond providing a basic interpretation) 5. There has been enforcement action beyond seeking voluntary compliance (e.g. a BEN warning or ticket, adjudication, a compliance agreement negotiated, etc.) 6. There has been, or is an expectation of, joint enforcement with other jurisdictions 7. There is potential for impact on other related enforcement files.		
2011-205 (Standing)	Carried	17-Oct-2011
That where a Liquor Control and Licensing Branch Special Occasion License referral relates to a property on which Galiano Island Land Use Bylaw No. 127, 1999 permits public assembly uses, such as restaurants or community halls, and where there have been no issues related to parking or past complaints for the preceding three years, staff may approve the Special Occasion License without referral to the Local Trust Committee. All other Special Occasion License referrals are to be referred to the Local Trust Committee for consideration.		
2010-115 (Standing)	Carried	18-Oct-2010
That the Galiano Island Local Trust Committee will advertise Public Hearing Notices in the Active Page Magazine in addition to the legally required advertising in the Driftwood Newspaper.		
2009-085 (Standing)	Carried	11-May-2009
That staff refer all applications adjacent to a park or ocean access to the Galiano Island Parks and Recreation Commission for comment		



200-1627 Fort Street, Victoria, BC V8R 1H8
Telephone 250 405-5151 Fax 250 405-5155
Toll Free via Enquiry BC in Vancouver 660-2421. Elsewhere in BC
1.800.663.7867
Email information@islandstrust.bc.ca
Web www.islandstrust.bc.ca

December 17, 2021

File Number: 3026-01 LTC Corr 04 GL

Samuel Sugita, MCIP RPP, Manager, Real Estate and Municipal Affairs, Access Networks BC
Rogers Communications Inc.
1900 – 4710 Kingsway
Burnaby BC V5H 4M2

Via email: samuel.sugita@rci.rogers.com

Dear Mr. Sugita:

Re: Response to your email of October 29, 2021

I am writing you on behalf of the Galiano Local Trust Committee (“Galiano LTC”) in my role as Chair in response to your email of October 29th, 2021 regarding the CREST tower at 1228 Montague Road.

At the Galiano LTC meeting of December 6th your email was considered as well as correspondence and concerns from a number of residents of Galiano regarding the proposed “scope of work”. The Trustees reviewed the correspondence and the Galiano LTC protocol and passed the following motion:

GL-2021-109

It was Moved and Seconded

that Chair Rogers, in consultation with the other Trustees, will draft a letter to Mr. Samuel Sugita based on the protocol that requests more information and public consultation.

As you will recall, a previous Galiano LTC did not concur in the construction of this particular tower when it was originally proposed and concerns continued regarding its height after its construction. In regards to your email and the motion passed, I make the following points:

Not clear what the proposal is or how it is “exempt” as you indicate

The Galiano LTC asks for further information regarding the proposed scope of work including information regarding:

- a) What is the nature of the antennae system that is proposed to be added to the tower? What is the technology proposed and what purpose does it serve?
- b) Who is the clientele that the proposed system is intended to serve. You may not be aware but the LTC issued a letter of support for improved cell service for Galiano presuming it services the residents of Galiano. (Please see attached letter of April 2, 2019.) As a result, information regarding the service improvements any proposed scope of work would provide to Galiano Island residents might assist the Galiano LTC in terms of its consideration.

- c) On what basis do you assert that the proposed scope of work is exempt from public consultation?

Public Consultation would be Prudent in any case

As you may know, the Antennae Siting and Consultation Protocol – Galiano Island LTC contains the following:

Voluntary Public Consultation

The CPC states that:

Individual circumstances vary with each antenna system installation and modification, and the exclusion criteria above should be applied in consideration of local circumstances. Consequently, it may be prudent for the proponents to consult the LTC and the public even though the proposal meets an exclusion noted above.

Therefore, when applying the criteria for exclusion, proponents are encouraged to consult the LTC when it is prudent to do so in consideration of any of the following:

- *The antenna system's physical dimensions, including the antenna, mast, and tower, is significant compared to the local surroundings,*
- *The relative location of the proposed antenna system on the property and its proximity to neighbouring residents;*
- *The likelihood of an area being in a community-sensitive location; and.*
- *The nature of Transport Canada's marking and lighting requirements for the proposed structure.*

In the view of the Galiano LTC, many of these factors come into play. For example, the current tower is in a community sensitive location and thus so would the antennae system. Its location to neighbouring residents is also a factor as there are neighbours within 350 metres of this location.

Thus, the Galiano LTC requests public consultation even if the antennae system is exempt from the Siting and Consultation protocol. This would especially be so given the history of this particular tower in terms of LTC non-concurrence and subsequent complaints that it was over height. Clearly, there is substantial community interest in this tower and information regarding benefits to the Galiano Island community would be important.

I look forward to your reply,

Best Regards,



Daniel J. Rogers
Chair, Galiano Local Trust Committee

Cc: Galiano Local Trust Committee
Brad Smith, Island Planner
Robert Kojima, Regional Planning Manager

BRIEFING

To: Local Trust Committees **For the Meeting of:** TBA

From: David Marlor, Director, Local Planning Services **Date Prepared:** December 15, 2021

SUBJECT: Shoreline Protection Model Bylaw Report

PURPOSE:

The purpose of this briefing is to provide the subject report to each local trust committee.

BACKGROUND:

Trust Council passed a resolution in September, 2021 requesting that Staff forward the Shoreline Protection Model Bylaw Report dated March 2021 to local trust committees and Bowen Island Municipality for information.

This report was undertaken by the Regional Planning Committee in accordance with Islands Trust Strategic Plan Item 2.3. "Undertake a review of Local Trust Committee- Bowen Islands Municipality foreshore policies and regulatory bylaws and develop model policy and regulatory bylaws for the protection of the foreshore and nearshore."

This report undertakes a review of official community plan and land use bylaw provisions for shoreline protection in the Islands Trust Area as well as examples from outside the Islands Trust Area, and provides recommendations for local trust committees and Bowen Island Municipality to consider when developing new, or updating existing shoreline policies and regulations.

ATTACHMENT(S):

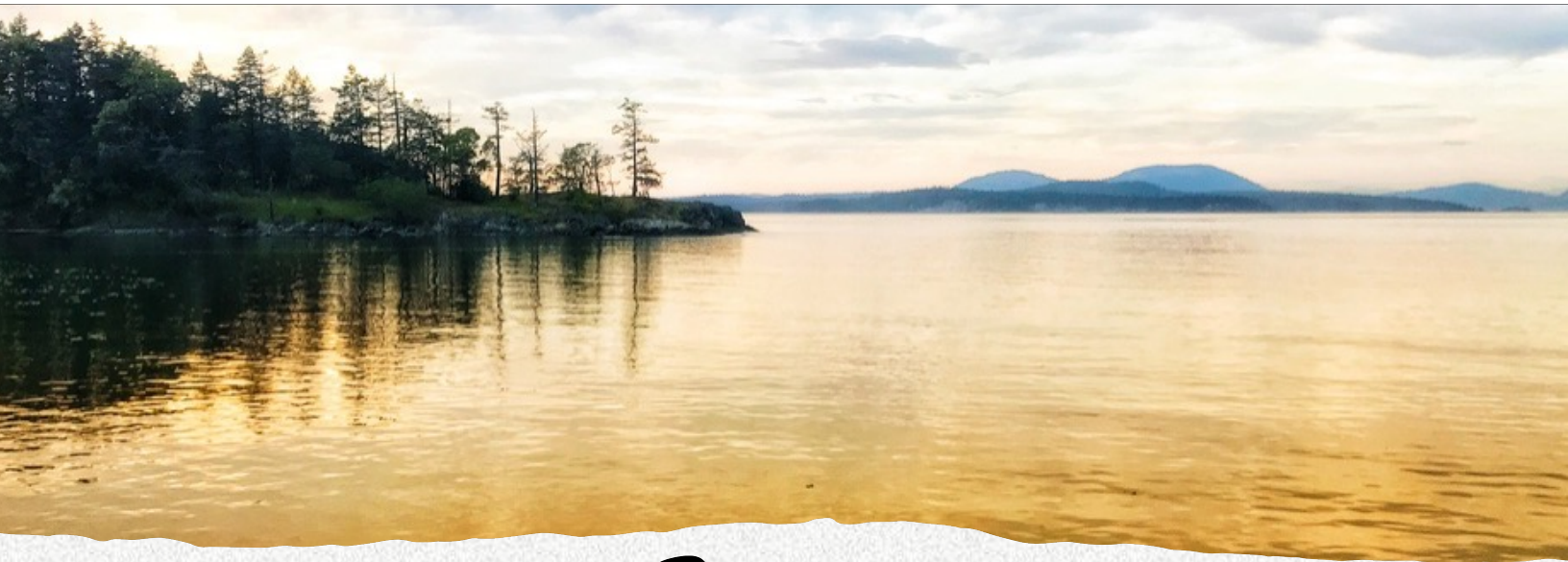
1. Shoreline Protection Model Bylaw Report

FOLLOW-UP:

A requested by the local trust committee. Note that any work on shoreline would be a project of the local trust committee with relevant consideration of staff and budget resources.

Prepared By: David Marlor, Director, Local Trust Committees

Reviewed By/Date:



Islands Trust

Shoreline Protection Model Bylaw Report
March 2021

ACKNOWLEDGEMENTS

This Report is possible through the financial support of the Islands Trust.

We would like to thank all those who participated in the Islands Trust Shoreline Review Model Bylaw Project.

Islands Trust

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It is a privilege to write this guide and we acknowledge the lands described in this report are within the ancestral territory of the Coast Salish people and as a reminder we are all connected.

We are in a sacred relationship with all things in the natural world – the land, waters, and air, and all of the plants and animals we live with. Respect for the spirit and life in each of these, and the intricate relationships and interconnectedness we are all in together is a key value and principle of our culture.



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OVERVIEW

Located in the islands and waters of the Salish Sea, between the British Columbia mainland and southern Vancouver Island, the Islands Trust encompasses 13 major and more than 450 smaller islands, covering 5,200 square kilometers. The area is home to the highest density of species at risk in Canada and some of the most diverse and sensitive marine ecosystems in the world. The region's rich forests, soils, wetlands, and ocean vegetation act as important carbon sinks, mitigating greenhouse gas emissions and buffering communities against the impacts of climate change. The ecological significance and sensitivity of the region, and the need for protective measures, were internationally recognized in 1973.

The Islands Trust Area is located within the Coast Salish territory and is the homeland to over 28,000 Coast Salish Peoples who have called this place home since time immemorial. In 2019, Islands Trust Council passed a Reconciliation Declaration and committed to a Reconciliation Action Plan as per the Truth and Reconciliation Commission (TRC) Calls to Action. Islands Trust is committed to building meaningful relationships with First Nations in the Trust Area, protecting cultural heritage, and upholding the principles embodied within the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the BC Declaration on the Rights of Indigenous Peoples Act (DRIPA); the Truth and Reconciliation Commission (TRC) Calls to Action; and the Missing and Murdered Indigenous Women and Girls (MMIWG) Calls for Justice. Islands Trust Council recognizes that the work of reconciliation is key to preserving and protecting this place for generations to come.

The Islands Trust Council adopted a Strategic Plan for the 2018-2022 term. Item six of the Strategic Plan is to: Undertake a review of Local Trust Committees and Bowen Islands Municipality foreshore policies and regulatory bylaws and develop model policy and regulatory bylaws for the protection of the foreshore and nearshore. This is a community planning project that is being advanced by Islands Trust Council Regional Planning Committee. The work will be consolidated into a template of standard bylaws that will be available for local trust committees and Bowen Island Municipality to use when developing policy and regulation along the shoreline.

Project Deliverables:

- Review all 21 existing Official Community Plans and 21 Land Use Bylaws in the Islands Trust Area on foreshore and nearshore policies and regulations, and a selection of other BC coastal jurisdictions and San Juan County. Selection should have relevance to the Trust Area with similar shorelines and upland uses.
- Discussion with Islands Trust Senior Intergovernmental Policy Advisor on consideration of First Nations interests in the options and recommendations.
- Review Provincial guidelines on mitigation and adaptation to sea level rise.
- Review Islands Trust Policy Statement for compliance of any proposed policies and regulations.

- Develop options and make recommendations on model official community plan policy and land use bylaw regulations to protect foreshore and nearshore,

HERITAGE AND CULTURAL CONSIDERATIONS

Islands Trust Initiatives:

The Islands Trust acknowledges the value of Indigenous traditional knowledge and perspectives as part of its decision-making processes.

Some of the recent Official Community Plans (OCP) reviews included references to Heritage and Archaeological Resources. To guide development the Saturna, South Pender and Thetis Island OCPs include the following objectives:

1. To encourage the identification, protection, and conservation of archaeological sites, buildings and sites associated with early settlement, and natural heritage features.
2. To protect archaeological sites from damage due to development, land alteration or human use.
3. To increase public awareness of the Island's heritage resources.
4. To recognize first nations past and current presence on Thetis Island, its foreshore, and surrounding waters, and to protect archaeological and other cultural heritage resources in cooperation with First Nations.

The Saturna Island OCP also includes a Heritage designation which identifies known heritage sites and areas of historical or cultural significance. The objective is to preserve places of historical or cultural significance from destruction. These places are to be identified and means for their preservation should be sought. Furthermore, the Saturna Island Local Trust Committee

may create a Heritage Commission to study and recommend sites, areas, landmarks, buildings, roads, trails, and other features of historical or cultural significance for inclusion together with sites that are on a registry in a Heritage designation under the Local Government Act and archeological sites protected under section 13 of the Heritage Conservation Act.

The Heritage Commission may:

- a) develop a Community Heritage Registry to identify island heritage buildings or other heritage and archaeological sites and features;
- b) develop heritage conservation areas for inclusion in the plan;
- c) require heritage alteration permits for heritage features identified in the Community Heritage Registry and heritage conservation areas;
- d) require heritage impact assessments for designated heritage features and archaeological sites protected under section 13 of the Heritage Conservation Act.;
- e) encourage heritage conservation covenants to protect heritage features; and
- f) encourage dedication or donation of heritage features for long-term protection.

Furthermore, the Saturna Island Local Trust Committee shall encourage and support creation of a community heritage museum on Saturna Island to maintain and display heritage artifacts originally located within the Area.

South Pender Island heritage cultural resources include the archaeological evidence of First Nations use and buildings

associated with the island's more recent settlement. There are registered archaeological sites on South Pender Island, mostly midden deposits, and these are afforded protection from disturbance under the provisions of the Heritage Conservation Act.

South Pender Island OCP Heritage Cultural Resources Objectives include: a) To increase awareness and appreciation of the island's ancient and recent cultural heritage.

b) To encourage and support measures that identify, inventory, and protect heritage cultural resources.

c) To recognize First Nations presence on South Pender Island and to protect archaeological and other cultural heritage resources in cooperation with First Nations.

Heritage Cultural Resources Policies:

a) The Local Trust Committee is to encourage the formation of a Community Heritage Commission to provide it and the community with advice and assistance regarding:

i) criteria for determining community heritage values, e.g., archeological evidence, historical significance, socio-cultural context, and architectural relevance;

ii) identification, inventory, and information compilation regarding sites, artifacts, structures, buildings, and persons of interest;

iii) measures to increase general awareness and appreciation of the island's cultural heritage; and

iv) methods of securing protection for the island's cultural heritage resources.

b) Roads or portions thereof identified as Scenic/Heritage Road are not to be altered without consultation,

c) All development applications shall be reviewed for the presence of known and recorded archaeological sites. Applicants should modify or revise proposed development plans to avoid archaeological site impacts as the best means of preserving archaeological resources. Alteration of a protected archaeological site requires a Provincial Heritage Alteration Permit prior to land altering activities.

d) The Local Trust Committee should not approve applications that would result in disturbance to an archaeological site unless there are unavoidable conflicts with significant archaeological sites or other known First Nations cultural sites. If this is the case, the LTC should require measures to manage the impacts.

e) Recognizing the inter-relationship of community interests and services between North and South Pender Islands, the Local Trust Committee is to encourage opportunities for mutually beneficial co-operative efforts relating to heritage cultural resources.

f) The Local Trust Committee may consider designation of a Heritage Conservation Area or adoption of Heritage Bylaws to protect heritage cultural resources.

The Salt Spring Island Official Community Plan includes a General Community Objective designed to "identify and protect important components of our island's heritage, including archaeological and First Nations cultural sites, whether they are reminders of past or present lifestyles." (*Source: SSI OCP Volume 1 Section A4 Objective 15*)

Provincial Archaeological Requirements:

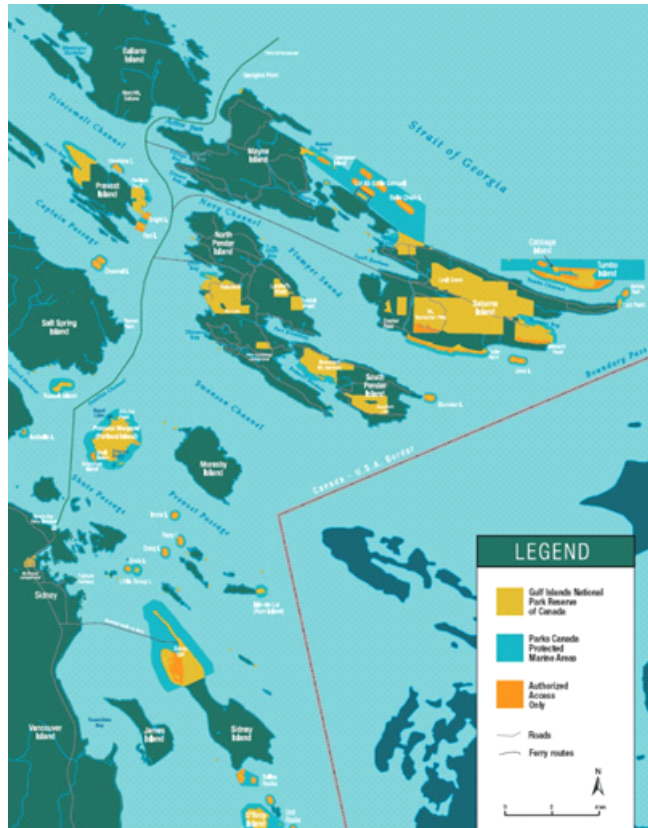
The protection of archaeological and heritage sites afforded under the Heritage Conservation Act is acknowledged by all the Local Trust Committees. The LTC recognizes that there are other buildings and landscapes of heritage value to Island residents and to the First Nations with a long and continuing history of life on the island. <http://www.islandstrust.bc.ca/trust-council/first-nations-reconciliation/>

This recognizes that marine shorelines were well used by First Nations people and as a result it is not uncommon for these areas to contain significant cultural sites and remnants. Any development activity along the marine shoreline must understand that there is a strong potential that these cultural remnants could exist on or below the surface. The BC Heritage Conservation Act governs the processes by which any development activity can occur in and around archeological sites and any indication of archeological artifacts requires adherence to this legislation.

It should be noted that information pertaining to archaeological sites is not available publicly, and Islands Trust planning staff are not authorized to share this information. Individual property owners can petition the BC Archaeology Branch for information regarding archaeological sites on their property, as the Archaeology Branch is responsible for maintaining and distributing archaeological information; however, the Archaeology Branch may not release data that could potentially damage archaeological sites. Property owners are encouraged to contact the Archaeology Branch for more information.

Federal Government Initiatives:

The Federal Government's Gulf Islands National Park Reserve (GINPR) comprises approximately 31 square kilometers of land and intertidal areas scattered over 15 of the southernmost Islands. The following map provides an overview of the national parks in the Gulf Islands.



(Source: [Camping - Gulf Islands National Park Reserve \(pc.gc.ca\)](http://pc.gc.ca))

Parks Canada is responsible for the management of about six square kilometers of marine area located offshore of waterfront portions and around islets of the national park reserve.

The southern Gulf Islands embody a rich human history stretching from thousands of years ago to the present. Coast Salish people have occupied the region since time immemorial and continue to live and use these islands.

These parklands help maintain a deep spiritual connection to the area and traditional use continues today. First Nations

archaeological sites as well as historical features from other groups provide tangible evidence of the history of the region's inhabitants who lived out their lives in this ecologically diverse landscape.

GINPR lies within the Dry Coastal Douglas-fir ecosystem—one of Canada's most at risk ecosystems. Although the national park reserve contains examples of many of the various components found within the Coastal Douglas-fir ecosystem, younger forest ecosystems make up the majority of the reserve, with significantly smaller amounts of mature forest and Garry Oak and associated ecosystems. To protect these ecosystems the Federal Government implemented the legislation to protect Species at Risk.

The Species at Risk Act (SARA) prohibits individuals and applies to species listed. All critical habitat in national parks and national historic sites must be legally protected within 180 days of being identified.

Recovery measures for species at risk will be integrated within the framework of Parks Canada's ongoing ecological integrity and management programs. The species-directed measures outlined in this plan will contribute to maintaining and improving ecological integrity of GINPR by improving the conservation status of native species and their habitat and maintaining biodiversity.

Provincial Initiatives

There are a number of Provincial recovery strategies and plans that complement the GINPR and provide guidance for the recovery of individual species, including strategic directions, recovery objectives, critical habitat, and threats. Multi agency cooperation links strategies and plans for more successful outcomes.

The measures presented in the action plan for GINPR could result in positive impacts on biodiversity and the value individuals place on preserving biodiversity (Federal, Provincial, Territorial Governments of Canada, 2014).

Intergovernmental collaboration and support will benefit park reserve visitors, local residents and Coast Salish groups. Voluntary stewardship opportunities will help build community knowledge which is an important consideration for species at risk management in GINPR. Some activities may create opportunities for local residents to become involved in the recovery of species at risk and for community partnerships to enhance recovery for Species at Risk. Benefits should be relatively evenly distributed across individuals in local communities. These include opportunities to learn about and take part in the recovery of culturally important species at risk, opportunities for integration of Coast Salish traditional knowledge into conservation issues in GINPR, and greater awareness of Coast Salish values and culture among local residents and visitors to the park reserve. Clam food harvesting brings communities together. This activity crosses cultural boundaries and is vital to BC coastal communities to have access to healthy Shell-Fish harvests.

Clam Garden Restoration

First Nations governance and inter-generational knowledge sharing helps to deepen knowledge. The Clam Garden Network is a group of First Nations, academics, researchers, and resource managers from coastal British Columbia, Washington State, and Alaska. Through collaborations across communities and disciplines participants explore the cultural and ecological

importance of traditional clam management practices and features to enhance regeneration of clam gardens.

Eelgrass Restoration

The Sea Change Society based in Brentwood Bay, Victoria, BC initiated coast-wide eelgrass mapping, restoration, and monitoring. Sea Change Society works with First Nations communities on Southern Vancouver Island including the Gulf Islands. Their strategy is to locate and restore sites that historically supported eelgrass. Sea Change transplants between 500 and 1000 eelgrass shoots into a test plot. If restoration is successful, the transplant areas are expanded with additional eelgrass shoots.

Source: [Home - SeaChange Marine Conservation Society \(seachangesociety.com\)](http://seachangesociety.com)



Source: Mapping in the Salish Sea (islandstrustconservancy.ca)

Local organizations such as Green Shores use ecological methods to protect shorelines from erosion and to address the impacts of climate change. The use of Eelgrass mapping as a planning tool is proving to be an effective method to consider erosion control.

GREEN SHORES

Green Shores is a program of the Stewardship Centre for British Columbia that promotes sustainable shoreline ecosystems for commercial, residential, institutional and park properties. It supports a broader vision for Canada's waterfront communities to increase capacity to minimize impacts of shoreline development and climate change while preserving or enhancing shoreline ecology and ecosystem services. Climate change is expected to impact the rate and nature of change across Canada's shorelines and affect its ecosystems. Green Shores incentivizes and provides a guideline for climate change adaptation and incorporates the most recent estimates of sea level rise to increase shoreline resilience for both ecosystems and property developments. The Green Shores guiding principles are to:

1. Preserve the integrity and connectivity of shoreline processes;
2. Maintain and enhance shoreline habitat diversity and function;
3. Minimize and reduce pollutants to the shoreline environment;
4. Reduce and reverse cumulative impacts to shoreline systems.

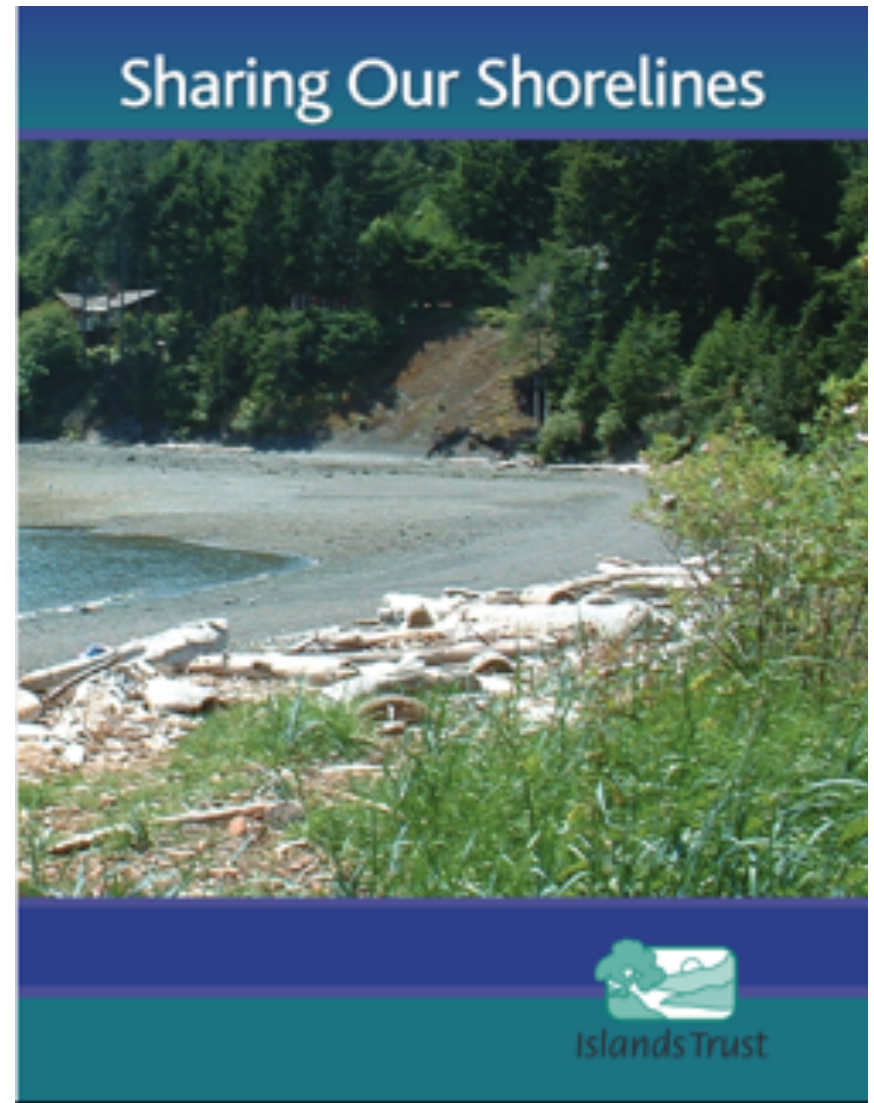
The Islands Trust promotes the Green Shores programs to the development community.

There are two programs –

Green Shores for Development provides a Credit and Ratings Guide for commercial, multi-family residential, subdivision, park, and institutional waterfront development.

Green Shores for Homes Program which is based on the four guiding principles:

1. Preserve or restore physical processes—the natural actions of water and sediment movement that maintain healthy shorelines.



2. Maintain or enhance habitat function and diversity along the shoreline.
3. Prevent or reduce pollutants entering the aquatic environment.
4. Avoid or reduce cumulative impacts—small individual effects that add up to large impacts on shoreline environments. (Source:

Green Shores for Homes - Stewardship Centre for BC (stewardshipcentrebc.ca) and Care for my Shoreline (islandstrust.bc.ca))

Examples of related policies include Salt Spring Island Official Community Plan B.9.2. shoreline conservation designation policy which states: shoreline conservation designation is encouraged to

help owners to implement best practices for shoreline development, such as green shores.

GUIDELINES ON MITIGATION AND ADAPTATION TO SEA LEVEL RISE

B.C.'s climate is changing, and climate scientists are projecting further changes over the next decades. Climate change mitigation and adaptation involves preparing for these changes and the impacts they will have on natural systems and communities. Communities are experiencing the impacts of climate change including more frequent and intense storms, increasing temperatures, drought, wildfire, sea level rise and flooding.

- Mitigations deal with how we can reduce the greenhouse gases that are the root cause of human caused climate changes.
- Adaptations are behavioral. Physical changes we make in our use of natural resources deal with the results of changing climate.

Mitigations

Mitigations in climate change can be undertaken by the Islands Trust by either reducing carbon dioxide emissions or increasing carbon sequestration (the amount of atmospheric carbon fixed into plants or other solid materials). Energy use is a key issue around reducing emissions. Maintaining forest cover is important for carbon sequestration. Several resources are available to help us with mitigation efforts such as:

- Plug in BC - <https://pluginbc.ca/>
- Climate Action to Go Kits -

<https://www.crd.bc.ca/education/climate-action/at-home/climate-action-to-go-kits>

- Efficiency BC - <https://betterhomesbc.ca/> to carbon sequestration by island, Here's a link <http://www.islandstrust.bc.ca/media/346674/cdf-toolkit-final-web.pdf>

The Islands Trust is committed to becoming a carbon neutral organization with no net increase in greenhouse gas emissions from its operations. Carbon neutrality has been achieved since 2012 through these steps:

- Performing an emissions inventory of our operations.
- Implementing an action plan to reduce emissions;
- Purchasing carbon offsets to counteract emissions that cannot be readily reduced.
- Improving transportation networks that are low carbon such as bike paths or other trail networks or installing EV stations.
- All Local Trust Committee Official Community Plans contain targets and policies related to Green House Gas (GHG) emission reduction.

Local Trust Committees have the following tools available for addressing climate change mitigation efforts:

- GHG Reduction Targets- Section 473 of the Local Government Act – required content for official community plans, inclusion of targets and policies with respect to reducing greenhouse gas emissions.
- Zoning Authority – Section 479 of the Local Government Act could cluster development, protect areas for conservation, limit extent of development, establish building size limits, and prohibit uses that contribute the most to GHG production.
- Development Permit Area to Promote Energy Conservation– Section 488(1)(h) of the Local Government Act can be used to reduce heating and cooling requirements through building siting, systems, and landscaping.
- Development Permit Area to Promote the Reduction of Greenhouse Gas Emissions - Section 488(1)(j) of the Local Government Act.
- Off-street Parking and Loading Regulations - Section 525 of the Local Government Act – establish parking requirements, electric vehicle and active transportation parking, surfacing and landscaping of parking areas.
- Impacts of climate change include sea level rise, possible saltwater intrusion into groundwater aquifer, warmer winters and summers, dryer summers, more intense storm events, and wildfire potential. Adaptations to changes resulting from climate warming include a wide variety of options. Such adaptations could be behavioural (e.g., Educating people to reduce food waste and drive less) or structural measures (e.g., Requiring water storage for household and fire suppression use).

The Province of B.C. has developed a Climate Change Secretariat to address climate change adaptations and has begun to produce numerous resources for communities to deal with climate change adaptations. These include:

- The site of climate change resources - <https://www2.gov.bc.ca/gov/content/environment/climatechang>

e

- The climate action toolkit - <https://www.toolkit.bc.ca/taking-action/community-wide> Local Trust Committees are being supported in understanding potential adaptations through staff reports.

A review of Islands Trust policies revealed a commitment to addressing climate change demonstrated by the islands of North Pender, South Pender, Galiano, Mayne and Saturna that are collaborating on a project to assess groundwater and establish water budgets.

Tools to support Local Trust Committees in understanding possible adaptations include:

- Zoning Authority - Section 479 of the Local Government Act require setback from the sea and water bodies, building location and size, appropriate uses, and density.
- Runoff Control Bylaw - Section 523 of the Local Government Act Regulations to address increased rain events.
- Development Permit Area to Protect Development from Hazardous Conditions – Section 488(1)(b) of the Local Government Act. Flood plain regulations along foreshore, rivers, and lakes. Tree and vegetation retention in areas prone to land slip.
- Development Permit Area to Promote Energy Conservation- Section 488(1)(h) of the Local Government Act. Siting, landscaping, and flooding.

Shoreline Management Plans: Oak Harbour. WA. U.S. Oak Harbour SMP

Shoreline Environment Designations

The basic intent of a shoreline environment designation is to preserve and enhance shoreline ecological functions and to encourage development that will enhance the present or desired future character of the shoreline as described in the

Comprehensive Plan, other adopted plans and the Shoreline Management Plan. To accomplish this, shoreline segments are given an environmental designation based on existing development patterns, biological capabilities and limitations, and community objectives. This Master Program establishes seven shoreline environments for the City of Oak Harbor. These shoreline environments shall include the shorelines of the City of Oak Harbor, including shorelands, surface waters, and bed lands. These environments are derived from and based on policy direction contained in the Oak Harbor Shoreline Inventory and Characterization Report, the Oak Harbor Comprehensive Plan, the Shoreline Management Act, and the Shoreline Master Program Guidelines. The seven Oak Harbor shoreline environment designations are: Maritime, Urban Mixed Use, Residential, Residential - Bluff Conservancy, Urban Public Facility, Conservancy, and Aquatic.



Storm surge flooding, Victoria. Photo: B.C. Ministry of Environment

The Summary List of Recommended Actions [Appendix A: Summary List of Recommended Actions Page 1 \(washington-apa.org\)](#) includes a number of options that LTC could use to outline how protection of marine ecology will be managed.

BC MARINE COASTAL SHORELINES JURISDICTION

Jurisdiction over coastal areas in B.C. is split among federal, provincial, and local governments, depending on the location along the coast and the relationship to the shore.

Within the Islands Trust Communities there are six types of shorelines that are shaped by complex processes that connect the land to the sea.



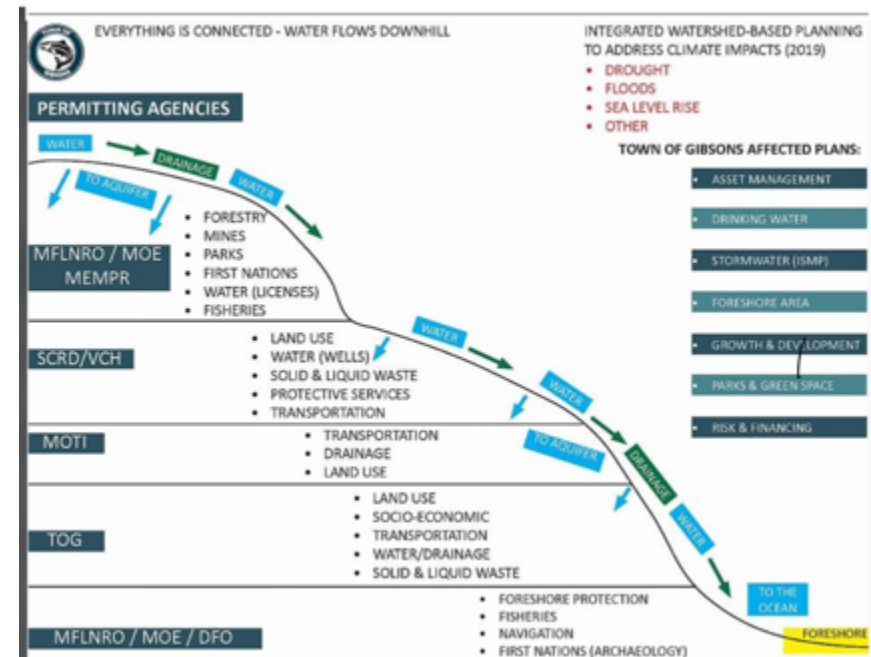
The land and surrounding environment protect the natural processes that form the shoreline. Marine and terrestrial habitat, as well as sensitive habitat and features exist, which are important to support a vibrant marine ecosystem.

The Islands Trust interactive mapping (MapIT) application is available online and provides more information about regulations. Although mapping is informative, it cannot replace observations made by walking the site and surrounding areas, particularly noticing seasonal and other changes over time.

It is important to note that while the following points refer to ownership and jurisdiction, all of B.C.'s coast is subject to aboriginal claims based on traditional use by First Nations and constitutional recognition of Aboriginal Title and Rights.

To highlight the multiple jurisdictions that regulate water the following water model in Figure 1 highlights how watershed planning can help to address climate impacts such as droughts, floods, and sea level rise.

Figure 1: Permitting Agencies | Integrated Watershed Model



Source: [2020-07-28 Gibson's Source to Sea Project.pdf \(civicweb.net\)](#)

The federal government has jurisdiction over offshore waters – from the low water mark out to 12 nautical miles along the outer coast. The Federal Department of Fisheries and Oceans (DFO) is responsible for fisheries protection provisions to prevent serious harm to commercial, recreational, and Aboriginal fisheries under the *Fisheries Act*, including shoreline “riparian” habitats, as well as for maintaining maritime safety through the Coast Guard. Transport Canada is responsible for preserving the public right of navigation under the *Navigation Protection Act* (2014) in waters listed in the schedule to that Act. The public right of navigation

will continue to be recognized in common law for navigable waters not listed in the Act. Port Authorities are also established under federal legislation to manage major harbours and facilities that are federal Crown lands, such as Victoria, Metro Vancouver, Port Alberni, Prince Rupert, and Nanaimo harbours.

On B.C.'s coast, the area between high tide and low tide (the foreshore area) is owned and controlled by the provincial government as well as the beds of inland seas such as the Strait of Georgia, Juan de Fuca Strait and Johnstone Strait. Foreshore area is never privately owned, though the Province may grant leases and licences for special uses of the foreshore – like gathering oysters or building docks and wharves. [Land Use - Private Moorage - Province of British Columbia \(gov.bc.ca\)](#)

The Land Tenure Branch (under the Ministry of Forests, Lands, Natural Resource Operations and Rural Development) administers lands in the foreshore area and issues permits, licences or leases for a wide range of uses – private and public moorage, wharves, marinas, aquaculture, and log storage to name a few. Consultation with First Nations is an important consideration with development around the coastal lands. It is part of land and resource decision-making. The following link outlines communications protocols with First Nations.

[Consulting with First Nations - Province of British Columbia \(gov.bc.ca\)](#)

The Province may also establish regional coastal zone or estuary management plans. Use of the foreshore is also subject to local

government land use regulations. *Source: Regulations Affecting BC Marine Coastal Shorelines Green Shores™ Background Report Shoreline Regulations and Permitting Processing BC 2014*

Professional Organizations Engineers have been involved in shoreline ecological restoration for some time. For example, in 2010 Jericho Beach enabled the opportunity to return the shoreline to its natural state and allowed for return of native plant habitat. Dangerous materials, such as creosote treated piles were removed.

The experience in undertaking flood plain restoration shows that a co-ordinated approach is essential and Community buy-in is required. An example of a multidisciplinary team has been the Shoreline Protection for the Town of Comox which commenced in 2011.

(Source: [Waters | Nanwakolas Council](#))

The Team included the K'omox First Nation, an archaeologist, a biologist/fisheries expert, a wave modelling/coastal engineering specialist, and a geotechnical engineer. The Foreshores dynamic nature made the Project extraordinarily complex. In addition, an archaeological site was located. *(Source: Innovation 2018 Engineers and Geoscientists BC). In 2016, the Association of Professional Engineers of BC (APEGBC) released a position paper entitled Human-Induced Climate Change which was followed in 2017 by professional practice guidelines, Flood Mapping in BC.*



1. Low Bank Beach of Jericho Beach, Vancouver, BC



Pictures 3 and 4 depict Low Bank Beaches in Comox, B.C. Rocks and logs are used as a natural approach to slow tidal flows and to prevent erosion.



2. Beach Images: Stanley Park, Vancouver, BC
Rocks placed to slow tidal action



LEGISLATIVE FRAMEWORK FOR SHORELINE PROTECTION STRATEGIES

An overarching goal of government regulation is to strengthen opportunities for protection of archaeological resources, sensitive ecosystems, shoreline integrity and function, and public access to marine ecosystems.

The Islands Trust has policies that give local island trust committees the ability to amend Official Community plans and Land Use bylaws. Policies to manage development on shorelines through its preserve and protect mandate, is expressed through

the Islands Trust Policy Statement that reflects the values expressed by Island Trust communities.

1. Islands Trust Policy Statement

The Islands Trust policy statement guides land use planning and development through the preserve and protect mandate of the islands trust. It includes goals and policies that reflect the values and concerns for the future of the trust area. Local trust committee official community plans and land use bylaws must comply with the policy statement. There are several policies which speak broadly for shoreline protection, and more specifically for the implementation, regulation and use of foreshore development for policies in the Islands Trust. These are listed in Appendix 1: Policies in the Islands Trust. Note that the Islands Trust Mandate in Section 3.4.4 requires that Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of sensitive coastal areas protection of sensitive marine areas and in Section 3.4.5 requires that Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for and regulation of development in coastal regions to protect natural coastal processes.

2. Official Community Plans

Official Community Plans allow local governments to set objectives and policies to regulate future growth and development in communities. The OCP divides the communities into residential, commercial, agricultural, institutional, industrial, and other land uses. The OCP outlines when these uses are needed and provides policy direction on how, when and where each land use will be located. Designated uses can be outlined on OCP maps.

The Official Community Plans within the Islands Trust area have included the Objectives and Mandate in a variety of ways. The following communities demonstrate how they have amended their OCP's to address shoreline protection.

The Saturna Island Official Community Plan highlights the legality of the Islands Trust Object. Over the years the provincial legislature has reaffirmed the Islands Trust object.

"The object of the trust is to preserve and protect the trust area and its unique amenities and environment for the benefit of the residents of the trust area and of British Columbia generally, in cooperation with municipalities, regional districts, improvement districts, other persons and organizations and the government of British Columbia." (Sec.3 Islands Trust Act).

This legislated objective defines the purpose of providing authority to the Islands Trust for land use regulation. The challenge is how to employ the available planning powers of the Local Government Act to preserve, protect, and effectively maintain the rural nature, health, natural environment, and vitality of the Saturna Island community.

The strength and obligation of the Trust mandate has been more clearly defined by the Court in the Galiano Island vs. McMillan Bloedel case. The BC Court of Appeal found that when a Local Trust Committee exercises its powers "to preserve and protect" an amenity, it is not acting in bad faith, but rather carrying out its assigned duty under the Islands Trust Act. Official Community Plans and Land Use Bylaws can be explicit and either more restrictive or permissive when furthering the objectives than would be acceptable in other local governments in British Columbia. The

Court's decision affirmed the powers and obligation of each Local Trust Committee to further the object of the Islands Trust Act.

The Galiano Island Official Community Plan elaborates on Principles.

- a. This Plan advances the Object of the Islands Trust to "preserve and protect the Trust area and its unique amenities and environment" and supports the limitations the Object presents for the type and scale of development in the Galiano Island Local Trust Area.
- b. Several First Nations have traditional ties and territories on Galiano. The community supports continued and strengthened collaboration and cooperation with First Nations in planning land and resource management and protection of cultural heritage and sites.

One method of regulation is via Development Permits as established in Section 919.1(1)(a) of the Local Government Act for the protection of the natural environment, its ecosystems and biological diversity. An example is Ballenas Winchelsea Official Community Plan, which elaborates on the justification of a Shoreline Development Permit area. The Plan notes that the Object of the Islands Trust to "Preserve and protect the Trust Area and its unique amenities and environment of the Trust Area for the benefit of the residents of the Trust Area, and of British Columbia generally, in cooperation with municipalities, regional districts, improvement districts, other persons and organizations and the government of British Columbia." Provincial legislation in Section 877(1)(d) of the Local Government Act says that an official community plan must include statements and map designations for the area covered by the Plan respecting restrictions on the use of land that is subject to hazardous conditions, or that is environmentally sensitive to development. It is policy of the Islands Trust Council that protection must be given to the natural

processes, habitats, and species of the Trust Area, including those of open coastal grasslands, the vegetation of dry rocky areas, estuaries, tidal flats, saltwater marshes, drift sectors, lagoons, kelp and eel grass beds and that development activity, buildings, or structures should not result in a loss of significant marine or coastal habitat, or interfere with natural coastal processes. It is also policy of the Islands Trust Council that local trust committees shall in their Official Community Plans and regulatory bylaws, address: the protection of sensitive coastal areas; and the planning for and regulation of development in coastal regions to protect natural coastal processes.

Land Use Bylaws also regulate Shoreline uses. North Pender Island, for example has 1 Ecological Zone and 6 Water Zones.

Developments to ensure they meet the policies and objectives of the Official Community Plan (OCP) as well as the regulations of the Zoning Bylaw. The OCP specifies areas that fall under a Development Permit Area (DPA).

Local governments may designate areas of land as development permit areas to be used for one or more purposes. The eligible purposes of a development permit area are:

- Protection of:
 - The natural environment, its ecosystems and biological diversity
 - Development from hazardous conditions. Protection of development from wildfire, land slide, flooding, erosion, and other hazards
 - Farming
- Revitalization of an area in which a commercial use is permitted
- Establishment of objectives for the form and character of:

- Intensive residential development
- Commercial, industrial, or multi-family residential development
- Development in a resort region
- Promotion of:
 - Energy conservation
 - Water conservation
 - Reduction of greenhouse gas emissions

Designating a Development Permit Area

Local governments may designate a development permit area in an official community plan. The plan must describe the special conditions or objectives that justify the designation.

The local government must also specify guidelines for how proposed development in that area can address the special conditions or objectives. These guidelines may be specified by zoning bylaw.

In the Islands Trust many locations include Development Permit Areas within Official Community Plans to implement Islands Trust Policy Statements to Preserve and Protect mandate.

The promote high quality developments in terms of design, performance, and environmental protection. Most lands within jurisdictions are subject to the provisions of one or more development permit areas. Therefore, prior to commencing subdivision, construction, or the clearing or alteration of land, a development permit may be required for one or more of the following purposes:

The Island Trust Shoreline DPA (DP-3) is an example of a policy that has designated an area for which development approval

information may be required as authorized by Section 484 of the Local Government Act.

Examples of Coastal Development Permit Guidelines are included:

1. northcowichan.ca/assets/MarineWaterfront.pdf
(North Cowichan Development Permit)
2. foreshore-development-permit-area.pdf
(Campbell River)

Development Permit Areas can help local government achieve development objectives by providing guidelines on the design, appearance, and performance of a development. A development permit cannot vary the use or density of land, or a flood plain specification. The only exception is where the permit is essential to health, safety, and protection of development from hazardous conditions.

Keats Island community in conjunction with the Island Trust planners conducted a Shoreline Review Project. This action was taken in response to community concerns related to the general increase in development on Keats, and more specifically to the increase in dock development. The attached report outlines a strategy that encompasses the findings from the consultation and a review of Land Use Policies in the Islands Trust.
[gm-ltc 2020-06-15_keats-shoreline_rpt-discussion-paper-working-group.pdf](http://gm-ltc-2020-06-15_keats-shoreline_rpt-discussion-paper-working-group.pdf) (islandstrust.bc.ca)

Zoning Bylaws and Setbacks

One area of inconsistency is between zoning Bylaws and specifically setback requirements. Zoning bylaws regulate Marine Riparian setbacks, and they may differ across local governments and regional districts.

Most jurisdictions now require setbacks on lands within 15 metres upland of the highest high tide mark of the ocean, or the top of bank, whichever is the larger. This is consistent with the Provincial Guidelines as part of its strategy to address climate change impacts. When development is proposed within a specified distance from the high tide mark of the ocean, a report is required from a qualified environmental professional, to eliminate or mitigate impacts of the development on all parcels with marine shorelines.

Often a measure that may stabilize one site can lead to instability on other sites in the area, as wave and tidal actions combined with longshore drift energy are redirected in response to human interventions. To minimize the degree to which this may happen it is preferred that natural measures are deployed to protect marine shores wherever possible. Section 524 of the Local Government Act enables local governments to develop flood hazard area bylaws. When adopting these bylaws, local governments are required to consider the Province's "Flood Hazard Area Land Use Management Guidelines" (the Provincial Guidelines).

Amended in 2018, the Provincial Guidelines incorporate sea level rise (SLR) into land use planning and future development and require that local governments adjust setbacks according to the Year 2100 Global SLR prediction of 1.0 metre, with adjustments made for regional uplift and subsidence. Using the Year 2100 SLR prediction of 1.0 metre as the minimum elevation, local governments can regulate flood construction levels (FCL) of buildings and structures, including docks.

The Provincial Guidelines requires a setback of 15 metres from the future estimated natural boundary (NB) of the sea at Year 2100, or landward of the location where the natural ground elevation contour is equivalent to the Year 2100. It is noted that where sea

frontage is protected from natural bedrock formation, setback requirements may be adjusted as recommended by a qualified Professional Engineer experienced in coastal engineering. Conversely, the recommended setback may be increased based on the site-specific conditions, for example in low-lying areas or areas of known erosion hazard. The Islands Trust is no exception as can be seen from the following table.

The Capital Region District (CRD) Flood Inundation Project 2020 provides detailed information for some of the more southern Islands within the Islands Trust regarding future hazards associated with coastal flooding

related to sea level rise and tsunamis. The following map shows information for Ganges and adjacent area on Salt Spring Island. (Source: Task 2 Sea Level Rise Modelling and Mapping Report Map 2)

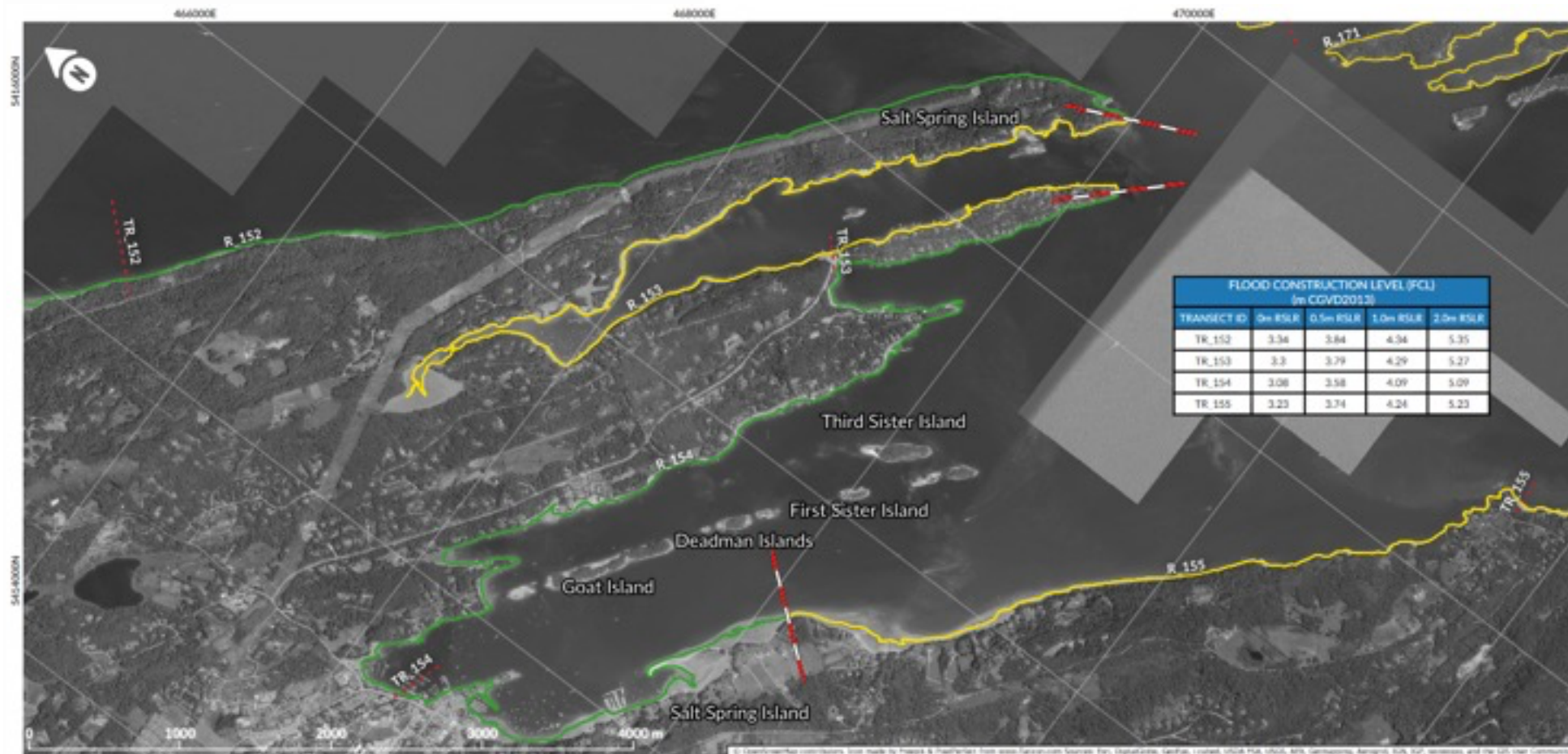


Table 1 Summary of Local Trust Committee (LTC) regulations.

Shoreline Regulation Overview Table	Private Docks permitted (zone specific)	Setback from Natural Boundary of the Sea	Permits Structures in Setback from NB	Exemptions to Setback from NB	Shoreline (or Marine) Development Permit Area
Ballenas-Winchelsea	✓	15 m	-	✓	✓
Bowyer and Passage Islands (Gambier LTA)	✓	7.6 m	Property specific min. setbacks based on historical buildings and structures	✓	-
Denman	✓	15 m	✓	-	-
Gabriola	✓	15 m**	✓	-	✓
Galiano	✓	7.5 m	✓	-	✓
Gambier	✓	15 m	✓	✓	✓
Gambier Associated Islands	✓	7.5 m	✓	-	-
Hornby	-	15 m	-	✓	-
Lasqueti	✓*	15 m**	✓	-	-
Mayne	✓	7.5 m	✓	✓	-
North Pender	✓	15 m	✓	✓	✓
North Pender Associated Islands	✓	15 m	-	-	✓
Salt Spring	✓	15 m**	✓	✓ (zone specific)	✓
Saturna	✓	7.6 m	✓	-	-
South Pender	✓	7.6 m	✓	✓	-
Thetis	✓	7.6 m	✓	✓	-
Thetis Associated Islands	✓	10 m	✓	-	-

*Docks permitted on specific lots only. Rezoning required for additional docks.

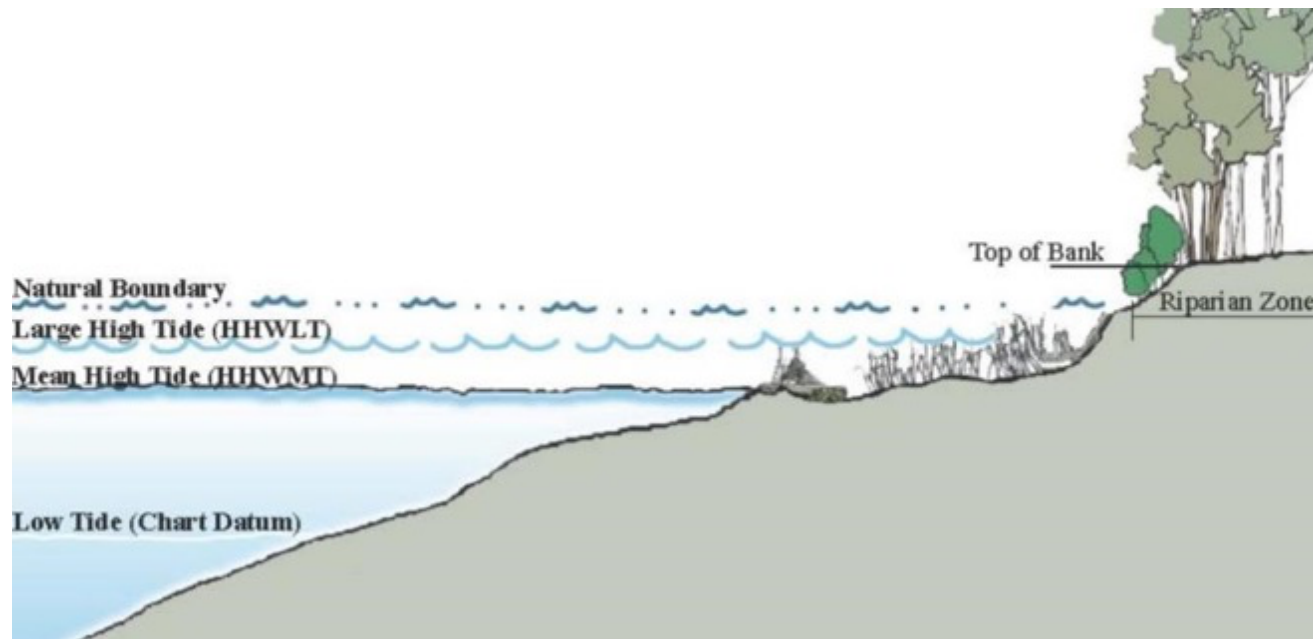
**May be reduced with engineer certification.

Natural Boundary Considerations

One of the key components of Development Permit requirements is establishing setback requirements. With regards to Shoreline protection, the establishment of the Natural Boundary is a key component as it impacts setback distances from hightide.

The 2010 BC Supreme Court case *Lawrence v. British Columbia* (Attorney General) 2010 accepted of the method of determining the natural boundary as shown in the figure below.

The Natural Boundary means the visible high-water mark of the sea, a lake, a stream, or other body of water, where the presence and action of water are so common and usual and so long continued in all ordinary years as to mark upon the soil or rock of the bed of the body of water a character distinct from that of the ban. (The definition is defined in the BC Land Act <https://www.bclaws.gov.bc.ca/civix/document/id/91consol15/91consol15/79214#section14.>) and in the case of a lot having a surveyed high-water mark means the high-water mark. LUB should provide the following regulations for siting of buildings and structures in relation to the natural boundary of the sea:



Source: Greenshores Credits and Ratings Guide

The following features may project into a required setback area:

- o steps, eaves gutters, cornices, sills, chimneys, or similar features, provided they do not project more than 1.0 metre

(3 feet) into the required setback area or 0.5 metres (1.5 feet) in the case of a side yard setback area;

- o balconies, decks, and sunshades, provided that they do not project more than 1.0 metre (3 feet) into the required setback area;
- o retaining walls may be located in any required setback area except the setback from the natural boundary of the sea.

Marine/Coastal Policies

- a. Develop and implement a Marine Action Strategy to identify, prioritize and resource local actions for protecting and maximizing waterfront and marine resources as important assets providing valuable ecological services, and social, cultural, and economic benefits.
- b. Continue to build partnerships and collaborate to monitor and protect waterfront and marine areas. Establish a Marine Working Group to coordinate and align efforts of all coastal stakeholders and agencies with jurisdictional authority and interests in the local marine environment.

Objectives

- a. Recognize, value, and promote ecosystem services provided by coastal and marine environments.
- b. Protect, restore, and enhance the ecological features and functions of coastal and near shore areas.
- c. The Islands Trust should continue to work collectively across each of the Gulf Islands to help sustain a healthy marine environment.
- d. Play a proactive leadership role and work with First Nations and senior governments to monitor and address marine issues such as unauthorized mooring, derelict vessels, and ship and non-point source pollution of the coastal environment.
- e. Continue to participate in initiatives and forums to enhance dialogue and collective action among First Nations, local and regional governments, marine stakeholders, and community

organizations to support the health and sustainability of the Gulf Islands.

f. Support participation and benchmarking activities in the provincially led cumulative impacts project for the Gulf Islands. Work with other agencies and groups to inventory and more closely to define environmentally sensitive areas in the marine environment.

g. Plan and design waterfront sites to minimize impacts on the marine environment, in accordance with best management practices, all federal and provincial regulations. Refer to Province's Develop with Care resource, and Island Trust's development permit guidelines. The purpose of a Development Permit Area (DPA) guidelines is to designate for the protection of the natural environment, its ecosystems and biodiversity. DPA requires applicants to provide information on the anticipated impact of development activities on the natural environment, pursuant to the Development Approvals Information requirements outlined in sec 30 of the Local Government Act.

h. Infill of marine areas to create additional upland developable area beyond the natural boundary is strongly discouraged. Where required for contaminated sites remediation and coastal flood protection, the location and shoreline alignment of structures should wherever possible follow High Water to maintain marine channel area. Wherever possible, apply 'Green Shores' principles in their planning and design for shoreline restorations projects.

i. Ensure foreshore development is undertaken in a manner that secures and enhances public shoreline access without adversely affecting aquatic habitat. Access points should be practical and universally accessible for public use and enjoyment.

j. Support opportunities for coordinated project review with senior governments and First Nations for projects proposed within the marine environment. It is strongly encouraged to contact the Archaeological Branch to prior to development along shorelines

to determine if there could be the presence of culturally significant artifacts.

For Shore line development made to the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development for private docks and floats, these applications will only be accepted by the Islands Trust if the following criteria are met: Adherence to the Integrated Land Management Bureau (ILMB) policies regarding public notification e.g. Local First Nations and is in keeping with best management practises, planning and design standards, e.g. shared access and dock usage whenever possible.

Environmentally Sensitive Areas

a. Marine Shoreline guidelines apply to environmentally sensitive areas. These areas are mapped and included in each of the Islands Trust OCPs, and accompanying Development Permit Applications. Shoreline developments within the Islands Trust may lie within multiple development permit areas. It is advised Property owners work with a Qualified Environment Professional to meet the requirements within each DPA. In the case of guidelines for areas designated for the protection of development from hazardous conditions, development proposals which include marine or riparian areas must also be submitted to Fisheries and Oceans (Canada) for authorization and should be subject to any conditions or limitations determined necessary or appropriate by Fisheries and Oceans (Canada).

Objectives and Justification

The objectives of Development Permit Areas are to:

- i. protect areas of highest biodiversity and ecological sensitivity within the Gulf Islands including ground and surface water, shorelines, forests, wildlife habitat features and rare and endangered ecosystems and species.

- ii. ensure that ecosystem protection and enhancement values are elevated and prioritized, and to specify where and how lands are developed in and around environmentally sensitive areas.

- iii. conserve and steward the natural environment, ecosystems, and biodiversity within the community.

- iv. support the movement of various species by connecting ecosystems through undisturbed open space corridors.

- vi. restore, enhance and protect marine ecosystems; Shoreline ecosystems such as stream corridors, slopes, and nearshore beaches to preserve fish habitat, improve water quality for shellfish harvests.

- vii. minimize and mitigate the environmental and visual impacts of development.

- viii. accommodate recreational and complementary land uses, where appropriate that contribute to the above objectives.

- ix. restore and enhance sites previously degraded or denuded of vegetation.

- x. Discourage any new development in within designated ecological reserves.

b. The Islands Trust has some mapping for designated Environmental Review Areas (ERAs) that are based on Sensitive Ecosystem Mapping completed to provincial standards that describe and classify the ecological diversity, type, and extent of vulnerable or rare ecosystem elements in a given area. Islands Trust Conservancy - Sensitive Ecosystems and Land Use Planning. The terrestrial ecosystems can be viewed using the Islands Trust interact mapping application MapIT and PDF versions of the maps can be downloaded.

These areas have rare or restricted distribution, high biodiversity, and habitat values, and are sensitive to disturbance and human

impacts. Within the Gulf Islands, sensitive ecosystems are not limited to Shorelines but include old forest, mature forest, woodlands, riparian areas, wetlands, and sparsely vegetated, estuarine, intertidal, fresh water and ocean areas.

c. Areas of recent disturbance or modification are not considered sensitive, and include urban and rural residential areas, industrial sites, golf course (excluding natural areas within some courses), gravel pits, roads, hydro corridors, dikes, farmland, and recently logged areas. The Gulf Islands has designated some areas as environmentally sensitive and there are several Environmental Review Areas (ERAs) based on Sensitive Ecosystem Mapping completed to Provincial standards that describe and classify the ecological diversity, type, and extent of vulnerable or rare ecosystem elements in a given area.

The Islands Trust has Sensitive Ecosystem Mapping available on the Islands Trust Geographic Information System to identify Environmentally Sensitive Area (ESA) rankings (Medium or High) based on an ecosystem's sensitivity to disturbance, ecological importance, and provincial rarity according to its BC Conservation Data Centre status. Ecosystems with high percent of recent disturbance are ranked as Low (not highlighted on ESA mapping).

ERAs may not represent all sensitive ecosystems present within a given area or site. The Islands Trust relies on the most updated information, acquired through site-level bio-inventories and assessments as required for Development Permits. As new information becomes available, and buffer areas are determined by Qualified Environmental Professionals (QEPs) to maintain ESAs,

OCP's and Development Permit areas can be amended along with Geographic Information System ESA map layers, which should be referenced for detailed ESA information over time.

d. Development within and adjacent to these sensitive ecosystem areas will be reviewed against and subject to OCP environmental objectives and policies that seek to ensure ecologically sensitive development. Development should be carried out according to permits issued pursuant to these guidelines.

Conclusion:

This discussion paper is intended to identify and document existing policies and regulations related to updating LUB and policies for shoreline in LTC's and to make recommendations as to potential updates to these policies and regulations.

The options presented in this report outline initiatives underway in other communities and jurisdictions. One of the major issues impacting changes in regulations is the impacts of Climate Change on coastal communities specifically sea level rise. The goal of the Islands Trust is to support policies to improve Shoreline Protection and to include Indigenous perspectives in project planning. The report represents some potential regulations that could be enacted that response to specific concerns from the community. It is recommended that Climate Change and Indigenous reconciliation be used as the catalyst to review and update LUB's specifically to introduce Shoreline Development Permit Areas as this regulatory tool as this has the best potential for impacting the areas of concern.

RECOMMENDATIONS

First Nations

1. To recognize areas of cultural significance the Local Trust Committee could consider designation of a Heritage Conservation Areas or adopt Heritage Bylaws to protect heritage cultural resources similar the projects completed on South Pender and Saturna.
2. Through government-to-government meetings, Local Trust Committee may wish to commit to meeting regularly with Indigenous First Nations stakeholders on land use planning issues. Also, the internal referral/advisory role between Islands Trust planning staff and the Intergovernmental Liaison appears to still be in a growth phase as new processes work towards collaboration on meeting the mandate of the Islands Trust.
3. The LTC Policy Statement should be revised to incorporate UNDRIP and DRIPA & the Islands Trust Reconciliation Declaration. The goal is to support more thorough Islands Trust project work to improve Shoreline Protection from an Indigenous perspective.
4. Based on feedback from Islands Trust staff it was mentioned that the Islands Trust Staff Report template could be updated to support a requirement to consult based on the intent of UNDRIP and DRIPA and the Islands Trust Reconciliation Declaration. This would give clear direction for greater consistency in approaches toward reconciling Indigenous Rights. In addition, to the Provincial public notification process the Islands Trust could develop a referral letter and provided to property owners regarding shoreline development for docks.

5. Consider working with First Nations and the Department of Fisheries and Oceans (DFO) to establish conservation areas to protect shellfish aquaculture, traditional shellfish harvesting, water quality and the protection of the marine environment. Due to the depuration areas such as the Sooke Basin and the closures of fisheries and shellfish harvesting (mandated by the Department of Fisheries and Oceans, DFO). Applications are no longer accepted for private moorage structures. Private moorage structures are not compatible with Designated Use Areas.

Land Use Planning Documents

6. Consider the establishment of Development Permit Areas (DPA) in Official Community Plans pursuant to the Local Government Act Section 488(1)(a) for the protection of the natural environment, its ecosystems and shoreline biological diversity; and Section 488(1)(b) for the protection of development from hazardous conditions. Consider updating Land Use Bylaws to clarify under what circumstances a development permit is triggered. Also revise Zoning Bylaws in regard to regulations to setbacks on Uplands from Shorelines.
7. DP requirements need to be consistent with the intent of Shoreline/Floodplain and the Riparian areas policies. This is required to balance development with protection of the environment. Mayne Island Official Community Plan includes a section on coastal waters and foreshore in which it states the local trust committee may: a) amend its bylaws to allow erosion protection structures to be

regulated through development permits; and b) consider on a case-by-case basis.

8. Shoreline Development Permit Area could be added to Land Use Bylaws. Islands Trust Staff have suggested that all surrounding islets also be included in the DP area.
9. Consider Implementation of a Shoreline Bylaw to strengthen the Land Use Bylaws and Official Community Plans. Develop LUB using shoreline mapping for all islands and highlight unique characteristics of the shoreline within the six beach types. For example, many Islands have flat beaches, cliff bluffs, rock, clay or marsh till. This will help to focus on more site-specific regulations and better protect marine ecology and support salmon spawning grounds, eel grass, and shellfish fishery. Problem areas for habitat protection and erosion of cliffs affecting setbacks should be identified as this could be a precursor to development of bylaws. Exemptions may be necessary if a specific issue does not exist. Shoreline mapping is available on MapIT and can be leveraged for shoreline protective bylaws.

Definitions:

10. Have a consistent definition for “shoreline” and “development” on the shoreline in all Islands Trust documents in accordance with the BC Land Act definition.

Setbacks are the primary tool for regulating where buildings locate. Need to define consistent setbacks for marine shoreline s. Implement consistent requirements for measuring Natural Boundary and have surveyor confirm exact High-Water Mark. Need to define “natural boundary” and “natural grade” in relation to “shoreline” and Sea Level Rise (SLR). The table

highlights LUB setback requirements from the natural boundary of the sea for buildings and structures and requires amendments to be consistent with the Provincial Guideline of 15metres.

Rather than amending the LUB to update the setback measurement, one option would be to amend the LUB to refer to the flood protection bylaw for setbacks from the natural boundary of the sea. This would align with the existing Provincial Guidelines, and with any future amendments to the setbacks to the sea as required by the Province.

Climate Change

11. Washington State requires all local governments to develop Shoreline Management Plans: Oak Harbour. WA. U.S. Appendix A: Summary List of Recommended Actions Page 1 (washington-apa.org) is an example we have included. This may be an option for LTC. to outline how protection of marine ecology will be managed and provide Climate Change Policy Recommendations: Undertake study of sea-level rise, and floodplain regulations. The Province of BC has provided Coastal floodplain maps to identify coastal flood hazards, such as sea level rise, and to provide guidance to coastal communities in land use planning, bylaw development and sea level rise adaptation strategies. [Microsoft Word - TEXT-20110627.doc \(gov.bc.ca\)](#) These maps will help to shape future policies with regards Flood Construction Levels and Sea Level Rise.
12. The Islands Trust mapping for the 21 Islands, supplemented by BC and CRD Mapping continue to be used to provide an evidence-based approach for identification and appraisal of options for future bylaws

that deal with Sea Level Rise Management management for in the Islands Trust communities. In particular, the analysis provides the types of land use, key assets, services and indicative economic values that exist in areas at inundation risk and this evidence will help to develop the objectives for and assess the impacts of different management options.

13. The Islands Trust should continue to conduct assessments of areas where Sea Level Rise risks exist and communicate these risks to Island Trust Committees and the community. The methods and mapping data sets used should be standardized so it can be applied to all Trust Communities. It is essential to consider the value in assessing inundation risk that could occur from flooding of drainage and other water systems. Data generated from this project could be used to create maps to show where such non-connected low-lying areas are located.

Best Practices – Islands Trust

16. There has been considerable work undertaken by Island planners and with the knowledge, and thorough

research and policy analysis of work it makes the most sense to utilize this project work for proposed Development Permit Areas. There are valuable best practices and details included in the shoreline projects for Keats Island and Lasqueti which is applicable to other islands. While there are differences for each of the islands, therefore these differences such as size, transportation needs, the purpose and function of docks will vary. [gm-ltc_2020-06-15_keats-shoreline_rpt-discussion-paper-working-group.pdf](https://islandtrust.bc.ca/gm-ltc_2020-06-15_keats-shoreline_rpt-discussion-paper-working-group.pdf) (islandtrust.bc.ca)

17. Recognizing the organizational structure and directives guided by the LTCs, perhaps it is worthwhile conducting a feasibility study to determine which LTCs are interested in building off of the extensive work carried out over a 2+ year span of time for the Lasqueti Shoreline Protection project and again recently for the Keats Shoreline Protection project?

APPENDICES

REGULATIONS – ISLANDS TRUST AND OTHER EXAMPLES

Across the Islands Trust, each Local Trust Area has adopted individual Official Community Plans (OCP) and Land Use (Zoning) bylaws.

Bowen Island Municipality

Marine Resources/Foreshore: The sea provides visual, auditory, recreational, and other tangible and intangible values that can be experienced from island and off island locations, as well as providing habitat for marine life and birds. Pollution of the foreshore can preclude its use by people and by all or some forms of wildlife. Excessive building and tree clearing on the shoreline can destroy fragile plant communities and the views for residents and the boating public. Objectives are to protect the natural and scenic values of the coastline that provide the rural maritime atmosphere of the island; to protect coastline habitat areas for marine life and to identify, protect and preserve sensitive coastal vegetation. The Land Use Bylaw will set out detailed provisions related to siting, setbacks, size, configuration, width, materials, and projections for private moorage. The importance of the marine environment as a recreational resource for island residents and visitors will be affirmed through the continued maintenance of existing beach and shoreline access and establishment of new beach and shoreline access where such access does not detrimentally affect the marine environment and associated wildlife.

Denman Island Local Trust Area

A guiding objective is to protect the foreshore, coastal waters, and native marine life and to retain sufficient natural habitat to ensure the preservation of native species...The foreshore (or intertidal) area is defined as the land located between highest and lowest tides.

Gabriola Island Local Trust Area

The objectives include to manage coastal marine resources in keeping with the Islands Trust preserve and protect mandate; To preserve and protect unique, rare, or representative marine plant and animal communities in their natural habitats; To protect the natural and scenic values of the coastline; To provide opportunities for the commercial uses of the foreshore and coastal waters; To recognize the importance of the existing log storage areas in the; To promote the recreational and commercial use of the area's aquaculture resources; and To encourage the sharing of docks and wharves. Within Development Permit Areas there are policies regarding no alteration or disturbance causing a negative impact to the foreshore habitat or erosion in upland areas.

Mudge Island

Since there is no ferry service, large or bulky items such as vehicles and building materials are transported by boat or barge to and from the island. Barges use either Moonshine Cove's beach or the deeper foreshore nearby at a public access point. Davidson Bay is also used for launching and retrieving boats. Objectives are to minimize disturbance and pollution of the foreshore and the surrounding waters and conflicts between marine and foreshore users and uses.

DeCourcy Island

The Official Community Plan notes that the foreshore and the ocean are fragile and valuable components of human and marine life habitat. Interference with the natural systems and their appearance should therefore be kept to a minimum. 1) Moorage space for residents and owners should be centralized at one or more locations. 2) Private floats and docks serving only individual lots should be discouraged. 3) Houseboats should not be permitted. Water General (W-1) Zone (i) Boat and seaplane moorage associated with single family uses located on adjacent upland.

Gambier Island Local Trust Area

Marine and Foreshore Areas Policy states that zoning should allow: cooperatively owned or operated docks to provide marine access to residential areas as a means of minimizing the need for upland road links between residential communities and to limit the need for multiple dock development along the shoreline. Also, property owners are encouraged to retain natural vegetation on any land sloping towards the shoreline. The Local Trust Committee may issue development permits to protect the natural environment, its ecosystems and biological diversity for Marine and Foreshore designated areas considered to have potential fishery resource values.

Keats Island

The Official Community Plan states that the integrity of foreshore features, shoreline features, and intertidal processes should be maintained by: a) discouraging uses that disrupt natural features and processes, and encouraging owners of shoreline properties to retain, wherever possible, natural vegetation and natural features on areas sloping towards the foreshore; b) supporting the prohibition of filling, deposit, excavation, or removal of foreshore and seabed materials, except for maintenance of navigational channels and existing wharfage areas; c) land use regulations should provide for waterfront developments to be setback sufficiently to allow for natural erosion and accretion processes, without endangering structures; d) where land use regulations provide for private docks, the use of communal or shared docks is encouraged, where feasible, to limit the need for multiple dock development along the shoreline. The location of new buildings and structures should be regulated so as to protect public access to, from and along the marine shoreline and to minimize negative impacts on sensitive coastal environments.

Gambier Associated Islands

Policies in the Official Community Plan state that the LTC should identify and consider protecting ecologically sensitive marine areas. The

LTC should permit and encourage the construction and use of common, community, or communal docks where feasible but permit individual private docks accessory to residential uses where required for access. The LTC should use bylaw provisions to protect public access to, from, and along the marine shoreline. The LTC should, through zoning, the use of setbacks and, where there is supporting mapping, the use of development permit areas: (a) protect the integrity of the foreshore, shoreline, and natural coastal and intertidal processes; (b) discourage uses that disrupt natural features and processes; (c) allow for natural erosion and accretion processes, without endangering structures; (d) encourage owners of shoreline properties to retain, wherever possible, natural vegetation and natural features on areas adjacent to the foreshore; and (e) discourage filling, deposit, excavation, or removal of foreshore and seabed materials, except for maintenance of navigational channels and existing facilities. Modification of the shoreline, such as seawalls, where it can be demonstrated to be necessary to support or protect a permitted or existing use or structure. Preference should be given to shoreline structures that have a lesser impact or enhance ecological functions, including vegetation enhancement, drainage control, beach enhancement, anchor trees, and gravel placement. Shoreline stabilization should not interrupt natural processes solely to reduce erosion of undeveloped land. Vegetation which helps stabilise banks, reduce erosion and provide habitat should be retained or enhanced.

Galiano Island Local Trust Area

The Official Community Plan explains the complex geography and geology of Galiano Island and surrounding islands and waters have produced a tremendous diversity of coastal and marine habitats. Unique relationships exist between terrestrial, fresh water and marine areas; as a result, coastal ecosystems are the most diverse and productive of all ecosystems. Significant recreational, commercial, industrial, and residential activities occur within the shoreline area and this sensitive area is under intense pressure from development and human activity. The Shoreline and Marine designation incorporate as all waters beyond high tide line up to the full boundary of the Galiano Island Local Trust Area. The objectives are: 1) to protect shoreline and marine ecosystems in the local trust area, 2) to ensure public access to the foreshore, and 3) to encourage safe and considerate use of the marine environment. There is a Shoreline and Marine Development Permit Area. Shorelines within the Galiano Island Local Trust Area have high ecological function and values and may be subject to shoreline erosion in some locations. Due to their physical and biological characteristics and situation they need to be carefully managed to avoid potential negative impacts of development. Development and associated shoreline improvements or protection measures can threaten the ecological and physical integrity of the foreshore and upland. The Objectives of the development permit area are:

1. To plan and regulate new development in a manner that preserves and protects the long-term physical integrity and ecological values of shorelines and associated foreshore and upland areas.
2. To manage development to minimize disruption of natural features and processes and to retain, wherever possible, natural vegetation and natural features.
3. To balance development opportunities with the ecological conservation of the shoreline environment.
4. To maintain the public's use and access to these important recreation areas in a way that does not compromise the ecological integrity of the shoreline or put users at undue risk.

5. To adapt to the anticipated effects of climate change.
6. To protect development from hazardous conditions resulting from shoreline erosion.
7. To ensure the form and character of marina development is compatible with the rural environment and minimizes impact to the aquatic environment.

The DPA includes Guidelines and provides information on Shoreline Protection Measures, Guidelines for specific Shoreline Types, Guidelines for Subdivision, Guidelines for Shore Protection Measures Design, Guidelines for Beach Nourishment and Fill, and Guidelines for Shore Access and Parking. There is also a Sensitive Ecosystem Development Permit area with some policies for shorelines.

Hornby Island Local Trust Area

The objectives of the Official Community Plan include, to promote the conservation, preservation or restoration of shoreline, foreshore, and the Island's surrounding marine ecosystem. Policies include 6.7.2.1 All uses of the waters within 1000 metres of the shoreline should be regulated by zoning.

Lasqueti Island Local Trust Area

Objectives include the support conservation-based subdivision layout that protects sensitive ecosystems, heritage resources and reduces parcelization of the natural boundary of the sea and limitation of the density of waterfront parcels.

Mayne Island Local Trust Area

Official Community Plan Objectives include: to retain the public accesses to shoreline and beach areas. The coastal waters within the Mayne Island Trust Area include the surface of the water extending from the shoreline of Mayne Island out to the middle of the Georgia Strait, except where the jurisdictional boundary overlaps with another Local Trust Area when the boundary becomes a line mid-channel. The objectives of this section are to limit the impact of foreshore uses on adjacent uses and on the visual appearance of the shoreline. Private floats, docks or wharves shall be permitted by zoning only for owners of land adjacent to the shoreline of the water area subject to the zone.

North Pender Island Local Trust Area

Sensitive Ecosystem Development Permit Areas are included in the Official Community Plan. Stipulations include: Shoreline structural modifications should be limited in number and extent and should be necessary to support or protect a permitted or existing use or structure. Preference should be given to shoreline structures that have a lesser impact or enhance ecological functions, including vegetation enhancement, drainage control, beach enhancement, anchor trees, gravel placement. Harder construction measures should be avoided where possible. Shoreline stabilization should not interrupt natural processes solely to reduce erosion of undeveloped land, except for agriculture. Vegetation which helps stabilise banks, reduce erosion and provides habitat should be retained or enhanced.

Salt Spring Island

The Official Community Plan objectives include: To give particular attention to the streams, wetlands, and shorelines. The Ministry of Transportation and Infrastructure and other responsible agencies are encouraged to support efforts to create a harbour shoreline that offers access to the harbour and opportunities for walking and traditional recreational activities. Shoreline and Aquatic Use Objectives and Policies are: To protect our marine and freshwater shorelines. To protect the most significant ecological and physical processes of marine and freshwater shorelines; To identify those shoreline areas that are most uniquely suited to or traditionally used for specific purposes such as conservation, First Nations sites, public recreation, boat moorage, aquaculture, industry or transportation; To avoid conflicts between shoreline uses and uses allowed on the adjacent upland; To avoid shoreline uses that impede public access to and along the shoreline; Shoreline identified as uniquely suited to or traditionally used for a specific purpose is designated for that use. Other parts of the shoreline and areas of water are designated Marine; The Local Trust Committee could undertake an integrated coastal area management (ICAM) planning process to identify other appropriate areas where specific designations should be placed. Such planning should take place in consultation with the community, First Nations, and other levels of government; The Local Trust Committee may consider shoreline rezoning applications adjacent to marine dependent general employment zoning which may make upland uses economically viable without detriment to the shoreline/riparian habitat. Shoreline Conservation Designation Objectives are: To protect the island's most environmentally sensitive shoreline areas such as tidal flats, fish and wildlife habitat, sensitive lake ecosystems, estuaries and wetlands that is not suitable for intensive development. and Policies include: Zones created in this Designation should not result in negative impacts to sensitive natural habitat areas. The Local Trust Committee will not consider rezoning applications that would locate large new developments in or next to this Designation. Zoning should recognize the existing aquaculture operation in Walker Hook. However, zoning changes to allow expansion of the operation will not be made, unless it can be demonstrated that there will be no impacts on the area's sensitive environment or First Nation's interests. The Local Trust Committee should support the efforts of other agencies to maintain existing public accesses to the Shoreline Conservation Designation. However, if the adjacent upland is being subdivided, the Subdivision Approving Officer is encouraged to ensure that any new public accesses provide viewing areas rather than direct physical access to sensitive habitat areas. In providing referral responses to Integrated Land Management Bureau, Islands Trust staff will identify any known and identified environmentally sensitive areas or habitat that may be impacted by the proposed use.

Saturna Island Local Trust Area

The Harbours section within the Official Community Plan states that Permanent private moorage facilities, including docks, ramps, floats, and breakwaters, should be as small as practicable given the particular conditions, including shoreline topography, depth of navigable water, exposure to weather and other navigational considerations. These facilities shall be designed to facilitate public access along the foreshore.

The DPA for Lyall Creek states that i) In general, development of the foreshore should be limited, should minimize negative impacts on the ecological health of the immediate area, and should not impede public access. ii) Shoreline protection measures should be limited to those necessary to prevent damage to existing structures or established uses on the adjacent upland. Softer shore protection measures should be considered first, and only if all options to locate and design without the need for shore protection works have been demonstrated to have been exhausted should such works be considered.

South Pender Island Local Trust Area

Marine Use Objectives in the Official Community Plan are a) To allow dock and wharf development for access to and from the foreshore in locations appropriate for public transportation, commercial, park, and residential purposes. b) To allow for access to beaches suitable for recreation and maintain them free from development.

c) To retain areas of foreshore in an undeveloped state. d) To protect against impacts of mariculture operations, marine shipping, or marine based activities. e) To protect the marine areas subject to this OCP from use and development that would detract from present marine, and upland uses or conflict with existing marine life. f) To protect and maintain important foreshore and marine features and habitats. g) To provide for and support foreshore and marine waters use in a manner that does not significantly alter important natural features and habitat. Policies include: The Local Trust Committee may regulate the size and location of docks and other shoreline developments. Coastal Environment Objectives include: To preserve the aesthetic quality of the natural shoreline as viewed from the water and adjacent lands and related policies: Where development is allowed along shorelines, it shall be designed to conform to, rather than conceal, the natural contours of the land that borders the shoreline.

Thetis Island

Official Community Plan includes the entire Island and the seaward area from the shoreline of Thetis Island as identified by the natural boundary of the sea and encompasses all other islands, islets, reefs, the seabed, surface water, and air space. Policies include: Public access to the Crown land foreshore should remain unobstructed and the right to pass around shoreline structures. The integrity of foreshore features, shoreline features, and intertidal processes may be maintained by a) Discouraging uses that disrupt natural features and processes and encouraging owners of shoreline properties to retain, wherever possible, natural vegetation and natural features on areas sloping towards the foreshore. b) Supporting the prohibition of filling, deposit, excavation, or removal of foreshore and seabed materials, except for maintenance of navigational channels and existing wharfage areas. c) Land use regulations should provide for upland waterfront developments to be setback sufficiently to allow for natural erosion and accretion processes, without endangering structures. d) Where land use regulations provide for private docks, the use of communal docks is to be encouraged where feasible and breakwaters are to be prohibited.

Thetis Associated Islands (Ruxton, Reid, Pylades, Hudson, Scott, Dayman, Tree, and Whaleboat)

Official Community Plan Policy: considers the location of future land uses so that their appearance and impact are compatible with and do not degrade or otherwise negatively impact the natural environment, community resources, and the character of existing land uses; the protection of sensitive ecosystems, ecological values and wildlife and fisheries habitats, especially in inter-tidal, estuarine, stream and riparian areas, in accordance with the current published guidelines as expressed in the Forest Practices Code, the Fish Protection Act and other guidelines published by the provincial and federal governments.

Ballenas and Winchelsea

Official Community Plan Policies include: LTC should identify and consider protecting ecologically sensitive marine areas; Zoning should permit shellfish aquaculture within existing tenures; LTC may consider rezoning applications for new leases for aquaculture, other than finfish farms; LTC should recognize and support the marine dependent nature of land uses; LTC should permit one dock adjacent to each private island in order to limit the need for multiple private dock development along the shoreline; LTC should only consider individual private docks accessory to residential uses where necessary for access. These docks should be regulated by zoning; LTC should not permit commercial marinas; LTC should use bylaw provisions to protect public access to, from and along the marine shoreline; use bylaw provisions

to limit structures within the setback from the sea to those related to permitted marine uses and those necessary for access to the foreshore; through zoning, the use of setbacks, and the use of development permit areas: (a) protect the integrity of the foreshore, shoreline, and natural coastal and intertidal processes; (b) discourage uses that disrupt natural features and processes; (c) allow for natural erosion and accretion processes; (d) encourage owners of shoreline properties to retain natural vegetation and natural features on areas adjacent to the foreshore; and (e) discourage filling, deposit, excavation, or removal of foreshore and seabed materials. The LTC should not permit the hardening of the shoreline. LTC should not support ocean disposal applications within the Plan area. LTC should not support the creation of artificial reefs within the Plan area.

Review other Examples

- Oak Harbour SMP

Shoreline Environment Designations

The basic intent of a shoreline environment designation is to preserve and enhance shoreline ecological functions and to encourage development that will enhance the present or desired future character of the shoreline as described in the Comprehensive Plan, other adopted plans and this SMP. To accomplish this, shoreline segments are given an environment designation based on existing development patterns, biological capabilities and limitations, and community objectives. This Master Program establishes seven shoreline environments for the City of Oak Harbor. These shoreline environments include shorelands, surface waters, and bed lands. These environments are derived from and build on policy direction contained in the Oak Harbor Shoreline Inventory and Characterization Report, the Oak Harbor Comprehensive Plan, the Shoreline Management Act, and the Shoreline Master Program Guidelines. The seven Oak Harbor shoreline environment designations are: Maritime, Urban Mixed Use, Residential, Residential - Bluff Conservancy, Urban Public Facility, Conservancy, and Aquatic.

- Natural Resources Canada, Land Use Planning Tools 2012

This publication describes a variety of planning tools being used across Canada to help communities prepare for climate change, increase adaptive capacity, and build resilience. It is directed to individuals and groups interested in climate change adaptation at the local level, including planners and other local government staff, elected officials, community organizations, local residents and business leaders.

Climate Change Land use planning tools for local adaptation to climate change describes seven of the most prominent land use planning tools in use across Canada and explains how communities can use them to more effectively adapt to climate change.

The land use planning processes and instruments employed to manage the use of land and the physical development of a community for the common interest includes a variety of statutory and other measures – bylaws, incentives, information and guidance, spending

programs – may be applied to control how land is used. [Land use planning tools for local adaptation to climate change \(publications.gc.ca\)](http://publications.gc.ca)

- Rural Comox Valley OCP 2014

Natural Environment: Objectives

(4) To protect, restore and enhance coastal shorelines, streams, wetlands, and the marine environment.

Climate change – policies (adaptation)

14. (1) Develop strategies to reduce the environmental, social, and economic impact of sea level rise and increasing extreme storm surge events in coastal areas through development permit area designations and conditions and submission of development approval information in accordance with policies included within this OCP.

14. (2) Work with stakeholders to complete an assessment of risk and susceptibility of the coastal areas to increasing sea level and extreme storm surge impacts.

Rural settlement areas – policies (industrial) (d) public access to the coastal waterfront, where applicable.

Coastal areas

68. Coastal areas are those lands that run parallel to the full waterfront of the CVRD, generally extending from the present natural boundary to the 30-metre bathymetric contour as illustrated on map 3. Activities are typically environmental protection, aquaculture, marine industry, and recreation. This plan seeks to protect such uses while discouraging activities both on the water and the abutting upland areas that could compromise the environmental integrity of the aquatic environment.

Coastal area - objectives

69. (1) To minimize any negative impacts of settlement on the coastal areas. (2) To steward these areas for their environmental and economic benefits. (3) To encourage appreciation of the marine environment, by providing for public access to, and enjoyment of, the shoreline and foreshore in ways that avoid negative impacts to natural systems and processes. (4) To ensure that coastal shoreline development does not alter sediment supply to the coastal environment or sediment transport within the coastal environment. (5) To reduce lighting impacts on species and ecosystems within the coastal area.

Coastal areas - policies

70. The following policies apply to the lands designated as “coastal areas” Rural Comox Valley Official Community Plan 2014 Bylaw No. 337 – Schedule ‘A’ (1) Permit industrial marine and aquaculture uses in the coastal area designation, except for areas within the K’ómoks Estuary where they are prohibited. (2) Notwithstanding above sub-section (1) sustainability and productivity of the K’ómoks Estuary is recognized as being critical for harvesting of aquaculture to K’ómoks First Nation, and it is recognized that the KFN may choose to proceed with aquaculture activities within the estuary at any time. (3) Protect coastal areas per the provisions stated in the natural environment sections of this OCP. (4) Respect the Islands Trust area of jurisdiction that includes the ocean area to the high-water mark of the eastern coast of Vancouver Island from Mud Bay to Comox Point and ensure development within the buffer

extending from the high-water mark to the 30-metre bathymetric contour considers the Islands Trust policy statement. (5) Support dock-side sales and limited on-site sales of aquaculture products that meet legislative requirements to promote economic activities. (6) Work with aquaculture industry stakeholders and small-scale aquaculture operations to support water flow into fish-bearing river systems of the Comox Valley. (7) Apply environmental best practices to all uses within the coastal designation (8) Recognize and support the need of the aquaculture industry to effectively grow seed to replenish existing oyster beds and support in principle the use of power supplies from wharfs for the growing of seed for the aquaculture industry, providing legislative requirements are met. (9) Generally, prohibit hardening of the coastal shoreline through the use of rip rap, concrete embankments and revetment walls, and other similar structural interventions that alter the ecological function and service of the coastal shoreline, disturb natural vegetation, disrupt natural coastal processes, redirect wave energy to adjacent properties, and/or destroy coastal shore habitat, including forage and spawning areas. If a qualified professional has submitted development approval information that concludes that shoreline hardening is required to protect life or a principal building on the property and that the impacts of the proposed hardening can be mitigated, the board may consider issuance of a shoreline protection device development permit. (10) Require preparation of a shore access plan by a qualified environmental professional for development proposals that include shore access and require rezoning or a development permit process to protect against sensitive environmental features and processes being disturbed. (11) Regulate by the development permit process to reduce light trespass (i.e., light that crosses property lines including the present natural boundary) and light glare (i.e., excessive illumination applied to a single area) within the coastal area to avoid disruption of natural activity patterns of coastal and marine species. (12) Assess proposed land uses or development within the K'ómoks Estuary in accordance with a completed and finalized K'ómoks Estuary management plan that has been endorsed by all affected jurisdictions.

Shoreline protection devices

Guidelines where an applicant proposes the installation, replacement, or repair of a shoreline protection device under these guidelines, the design of the device shall contribute to shoreline resiliency by following soft shore (e.g., “Green shore”) principles:

- Conserve or restore natural coastal or riparian processes (e.g., sediment transfer).
- Maintain habitat function and diversity.
- Prevent pollutants from entering the aquatic or riparian environment.
- Avoid or reduce cumulative impacts on the shoreline environment, including coastal or riparian processes. All proposals shall incorporate design elements that contribute to coastal resiliency by protecting or restoring natural coastal processes and habitat. Except when a hardened shoreline is proposed (i.e., based on the findings of a qualified professional that shoreline hardening is required to protect life and/or a principal building), shoreline protection device development permits can be approved under delegated authority. Proposals to harden a shoreline, including replacement and/or maintenance of an existing hard shoreline with similar hard design elements shall require board approval of the development permit.

- Campbell River Sustainable OCP n/a
- Sydney OCP – n/a
- Ucluelet OCP (2011)

3.4 Small Craft Harbour, Marine

The water areas of Ucluelet are generally designated as either: Small Craft Harbour (three water lots); Water Lot (majority of water lots); or Managed Water (remaining water areas not in registered water lots) In addition to these three designations, several water lots are designated in conjunction with the adjacent land-based designation (e.g. Village Square or Residential) Each registered water lot is inextricably linked to various adjacent land uses; hence the relationship between land and water requires careful consideration, which could include parking needs, water and sewer servicing and visual impacts. In conjunction with the sustainability objectives noted in the OCP, the District should consider protecting environmentally sensitive areas and shoreline habitat.

The District shall work with the Department of Fisheries and Oceans to: i. Identify environmentally sensitive areas; ii. Support marine ecology and marine education facilities within the Harbour; iii. Consider alternate long-term uses, such as residential, including a private marina, for the former BC Packers Plant; iv. Consider enhancing public access to the District owned water lot at the foot of Alder Street; v. Support transient boat moorage provided adequate sanitation facilities are located nearby; vi. Require all water lot uses to properly treat and dispose sanitary sewer waste and connect into the District's sewer collection system and access District potable water; vii. Require all structures to apply for and obtain a Building Permit, which addresses health and safety regulations; and viii. Explore ways and means of generating revenue to fund Harbour infrastructure.

2. iii. Managed Water All water areas located between the shoreline and the District boundaries, excluding all registered water lots, are designated as "Managed Water". Managed Water Policies: A comprehensive review of the area within the Managed Water designation will be carried out by the District. Until this time, no uses are permitted within the area, including boat or houseboat moorage.

+ Policies for Development Permit Areas

- Victoria OCP –

SHORELINE ECOSYSTEMS 10.9 Protect and enhance shoreline and marine habitat by: 10.9.1 Considering the establishment of Development Permit Area guidelines that consider best practices such as appropriate building setbacks, guidance for enhancing habitat values and the integration of climate change adaptation planning; 10.9.2 Establishing a Development Permit Area for the east side of the Upper Selkirk Waters to protect the unique natural features of this area; 10.9.3 Investigating the acquisition and designation of shoreline ecosystems through a Parks Acquisition Strategy; 10.9.4 Integrating restoration of natural shoreline features into the development of the Harbour Pathway, where appropriate; 10.9.5 Enhancing the Dallas Road Bluffs through the development of management zones and restoration targets; and, 10.9.6 Developing management strategies and initiatives for shoreline parklands that maintain and enhance coastal sediment processes. 10.10 Work in partnership with the Capital Regional District, the Township

of Esquimalt, the Town of View Royal, the District of Saanich, and other partners to increase coordination in the protection and restoration of Victoria Harbour and the Gorge Waterway. 10.11 Work with partners to assess the projected impacts of sea level rise on marine and shoreline ecosystems and respond to changing conditions through management strategies and development of a Climate and Energy Resiliency Plan [SEE ALSO SECTION 12 – CLIMATE CHANGE AND ENERGY].

- Powell River OCP 2014

5.5 Tidal / Saltwater Riparian Areas. The City is bounded on the west and south by Malaspina Strait. Due to exposure, topography, and historic private/industry ownership of much of the waterfront, direct community interaction, enjoyment, and exposure to the tidal water edge is limited. Increased public access to the waterfront and protection of the environmental quality of that waterfront is a priority for Powell River residents. Upland improvements to support expansion of harbour or any waterfront development must include environmentally sustainable measures.

5.5.1 Tidal/Saltwater Riparian Areas Objectives (a) Protect the shoreline along Malaspina Strait through the use of measures that take natural processes into consideration and do not detrimentally impact adjacent properties. (b) Plan for long-term climate change including sea level rise and associated storm impacts.

5.5.2 Tidal/Saltwater Riparian Areas Policies

(a) All development along the shoreline of Malaspina Strait must plan for a sea level rise of 1.0 metre and associated storm surge and coastal erosion.

(b) Except for shoreline protection measures and marine based structures such as ferry terminals, aquaculture facilities, breakwaters and moorage facilities, new buildings must be located a minimum of 15 metres from the natural boundary.

(c) Minimize the degradation of natural systems through steps such as protecting the foreshore from erosion, by retaining embankment vegetation and through construction that does not require vertical sea walls.

(d) All shoreline protection measures should include environmentally sustainable practices such as the retention and restoration of natural shoreline vegetation, and landscaping strategies that require little or no revetment and minimize erosion but augment bank stabilization, in conformance with the guidelines contained in the 2003 Federal/Provincial publication entitled Coastal Shore Stewardship: A Guide for Planners, Builders and Developers.

(e) Parking lots at or near the water's edge should consider permeable surfaces (e.g., grass, gravel, or open interlocking paving systems) to ensure bio-filtration of hydrocarbons and heavy metals from the undercarriage of vehicles from surface water drainage.

(f) It is recognized that the coastal shoreline undergoes a natural progression of accretion and erosion gradually over the long term or suddenly in severe storm events. The City shall endeavour to map and track this process as it relates to the shoreline for the purposes of land use planning.

(g) The City supports ensuring that storm water runoff from buildings and land is managed through a stormwater management system or other natural bio-filtration system where possible.

REFERENCES

General:

www.islandstrust.bc.ca/islands/island-ecosystems/caring-for-my-shoreline/greenshores-approach-your-marine-waterfront-canadian-edition-final-web-version.pdf (islandstrust.bc.ca)

[Islands Trust Conservancy](#)

[Microsoft Word - GS Jurisdiction Issue Sheet ver4 Oct09Final2.doc](#) (islandstrust.bc.ca)

[Greening Our Shores Workshop Presentations.pdf](#) (islandstrust.bc.ca)

[Critical Areas and Shoreline Monitoring & Adaptive Management Workshops](#) (washington-apa.org)

www.crd.ba.ca/docs/default-source/climate-action--pdf/sea-level-rise-planning-approaches-project-report.pdf?sfvtsn=d29757ca_0

Sea Level Rise:

[coastal-flood-inundation-mapping-project-summary.pdf](#) (crd.bc.ca)

<https://www2.gov.bc.ca/assets/gov/environment/climate-change/adaptation/resources/slr-primer.pdf>

[Coastal Floodplain Maps - Province of British Columbia](#) (gov.bc.ca)

City of Delta Sea Level Rise Strategy (2015): [119360](#) (civicweb.net)

[Sea Level - Environmental Reporting BC](#) (gov.bc.ca)

Island Ecosystems:

[Marsh Fine Sediment](#) (islandstrust.bc.ca)

Planning Tools | OCP + Development Permit Areas

District of Squamish OCP (2018): Development Permit Area guidelines: page 170

Specific Projects:

Bowen Island: [PowerPoint Presentation - Slide 1 \(civicweb.net\)](#)

] [June 2017 Attachment 2 Draft DPA Marine Shoreline Protection \[48138](#)

Lasqueti: [Shoreline Protection Project \(islandstrust.bc.ca\)](#) [June 2017 Attachment 1 Shoreline Protection OCP LUB.pdf](#)
[aug-2017-la-shoreline-mailout.pdf \(islandstrust.bc.ca\)](#)

[Sharing Our Shorelines Presentation.pdf \(islandstrust.bc.ca\)](#)

North Pender:

(brochure): [shorelinesmatterbrochure.pdf \(islandstrust.bc.ca\)](#)

Thetis:

[Thetis-Shoreline-Data-Compilation-for-workshop.pdf \(islandstrust.bc.ca\)](#)

[Summary-Report-Shoreline-Scenarios-workshop.pdf \(islandstrust.bc.ca\)](#)

[LPS Staff Report \(islandstrust.bc.ca\)](#)

[Microsoft Word - 1214420001-001-R-Rev0-Thetis Island Shoreline 24MAY 13.docx \(islandstrust.bc.ca\)](#)

Mapping:

Bowen Island: [Bowen Island Shoreline Maps - Briefing for BIM.pdf \(civicweb.net\)](#)

Lasqueti: [lasquetishorelinemapping.pdf \(islandstrust.bc.ca\)](#)

North Pender: [Map NPShorelineFeatures1.pdf \(islandstrust.bc.ca\)](#)

Forage Fish: [foragefishreport.pdf \(islandstrust.bc.ca\)](#)

South Pender: [Map.ShorelineFeatures.pdf \(islandstrust.bc.ca\)](#)

Thetis: [Review of Thetis Island Shoreline Classification and Recommendations for Shoreline Development - March 31, 2010, Archipelago Marine Research Ltd. \(islandstrust.bc.ca\)](#)

Other:

[Landowners-Guide-September-draft-revised.pdf \(islandstrust.bc.ca\)](#)

Local Updates (caorda.com)

Hul'qumi'num Heritage Law Case Study Report

KFN Marine Plan 2012.pdf (komoks.ca)

squamish.ca/assets/OCP_Coastal marine planning

Policy Compliance Checklist

Policies for Ecosystem Preservation and Protection

CONSISTENT	NO.	DIRECTIVE POLICY
	3.1	Ecosystems
	3.1.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and protection of the environmentally sensitive areas and significant natural sites, features and landforms in their planning area.
	3.1.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning, establishment, and maintenance of a network of protected areas that preserve the representative ecosystems of their planning area and maintain their ecological integrity.
	3.1.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the regulation of land use and development to restrict emissions to land, air and water to levels not harmful to humans or other species.
	3.2	Forest Ecosystems
	3.2.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of unfragmented forest ecosystems within their local planning areas from potentially adverse impacts of growth, development, and land-use.
	3.3	Freshwater and Wetland Ecosystems and Riparian Zones
	3.3.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means to prevent further loss or degradation of freshwater bodies or watercourses, wetlands and riparian zones and to protect aquatic wildlife.
	3.4	Coastal and Marine Ecosystems
	3.4.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of sensitive coastal areas.

	3.4.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for and regulation of development in coastal regions to protect natural coastal processes.
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PART IV: Policies for the Stewardship of Resources

CONSISTENT	NO.	DIRECTIVE POLICY
	4.1	Agricultural Land
	4.1.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and preservation of agricultural land for current and future use.
	4.1.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation, protection, and encouragement of farming, the sustainability of farming, and the relationship of farming to other land uses.
	4.1.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of adjacent properties to minimize any adverse affects on agricultural land.
CONSISTENT	NO.	DIRECTIVE POLICY
	4.1.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the design of road systems and servicing corridors to avoid agricultural lands unless the need for roads outweighs agricultural considerations, in which case appropriate mitigation measures shall be required to derive a net benefit to agriculture
	4.1.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address land uses and activities that support the economic viability of farms without compromising the agriculture capability of agricultural land.
	4.1.9	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of Crown lands for agricultural leases.
	4.2	Forests
	4.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the need to protect the ecological integrity on a scale of forest stands and landscapes.

	4.2.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the retention of large land holdings and parcel sizes for sustainable forestry use, and the location and construction of roads, and utility and communication corridors to minimize the fragmentation of forests.
	4.2.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of forest ecosystem reserves where no extraction will take place to ensure the preservation of native biological diversity.
	4.3	Wildlife and Vegetation
	4.4	Freshwater Resources
	4.4.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated, and seasonal demands for water are considered and allowed for.
	4.4.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses
	4.5	Coastal Areas and Marine Shorelands
	4.5.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the needs and locations for marine dependent land uses.
	4.5.9	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the compatibility of the location, size and nature of marinas with the ecosystems and character of their local planning areas.
	4.5.10	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location of buildings and structures so as to protect public access to, from and along the marine shoreline and minimize impacts on sensitive coastal environments.
	4.5.11	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways.
	4.6	Soils and Other Resources

	4.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of productive soils.
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PART V: Policies for Sustainable Communities

CONSISTENT	NO.	DIRECTIVE POLICY
	5.1	Aesthetic Qualities
	5.1.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of views, scenic areas and distinctive features contributing to the overall visual quality and scenic value of the Trust Area.
	5.2	Growth and Development
	5.2.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address policies related to the aesthetic, environmental and social impacts of development.
	5.2.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address any potential growth rate and strategies for growth management that ensure that land use is compatible with preservation and protection of the environment, natural amenities, resources and community character.
	5.2.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means for achieving efficient use of the land base without exceeding any density limits defined in their official community plans.
	5.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of areas hazardous to development, including areas subject to flooding, erosion or slope instability, and strategies to direct development away from such hazards.
	5.3	Transportation and Utilities
	5.3.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of a classification system of rural roadways, including scenic or heritage road designations, in recognition of the object of the Islands Trust.

	5.3.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the impacts of road location, design, construction and systems.
	5.3.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of areas for the landing of emergency helicopters.
	5.3.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of land use patterns that encourage establishment of bicycle paths and other local and inter-community transportation systems that reduce dependency on private automobile use.
	5.4	Disposal of Waste
	5.4.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of acceptable locations for the disposal of solid waste.

CONSISTENT	NO.	DIRECTIVE POLICY
	5.5	Recreation
	5.5.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the prohibition of destination gaming facilities such as casinos and commercial bingo halls.
	5.5.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location and type of recreational facilities so as not to degrade environmentally sensitive areas, and the designation of locations for marinas, boat launches, docks and anchorages so as not to degrade sensitive marine or coastal areas.
	5.5.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of sites providing safe public access to beaches, the identification and designation of areas of recreational significance, and the designation of locations for community and public boat launches, docks and anchorages.

	5.5.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and designation of areas for low impact recreational activities and discourage facilities and opportunities for high impact recreational activities.
	5.5.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for bicycle, pedestrian and equestrian trail systems.
	5.6	Cultural and Natural Heritage
	5.6.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification, protection, preservation and enhancement of local heritage.
	5.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation and protection of the heritage value and character of historic coastal settlement patterns and remains.
	5.7	Economic Opportunities
	5.7.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address economic opportunities that are compatible with conservation of resources and protection of community character.
	5.8	Health and Well-being
	5.8.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address their community's current and projected housing requirements and the long-term needs for educational, institutional, community and health-related facilities and services, as well as the cultural and recreational facilities and services.

POLICY STATEMENT COMPLIANCE	
	COMPLIANCE WITH TRUST POLICY
	NOT IN COMPLIANCE WITH TRUST POLICY for the following reasons:

