



Gabriola Island Local Trust Committee

Regular Meeting Revised Agenda

Date: April 12, 2018
Time: 10:15 am
Location: Gabriola Island Agricultural Hall
465 South Road, Gabriola Island, BC

Pages

1. **CALL TO ORDER** 10:15 AM - 10:20 AM
“Please note, the order of agenda items may be modified during the meeting. Times are provided for convenience only and are subject to change.”
2. **APPROVAL OF AGENDA**
3. **TOWN HALL AND QUESTIONS** 10:20 AM - 10:40 AM
Reminder: Bylaw No. 293, Housing Options Review Project - NO WRITTEN OR ORAL REPRESENTATIONS WILL BE RECEIVED BY THE GABRIOLA ISLAND LOCAL TRUST COMMITTEE, OR ITS INDIVIDUAL MEMBERS AS THE PUBLIC HEARING HAS CONCLUDED.
4. **COMMUNITY INFORMATION MEETING - none**
5. **PUBLIC HEARING - none**
6. **MINUTES** 10:40 AM - 10:45 AM
 - 6.1 Local Trust Committee Minutes dated March 1, 2018 – for Adoption 4 - 13
 - 6.2 Local Trust Committee Public Hearing Record dated March 1, 2018 - for receipt 14 - 16
 - 6.3 Section 26 Resolutions-Without-Meeting - none
7. **BUSINESS ARISING FROM MINUTES** 10:45 AM - 10:50 AM
 - 7.1 Follow-up Action List dated April 4, 2018 17 - 20
8. **DELEGATIONS** 10:50 AM - 10:55 AM
 - 8.1 Silva Bay Resort and Marina - Redevelopment
9. **CORRESPONDENCE** 10:55 AM - 11:00 AM
(Correspondence received concerning current applications or projects is posted to the LTC webpage)

9.1	Email dated March 14, 2018 from J Mallett regarding the Speculation Tax and Rental Accommodation	21 - 21
9.2	Email dated April 11, 2018 from M Herrmann regarding Silva Bay	22 - 23
10.	APPLICATIONS AND REFERRALS	
11.	LOCAL TRUST COMMITTEE PROJECTS	11:00 AM - 11:45 AM
11.1	Water Taxi Zoning Review Project - Staff Report	24 - 30
11.2	Mudge Island Targeted OCP/LUB review for Lot Coverage - Staff Report	31 - 36
12.	REPORTS	11:45 AM - 12:15 PM
12.1	Work Program Reports	
12.1.1	Top Priorities Report dated April 4, 2018	37 - 37
12.1.2	Projects List Report dated April 4, 2018	38 - 40
12.2	Applications Report dated April 4, 2018	41 - 47
12.3	Trustee and Local Expense Report dated February, 2018	48 - 48
12.4	Adopted Policies and Standing Resolutions	49 - 49
12.5	Local Trust Committee Webpage	
12.6	Chair's Report	
12.7	Trustee Reports	
12.8	Electoral Area Director's Report	
12.9	Trust Fund Board Report - none	
	- BREAK - 12:15 PM TO 12:25 PM	
13.	NEW BUSINESS	12:25 PM - 12:45 PM
13.1	Land-use planning implications of Fisheries and Oceans Canada Integrated Geoduck Management Framework 2017 - Briefing	50 - 67
13.2	Approval Process for Water Supply Systems on Salt Spring Island - Memorandum	68 - 97
14.	UPCOMING MEETINGS	12:45 PM - 1:00 PM
14.1	Next Regular Meeting Scheduled for Thursday, May 3, 2018 at The Gabriola Arts and Heritage Centre, 476 South Road, Gabriola Island, BC	

15. TOWN HALL

16. CLOSED MEETING

1:00 PM - 2:00 PM

16.1 Motion to Close the Meeting

That the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, s.90(1)(c),(d),(f) and (i) Labour Relations; Adoption of In-Camera Meeting Minutes dated January 18, 2018; Bylaw Enforcement and the receipt of Advice subject to Solicitor-Client Privilege, including communications necessary for that purpose and that the recorder and staff attend the meeting.

16.2 Recall to Order

16.3 Rise and Report

17. ADJOURNMENT

2:00 PM - 2:00 PM



Gabriola Island Local Trust Committee Minutes of Regular Meeting

Date: March 1, 2018
Location: Gabriola Arts & Heritage Centre
 476 South Road, Gabriola Island, BC

Members Present: Laura Busheikin, Chair
 Melanie Mamoser, Local Trustee
 Heather O'Sullivan, Local Trustee

Staff Present: Ann Kjerulf, Regional Planning Manager
 Sonja Zupanec, Island Planner
 Jaime Dubyna, Planner 1
 Lisa Millard, Recorder

Others Present: There were approximately fourteen members of the public and one member of the media in attendance.

1. CALL TO ORDER

"Please note, the order of agenda items may be modified during the meeting. Times are provided for convenience only and are subject to change."

Chair Busheikin called the meeting to order at 10:20 am. She acknowledged that the meeting was being held in territory of the Coast Salish First Nations.

2. APPROVAL OF AGENDA

The following additions to the agenda were presented for consideration:

The In-Camera Meeting was cancelled.

By general consent the agenda was approved as amended.

3. TOWN HALL AND QUESTIONS

There were no public comments or questions.

4. COMMUNITY INFORMATION MEETING

4.1 Housing Options Review Project (Bylaw No. 293)

4.1.1 Planner Presentation

Planner Zupanec summarized the project and highlighted the following:

- Secondary suites will be permitted on all properties that currently allow an accessory cottage.

- The bylaw affects properties 2 hectares or larger, located in residential zones and not located in the Agricultural Land Reserve (ALR).
- A secondary suite can be located within a principal dwelling, attached to the principal dwelling, or within an accessory building.
- The Province defines secondary suite regulations on ALR properties.
- It was clarified that the Local Trust Committee (LTC) can not remove the farm status clause for an additional suite above an existing building located within the ALR.
- The LTC is currently not effectively able to monitor farm status and enforce use of the additional secondary suite above an existing farm building.
- The differences between a manufactured home used as a secondary suite within the ALR as a temporary structure versus a secondary suite that is a permanent structure were noted.
- Secondary suites can be a maximum of up to 968 square feet in size.
- If a secondary suite is attached to, or within, a single family dwelling it is limited to 40% of the floor area of the dwelling.
- A restrictive covenant will be required to be registered against the property prohibiting a strata plan if a secondary suite is built outside of the ALR.
- One home occupation per lot is currently allowed and the proposed bylaw clarifies the maximum floor area of said allowable home occupation, however, more than one home occupation can exist within the same maximum floor area.
- A bathroom and cooking facility can be included in one accessory building per allowable lot for the intent of home occupation use.
- The current proposed bylaw does not change secondary dwelling options on properties within the ALR as compared to the existing regulations.

4.1.2 Question and Answer Session

Regional Planning Manager Kjerulf arrived at 11:10 am.

Questions from members of the public, and answers given by staff, follow:

- Does the bylaw affect Bed and Breakfast businesses?
 - No
- Has the LTC received clarification from the Agricultural Land Commission regarding secondary suite allowances within the ALR?
 - Yes verbally but not in a formal bylaw referral response.
- Is the LTC proposing that every lot located outside of the ALR be allowed to build a secondary suite?
 - The bylaw only affects lots 2ha or larger that currently allow for an accessory cottage.
- How will the LTC stop an accessory building with a bathroom and kitchen from becoming an illegal dwelling?
 - The Land Use Bylaw (LUB) is clear about what density is permitted on any lot and illegal suites are subject to bylaw enforcement.
- Does the LTC have the option to further amend the bylaw based on what they hear at the Public Hearing?
 - Yes.

- The proposed bylaw language permitting a kitchen and bathroom within an accessory building indicates that it can be used for temporary dwelling purposes.
 - The crux of the bylaw is to allow for a bathroom and / or a kitchen to be used for home occupation purposes and it does not increase density.

5. PUBLIC HEARING

5.1 Recess for Public Hearing

Public Hearing - Bylaw No. 293 (Housing Options Review Project)

By general consent the regular meeting was recessed at 11:18 am.

5.2 Recall to Order

By general consent the regular meeting was recalled to order at 11:46 am.

Chair Busheikin stated that no written or oral representations will be received by the LTC or its individual members as the Public Hearing for Bylaw No. 293 has concluded.

By general consent the regular meeting was recessed for a break at 11:46 am and reconvened at 11:52 am.

6. LOCAL TRUST COMMITTEE PROJECTS

6.1 Housing Options Review Project Bylaw 293 (LUB) for consideration of 2nd and 3rd readings - Staff Report

Discussion ensued and Trustees noted the following:

- There are concerns that a written referral response from the Agricultural Land Commission (ALC) has not been received which resulted in challenges.
- There is concern that a secondary suite could be decommissioned if farm status is not maintained and this contributes to the creation of insecure rental housing supply.
- Options regarding allowing an additional secondary suite on land located within the ALR were discussed.

By general consent the meeting was recessed for a break at 12:30 pm and reconvened at 1:06 pm.

GB-LTC-012

It was **MOVED AND SECONDED**

that the Gabriola Local Trust Committee Bylaw No. 293, cited as "Gabriola Island Land Use Bylaw No. 177, 1999 Amendment No. 1, 2017", be amended as per Attachment 1 of the memorandum dated March 1, 2018 with the addition of changing the word "or" to the word "and" between "bathroom and areas" in 2.2.B.1.2.3.b and reverting to the original wording in 2.1 part b.

CARRIED

GB-2018-013**It was MOVED and SECONDED**

that Gabriola Island Local Trust Committee Bylaw No. 293, cited as “Gabriola Island Land Use Bylaw No. 177, 1999, Amendment No. 1, 2017” be read a second time as amended.

CARRIED**GB-2018-014****It was MOVED and SECONDED**

that Gabriola Island Local Trust Committee Bylaw No. 293, cited as “Gabriola Island Land Use Bylaw No. 177, 1999, Amendment No. 1, 2017” be read a third time.

CARRIED**GB-2018-015****It was MOVED and SECONDED**

that Gabriola Island Local Trust Committee Bylaw No. 293, cited as “Gabriola Island Land Use Bylaw No. 177, 1999, Amendment No. 1, 2017”, be forwarded to the Secretary of the Islands Trust for approval by the Executive Committee.

CARRIED**GB-2018-016****It was MOVED and SECONDED**

that the Gabriola Island Local Trust Committee request staff to update the ‘Housing Options Review Project – Frequently Asked Questions’ document to reflect changes made to Proposed Bylaw No. 293, including adding the pictorial examples of secondary suite configurations.

CARRIED**GB-2018-017****It was MOVED and SECONDED**

that the Gabriola Island Local Trust Committee add to the Phase 2 Project Charter of the Housing Options Review Project consider secondary suites above accessory buildings on Agricultural Land Reserve land.

CARRIED

Discussion ensued regarding options of communicating to the ALC the challenges that the LTC encountered due to lack of clarity and communication from the ALC. It was noted that there is a protocol agreement in place between Trust Council and the ALC regarding consultation.

GB-2018-018**It was MOVED and SECONDED**

that the Gabriola Island Local Trust Committee request senior staff to review the process of referrals with the Agricultural Land Commission in regard to proposed Bylaw Nos. 292 and 293 and request a response.

CARRIED

7. MINUTES

7.1 Local Trust Committee Minutes dated January 18, 2018 – for Adoption

The following amendments to the minutes were presented for consideration:

On page 3, Section 8.1 Diane Cornish made the presentation not Dyan Dunsmoor-Farley.

By general consent the minutes were adopted as amended.

7.2 Section 26 Resolutions-Without-Meeting Report dated February 21, 2018

Received for information.

7.3 Mudge Island Advisory Planning Commission Adopted Minutes dated January 19, 2018 - for Receipt

Received for information.

7.4 Mudge Island Advisory Planning Commission Draft Minutes dated February 18, 2018 - for Receipt

Received for information.

8. BUSINESS ARISING FROM MINUTES

8.1 Follow-up Action List dated February 21, 2018

Received for information.

9. DELEGATIONS - none

10. CORRESPONDENCE - none

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

11. APPLICATIONS AND REFERRALS

11.1 GB-TUP-2016.1 (McAfee & Loerzer - 1070 Chappel Place, Gabriola) - Staff Report

It was noted that the Applicant was in attendance.

Regional Planning Manager Kjerulf summarized the application and the recommendations outlined in staff report and noted the following:

- The application is in compliance with water, septic and parking requirements.
- Due to the age of the structure the Regional District of Nanaimo (RDN) is not able to provide an occupancy permit and staff recommend that the applicant provide home liability insurance for that use.
- Notice was distributed to neighbors by both mail and hand delivery and notice was also published in the local newspaper.
- To date no comments from neighbors, or other interested parties, have been received

Trustees questioned if it was necessary to have the phone number as part of the Temporary Use Permit (TUP) and staff clarified that the guidelines do not require that the phone number be included.

GB-2018-019

It was MOVED and SECONDED

that the Gabriola Island Local Trust Committee approve issuance of Temporary Use Permit GB-TUP-2016.1 for a commercial vacation rental for a period of three (3) years from date of issuance, subject to the following conditions:

- a) the landowner must hold valid home insurance and liability insurance for the commercial vacation rental use;
- b) the landowner or an operations manager must reside on Gabriola and be available by telephone 24 hours/day, seven days per week. Any changes to contact information must be provided to the Islands Trust within seven (7) working days;
- c) the landowner or an operations manager must provide neighbours within a 100 metre radius of the vacation rental with a contact phone number, and a copy of the temporary use permit;
- d) the landowner or an operations manager must post for guests: information on noise bylaws, water conservation, fire safety, storage of garbage, septic care, and control of pets (if pets are permitted), and information to remind guests that they are in a residential area, not a commercial area, and to be aware of and sensitive to First Nation sites and artifacts;
- e) the landowner or an operations manager must not alter the exterior appearance of the residence, nor remove any existing vegetative screening;
- f) the landowner or an operations manager must provide accommodation for a minimum of two vehicles for the commercial vacation rental use on the property;
- g) the maximum number of signs advertising the commercial vacation rental is restricted to one sign, with a maximum area of 0.3 square metres, and is to be made of wood and not illuminated;
- h) the rental or provision of motorized personal watercraft to rental clients is prohibited;
- i) the maximum number of bedrooms for the commercial vacation rental is 3;
- j) the maximum number of people that can stay in the commercial vacation rental is a maximum of 2 guests per bedroom;
- k) recreational vehicles and camping are prohibited; and
- l) the holder of the Permit, landowner, operations manager, or management company will be held accountable for any violation of the conditions of this Permit. For the purpose of investigating a complaint, the Islands Trust Bylaw Investigations Officer may enter the property between the hours of 9:00 am and 5:00 pm on any day without prior consultation with the holder of the Permit, landowner, operations manager, management company or commercial vacation renter.

CARRIED

12. LOCAL TRUST COMMITTEE PROJECTS - CONTINUED

12.1 Water Taxi Zoning Review Project

Planner Dubyna summarized the staff report.

Trustee O’Sullivan stated she informally surveyed other Trustees within the Islands Trust area about local water taxi services and she highlighted the following findings:

- Other islands surveyed have significantly more water taxi availability compared to Gabriola which has none.
- Gabriola has fewer docks, and limited community docks, and the one community dock has limited uses attached to it.
- The majority of islands surveyed use community docks for water taxi services and these areas are located close to their ferry docks.
- None of the islands surveyed have public facilities, or shore facilities, provided by the water taxi operators.
- Some islands surveyed have water taxi operators that share public facilities.
- There are both scheduled and unscheduled services available.

It was noted that when water taxis have been discussed with the Regional Director of the RDN he has suggested that the Green Wharf should be considered for water taxi use versus the RDN’s dock at Descanso Bay, however the Green Wharf is not zoned for water taxi use. Trustee O’Sullivan asked that staff broaden its review to include Green Wharf, along with Descanso Bay. It was further noted that the existing Official Community Plan (OCP) policies support water taxi services.

GB-2018-020

It was MOVED and SECONDED

that the Gabriola Island Local Trust Committee request staff to amend the Gabriola Island Water Taxi Zoning Review draft project charter as discussed and bring it back to the next Local Trust Committee meeting with a draft survey regarding changes to the WC3 zoning.

CARRIED

12.2 Mudge Island Targeted OCP/LUB Review Project for Lot Coverage

12.2.1 Staff Memorandum

Regional Planning Manager Kjerulf summarized the staff memorandum and noted that the Mudge Island APC have met twice.

Discussion ensued and Trustees thanked the Mudge Island APC, and the community, for their interest and engagement in local issues. It was noted that Mudge Island residents had expressed a lack of interest in being incorporated as a special area.

GB-2018-021

It was MOVED and SECONDED

that the Gabriola Island Local Trust Committee staff do no further work on GB-2017-149 Point e. Incorporating Mudge Island as a “Special Area” under the Gabriola Official Community Plan and Land Use Bylaw.

CARRIED

12.2.2 Mudge Island Advisory Planning Commission DRAFT Report

Received for information.

13. REPORTS

13.1 Work Program Reports

13.1.1 Top Priorities Report dated February 21, 2018

Received for information.

GB-2018-022

It was MOVED and SECONDED

that the Gabriola Island Local Trust Committee Top Priorities List Item 3 activity be re-worded to 'review zoning provisions for water taxi service'.

CARRIED

13.1.2 Projects List Report dated February 21, 2018

Received for information.

13.2 Applications Report dated February 21, 2018

Received for information.

13.3 Trustee and Local Expense Report dated December, 2018

Received for information.

13.4 Adopted Policies and Standing Resolutions

Received for information.

13.5 Local Trust Committee Webpage

A link for the feedback that the ALC is seeking from the public should be posted to the webpage.

13.6 Chair's Report

Chair Busheikin reported the following:

- The Chair of the Executive Committee was in Ottawa recently to discuss the issues of derelict vessels, ocean plastics, aquaculture impacts, shipping safety and anchorages within the Trust area. He has met with the head of the Chamber of Shipping for BC and has an upcoming meeting with the Port of Vancouver.
- The Strathcona Regional District received a federal grant for a broadband fibre optic cable project with the primary goal of creating better connectivity for rural communities that might include Gulf Islands. This project will be monitored for information.
- The Executive Committee is getting ready for the upcoming council meeting on Saltspring Island and there will be a session on advocacy, a speaker on climate change, a tour of Saltspring, an affordable housing presentation, and the presentation of the upcoming budget.
- The Trust has been asking the Provincial Government for a new name for what is currently called the Islands Trust Fund and have heard that this request is potentially progressing at this time.

13.7 Trustee Reports

Trustee Mamoser reported the following:

- She attended a meeting of the Local Planning Committee (LPC) in which a standing resolution on cell phone towers for Gabriola was made, and recommended language for Land Use Bylaws was proposed for the purpose of easier adoption.
- The LPC will be providing an update on the housing needs assessment and will do an information session with the consultant and the Trustees
- The LPC is moving forward on the coastal Douglas Fir Project and will be looking at ideas for ways that LTCs can adopt land use planning tools to protect Douglas Fir trees.

Trustee O'Sullivan reported the following:

- She attended a recent Trust Programs Committee (TPC) meeting and a governance review will be initiated as a result of the recent Saltspring Island referendum.
- She noted that the Ferry Advisory Committee (FAC) recently consulted with BC Ferries regarding ferry terminal development on Gabriola and Nanaimo.
- She is planning to attend an upcoming Trust Council meeting as well as the Fresh Water Forum.
- Doug White will be speaking about the Snuneymuxw Treaty and local issues at the March 10 From Truth to Reconciliation Series and she will be participating in a blanket exercise with Trustee Mamoser and Islands Trust staff members.

13.8 Electoral Area Director's Report

Received for information.

13.9 Trust Fund Board Report - January 2018

Received for information.

14. NEW BUSINESS

14.1 Farm Industry Review Board and Aquaculture – Memorandum

Received for information.

15. UPCOMING MEETINGS

15.1 Next Regular Meeting Scheduled for Thursday, April 12, 2018 at Gabriola Island Agricultural Hall, 465 South Road, Gabriola Island, BC

16. TOWN HALL

17. CLOSED MEETING

The closed meeting was cancelled.

18. ADJOURNMENT

By general consent the meeting was adjourned at 2:45 pm.

Laura Busheikin, Chair

Certified Correct:

Lisa Millard, Recorder



**Gabriola Island Local Trust Committee
Public Hearing Record**

**REGARDING
PROPOSED BYLAW NO. 293 (Housing Options Review Project)**

Date: March 1, 2018
Time: 11:00 am
Location: Gabriola Arts & Heritage Centre
476 South Road, Gabriola Island, BC

Members Present: Laura Busheikin, Chair
Melanie Mamoser, Local Trustee
Heather O'Sullivan, Local Trustee

Staff Present: Ann Kjerulf, Regional Planning Manager
Sonja Zupanec, Island Planner
Jaimie Dubyna, Planner 1
Lisa Millard, Recorder

Others Present: There were approximately fourteen members of the public and one member of the media in attendance.

1. CALL TO ORDER

Chair Busheikin called the Public Hearing to order at 11:19 am.

Chair Busheikin read a formal statement explaining the Public Hearing regarding the Proposed Bylaw No. 293. She stated that all persons who believe their interest is affected by the bylaw would be given the opportunity to express their concerns and that further submissions cannot be received by the Local Trust Committee after the close of the Public Hearing.

Planner Zupanec reviewed the Public Hearing Notice, summarized proposed Bylaw No. 293, and stated that all related information, and public comments, was available for members of the public to view in the Public Hearing binders.

2. PROPOSED BYLAW NO. 293

Gabriola Island Local Trust Committee Bylaw No. 293 cited as "Gabriola Island Land Use Bylaw No. 177, 1999, Amendment No. 1, 2017".

3. PUBLIC COMMENTS

Nancy Heatherington-Peirce made the following points:

- She requested that in reference to secondary suites located on properties within the Agricultural Land Reserve (ALR) trustees should consider reinstating the option of allowing a secondary suite over an outbuilding so there is a choice between providing a manufactured home or suite over an outbuilding.
- She noted that the purpose of the Housing Options Review Project is to provide a wider range of housing options and based on that purpose the allowance of a secondary suite built over an out building provides further options for non-farming renters.
- She indicated that the enforcement challenges of ensuring that farm status is maintained in order for said secondary suite to remain in use are no different than existing enforcement challenges in reference to manufactured home use.
- She noted that the benefits of allowing the suite outweigh the potential enforcement challenges.

Kees Langereis made the following points:

- He disagrees with adding clause B.1.2.3.b in section 2.1 and believes this is a potential error.
- In section 2.6 he does not agree with including the language that all dwelling units are for residential purposes except when a Temporary Use Permit (TUP) is in place as this is an information note and not a rule. The Official Community Plan (OCP) TUP provides use for this therefore this clause is a duplication.
- In section B.6.6.2 he believes it should say only one secondary suite or a maximum of one suite.
- In section B.6.6.6 it states an accessory building includes a cottage and feels this language is ambiguous.
- There is need for an additional statement noting that a detached secondary suite can be a maximum size of 868 square feet.
- He notes that the ALR regulation talks about immediate family only and not farm worker housing and he assumes the Agricultural Land Commission (ALC) has seen this and has expressed no concern and he questions why.
- Within the agricultural zone there is reference to a secondary suite as a detached building and if the agricultural zone is always located within the ALR this language is not needed as it implies that an agricultural zone is not within the ALR.
- He does not agree with removing the word 'means' at the beginning of each definition.
- He believes the language in section B.1.2.3.b will generate a lot of illegal suites regardless of enforcement allowances and that illegal suites will occur in an increased manner.

Erik Johnson made the following points:

- He stated that he likes the document but believes that any ambiguity, as noted by Kees Langereis, needs to be removed.
- He has property located within the ALR and that ALR regulations supersede things that the LTC can do and he requests that the LTC use the ALCs template.
- He is concerned about increasing density and believes that this bylaw does not sound like a density increase.
- He appreciates the issues with enforcement however illegal suites are already an issue.

**Public Hearing Record
Received for Information
By Local Trust Committee**

- He appreciates the work that has been done by the LTC.

Rosheen Holland made the following points:

- As a farmer she proposed that amendments regarding a suite above an existing building option on land within the ALR not be removed.
- She would like this to remain as an option to alleviate the problems of farm families who are trying to make ALR regulations work for them while operating as a working farm.
- A manufactured home is a high expense and it is more conservative for a farmer to use an existing building and this option has less impact on resources.
- The choice to have this option remain is important as it increases ecological and sustainable ways for farmers to have options.

Graham Bradley made the following points:

- He would like to propose that the option for an additional suite above accessory buildings remain.
- He noted that it is important for farm labourers to have accommodation year-round versus seasonal accommodation.
- Manufactured homes are not always ideal.
- The option of having rental income as a passive income source is valuable to farmers.

Chair Busheikin asked the public for any other comments or submissions. The Chair asked again for any further comments or submissions. The Chair asked a third and final time for submissions. Hearing none, Chair Busheikin closed the meeting.

4. ADJOURNMENT

By general consent the Public Hearing was adjourned at 11:45 am.

**I CERTIFY THAT THIS IS A FAIR AND ACCURATE SUMMARY OF THE NATURE OF
REPRESENTATIONS RESPECTING THE MEETING HELD:**

Lisa Millard, Recorder

Follow Up Action Report

Gabriola Island

07-May-2015

Activity	Responsibility	Target Date	Status
Staff to schedule a meeting with Snuneymuxw First Nation as per our protocol agreement. Letter of invitation to participate in C2C Forum sent September 22, 2016.	Fiona MacRaid	11-Jun-2015	On Going

08-Sep-2016

Activity	Responsibility	Target Date	Status
For RDN annual meeting agenda for 2017 - ADD: 1. Enforcement of RDN Noise Bylaw; 2. Mudge Island Public Dock; 3. Regulations for temporary dwellings being connected to a sewage disposal system 4. Village/North Road street improvements (ref. 2a+b) of Village Vision submission to the LTC dated Jan. 3, 2018) Staff are waiting for a response from the RDN regarding a possible meeting date in 2018.	David Marlor Ann Kjerulf		On Going

30-Mar-2017

Activity	Responsibility	Target Date	Status
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**Follow Up Action Report**

GB-RZ-2016.1 - Bylaws 289 and 290 amended as per minutes of Mar 30 sp LTC mtg. Third reading and forward to Executive Committee. Update bylaws and post to web. - Done

Becky McErlean
Sonja Zupanec

11-May-2017

On Going

LTC resolutions confirming proof of covenant registration required prior to adoptions of bylaws. Investigate and report back on covenant recommendations being imbedded in text of covenant. Include requirement in covenant for an integrated storm water management plan at the time of subdivision.

08-Jun-2017

Activity	Responsibility	Target Date	Status
Request staff to work with GALLT to organize a gathering with the Snuneymuxw First Nation (Fiona MacRaid).	Fiona MacRaid Wil Cottingham	29-Jun-2017	On Going

13-Jul-2017

Activity	Responsibility	Target Date	Status
First Nations Relationship with Snuneymuxw Nation: LTC resolution to endorse the project charter and commit to hosting one or two public events on Gabriola and/or Mudge. Request staff draft an amendment to the introduction of the OCPs as per staff recommendation.	Ann Kjerulf Fiona MacRaid	31-Jul-2017	On Going
Event #1: Mudge Island (August 8th)			
Dec. 2017/Delayed due to Snuneymuxw elections process			

07-Sep-2017

Activity	Responsibility	Target Date	Status
GB-DVP-2017.1 - LTC resolution to defer consideration of the applications until First Nation and Arch Branch input are received. Enter into cost recovery agreement with the applicant for preparation of restrictive covenant. See minutes of Sept 8 for LTC requested changes to covenant restrictions.	Teresa Rittmann	29-Sep-2017	On Going

Follow Up Action Report

18-Jan-2018

Activity	Responsibility	Target Date	Status
GB request that Village Vision delegation request, "amend the MOTI/Islands Trust letter of agreement to include specific standards for village area streetscapes as rural complete multi-modal streets", be referred to the Executive Committee along with a submission from the Village Vision group.	Ann Kjerulf		On Going
Staff to add points 2a and 2b of the Village Vision Delegation's submission to the agenda of the upcoming Regional District of Nanaimo and Islands Trust joint meeting: "Adopt a co-ordinated inter-agency (Islands Trust, RDN and MOTI) approach to: a) the development of a Master Plan for the development of accessible, safe, pedestrian friendly routes not only in the village core but also down North Road to the ferry; and b) the development of standards, processes and shared funding programs to allow rural community Regional Districts to more efficiently and successfully collaborate with MOTI on rural village complete street improvements".	Ann Kjerulf		On Going
Request 2c of the Village Vision Delegation's submission to the Trust Programs Committee for consideration: a) the development of standards that would allow for the safe rainwater harvesting for potable use in multi-family, commercial and institutional settings."	Ann Kjerulf		On Going

01-Mar-2018

Activity	Responsibility	Target Date	Status
Proposed Bylaw 293 (Housing Options Review Project) -amended as per minutes and given 2, 3rd readings; forward to EC for approval.	Becky McErlean Sonja Zupanec	12-Apr-2018	Done

Follow Up Action Report

Housing Options Review Project FAQ: -staff to prepare an update to the document including amendments and pictorial configurations for clarity.	Sonja Zupanec		On Going
Staff to add to the Housing Options Review Project Phase 2 list a review of secondary suite above an existing farm building provisions		01-Mar-2018	Done
LTC request senior staff to follow up with staff at the Agricultural Land Commission regarding the referrals process for Bylaws 292 and 293.	Ann Kjerulf		On Going
GB-TUP-2016.1 - amend permit to omit the phone number; issue permit as amended.	Becky McErlean Teresa Rittemann		Done
Mudge OCP/LUB review: LTC resolution requesting staff not provide analysis of option E to incorporate Mudge into Gabriola OCP/LUB.	Teresa Rittemann		Done
Water Taxi Zone Review: LTC request that staff amend the project charter for the Water Taxi Feasibility Study and bring it back to the next LTC meeting with a draft survey with regard to changes to the WC3 zoning	Jaime Dubyna	12-Apr-2018	Done
LTC request to change the Top Priorities description of the water taxi project to "review zoning provisions for water taxi service"	Sonja Zupanec		Done
add a link to ALC consultation survey to the ""latest news"" section of the Gabriola LTC website			Done

From: John Mallett [REDACTED]
Sent: Wednesday, March 14, 2018 9:55 AM
To: Melanie Mamoser
Cc: Heather O'Sullivan; Laura Busheikin; Ann Kjerulf
Subject: Additional Agenda Item for the April 12 LTC Meeting

Good morning Melanie,

I am sure you are aware of the NDPs Speculation Tax, a tax that has negatively impacted a majority of your constituents, including many out of province and international owners.

As a partial remedy to this tax I request that the LTC do two things at the upcoming LTC meeting and or make a motion to elevate to the Islands Trust Board for review and action.

Number one.

I realize there is nothing that the Islands Trust can do specifically about this tax except write a letter to the Government to object to its broad brush approach to solving residential speculation and the rental housing shortage.

Therefore, I recommend, despite the Islands Trust's tendency to support the NDP and there social policies, that they write a letter of objection, and recommend that the Gulf Islands be specifically excluded from the Tax.

Number two.

With the above in mind, there is something that Islands Trust can do about the lack of rental accommodation that is within your control.

The Islands Trust should amend their bylaws and allow property owners to have small rental accommodation on their land regardless of zoning restrictions.

Island Trust can still control the size of the accommodation through the lot coverage restrictions and ensure all rental accommodation are authorized by a building permit.

It is my opinion that Gabriola's rental shortage, for example, would be alleviated somewhat with the implementation of the above suggestion. I know many property owners, me included, that would love to build an above garage or Casita accommodation. Not only would it help defray costs but it would also provide year round security.

Thank you in advance for this consideration.

Regards,

John Mallett

[REDACTED]
Mudge Island
British Columbia, Canada

[REDACTED]

On Apr 11, 2018, at 3:58 PM, Marc Herrmann [REDACTED] wrote:

Dear Gabriola Island Trust Committee;

Reading in this week's Souder the article pertaining to the above subject matter has enticed me to respond to the Sounders' editorial.

Upon receipt of my Editorial, Derek informed me that you have your meeting this coming Thursday to discuss the matter with the owner.

I urge you to take into consideration what I outlined in my letter and suggest to work with the RDN to order to expedite the process.

Many years ago I recall similar circumstances to improve SB which apparently was met with lots of opposition especially with local residents.

As the old saying goes, "one can't have the cake and eat it too" holds true. If individuals seek to have convenient services there is always a price to pay for such convenience.

In order to revitalize SB this is a first step first and a perfect starting point to work with "all" parties involved to make this happen in a timely and efficient manner.

Regards,
Marc Herrmann

EDITORIAL

Reading last week's Souder regarding the absurd red tape the Owner of Silva Bay (SB) encountered is completely ridiculous. Here is someone who is proactively engaged to replace an existing infrastructure and provide a facility that "all" members of the public can enjoy, not just the boaters but only to be stymied in jurisdictional political quagmire dealing with the Island Trust (IT) and RDN.

Don't get me wrong, I wholeheartedly support sticking to legal requirements and following bylaws and regulations. However, what I don't believe is to make it more difficult than necessary when someone makes efforts to support the local community and "bring back Silva Bay" in a format that benefits everyone.

I've lost count how many individuals commented on the loss of the SB restaurant/pub and how it served its community, visitors and that of local residents. It was bad enough losing the liquor store but now not to have any services is tragic indeed.

Being a boater myself I fondly recall the days as far back as 40 years when SB was a destination place in services and a great place to drop anchor or tie up at the Marina and enjoy what SB had to offer. It was a hub of activity and those of you that remember those days recall how most islanders, visitors and transients benefited from this magical place which made us all want to come back time and time again.

Unfortunately those glory days are gone and given the fact there currently are limited attractions for visitors by land, sea or air, is truly sad.

Here is a perfect opportunity for IT to work with the RDN in an effort expedite the process and make this a reality, not fantasy so everyone can benefit in a timely manner.

Marc Herrmann





File No.: 6500-20 LTC Projects
(Gabriola Island Water Taxi
Zoning Review)

DATE OF MEETING: April 12, 2018
TO: Gabriola Island Local Trust Committee
FROM: Jaime Dubyna, Planner 1
Northern Team
COPY: Ann Kjerulf, Regional Planning Manager
SUBJECT: Top Priority Project: Water Taxi Zoning Review Project Charter

RECOMMENDATION

1. That the Gabriola Island Local Trust Committee endorse the Project Charter v.2 *Gabriola Island Water Taxi Zoning Review*, dated April 12, 2018.
2. That the Gabriola Island Local Trust Committee endorse the draft survey prepared for the *Gabriola Island Water Taxi Zoning Review Project*.
3. That the Gabriola Island Local Trust Committee request the release of \$2,300 from the Local Trust Committees' Projects Reserve Fund for the Gabriola Island Water Taxi Zoning Review Project.

REPORT SUMMARY

This Staff Report accompanies the amended draft project charter and draft public survey prepared for the Gabriola Island Local Trust Committee (LTC) top priority project, Gabriola Island Water Taxi Zoning Review. For consideration by the LTC, the amended draft Project Charter can be found in Appendix 1, and the draft survey can be found in Appendix 2.

BACKGROUND

On July 14, 2016, the LTC passed resolution GB-2016-064:

GB-2016-064

It was MOVED and SECONDED that the Gabriola Island Local Trust Committee review Official Community Plan and Land Use Bylaw provisions to encourage water taxi service near Descanso Bay be moved to the Top Priorities List.

CARRIED

At the March 1, 2018 meeting, the LTC received a preliminary report from staff to initiate this project and subsequently requested that staff narrow its focus on expanding uses in the 'Water Commercial 3 – Marine Transportation (WC3)' zone to include dockage and moorage for water taxi use.

The LTC passed resolution GB-2018-020:

GB-2018-020

It was MOVED and SECONDED that the Gabriola Island Local Trust Committee request staff to amend the Gabriola Island Water Taxi Zoning Review draft project charter as discussed and bring it back to the next Local Trust Committee meeting with a draft survey regarding changes to the WC3 zoning.

CARRIED

Staff have amended the draft project charter and prepared a draft community survey in response to the LTC resolution.

ANALYSIS

Policy/Regulatory

In the [Staff Report](#) dated February 21, 2018, staff provided a review of the pertinent Gabriola Island Official Community Plan Bylaw No. 166 (OCP) policies and Gabriola Island Land Use Bylaw No. 177 (LUB) regulations.

Consultation

The draft survey is intended to solicit input from community members and stakeholders on amendments to the Land Use Bylaw to regulate water taxi use in the WC3 zone. Staff note that community surveys are typically distributed online and in paper form, and that this survey could be distributed via the Gabriola Sounder. Staff are requesting input from the LTC on the content and distribution of the draft survey, attached as Appendix 2.

ALTERNATIVES

1. Amend the project charter and/or the draft survey.

The LTC may wish to consider amending the project charter and/or the draft public survey. Should the LTC request staff to amend these documents, recommended amendments would be provided by the LTC. Recommended wording for the resolution is as follows:

That the Gabriola Island Local Trust Committee request staff to amend the Water Taxi Zoning Review project charter, timeline, and budget to include... (specific details to be provided by the LTC).

That the Gabriola Island Local Trust Committee request staff to amend the Water Taxi Zoning Review Project draft survey to include... (specific details to be provided by the LTC).

2. Proceed no further.

The LTC may wish to not proceed with the project. Recommended wording for the resolution is as follows:

That the Gabriola Island Local Trust Committee request staff to remove the Water Taxi project from the Top Priorities List and Projects List.

NEXT STEPS

The LTC is asked to consider the amended draft project charter and draft community survey. Should the LTC endorse the amended project charter and draft survey, staff will proceed in general accordance with the project charter. Should the LTC wish to distribute the survey via the Gabriola Sounder, staff can obtain a quote from the Sounder and request LTC authorization for newspaper distribution via Resolution without Meeting.

Submitted By:	Jaime Dubyna, MSc.Pl. Planner 1	March 27, 2018
Concurrence:	Ann Kjerulf, MCIP, RPP Regional Planning Manager	April 4, 2018

ATTACHMENTS

1. Appendix 1 – Draft Project Charter v.2
2. Appendix 2 – Draft Community Survey

Gabriola Island Water Taxi Zoning Review— Project Charter, **Draft** v2

Gabriola Island Local Trust Committee

Date: April 12, 2018

Purpose: To consider amendments to the Gabriola Island Land Use Bylaw (LUB) that would permit dockage and/or moorage for water taxi use in the Water Commercial 3—Marine Transportation(WC3) zone, and to solicit input from the community on potential amendments to the LUB that would regulate water taxi use in the WC3 zone.

Background: At their July 14, 2016 meeting, the Gabriola Island Local Trust Committee (LTC) identified the “Gabriola Water Taxi Feasibility Project” as a Top Priority Project. At the March 8, 2018 meeting, the LTC requested staff to amend the project charter to pursue amendments to the WC3 zone, and to prepare a draft community survey.

Objectives

- To review LUB regulations that support and/or pertain to water taxi use in marine zone(s).
- To consider potential amendments to the WC3 zone.
- To develop a community survey to solicit input on regulating water taxi use in the WC3 zone.

In Scope

- Review of current Gabriola Island LUB regulations.
- Community consultation (i.e. survey).
- Proposed LUB text amendment.
- Referral to the Gabriola Island Advisory Planning Commission.
- Staff analysis and subsequent Staff Report(s) with recommendations to the LTC.

Out of Scope

- Economic feasibility study for water taxi services.
- Review of other zones or locations for zoning for water taxi use.
- Review of the Gabriola Island OCP and LUB that is unrelated to the objectives identified in this Project Charter.

Workplan Overview

Deliverable/Milestone	Date
Preliminary staff report and draft Project Charter to LTC for consideration	March 1, 2018
Draft public survey and amended draft Project Charter to LTC for consideration	April 12, 2018
Community engagement and consultation	Spring 2018
Stakeholder consultation	Ongoing
Report to LTC with recommendations/options	Fall 2018
Refer to the Gabriola Island Advisory Planning Commission	Fall 2018
Bylaw Drafting; Legal Review and Referral	Winter 2019
Legislative Process (Bylaw Readings, Public Hearing, LTC Approval)	Spring 2019
Adoption of Bylaw; Final Communications	Spring 2019

Project Team

Jaime Dubyna, Planner 1	Project Manager
Sonja Zupanec, Island Planner	Project Support
Islands Trust GIS Technician	Mapping Support
Becky McErlean, Legislative Clerk	Clerk Support

RPM Approval:

Date:

LTC Endorsement:

Resolution #:

Date:

Budget

Budget Source: 2018/2019 Gabriola Island Local Trust Committee Special Projects Budget

Fiscal	Item	Cost
2018	Community engagement and consultation	\$500
2018	APC Referral (APC meeting)	\$300
2018	Legislative Process (community information meeting; public hearing; advertising)	\$1,500
Total		\$2,300 ²⁷

GABRIOLA ISLAND LOCAL TRUST COMMITTEE
WATER TAXI ZONING REVIEW PROJECT
COMMUNITY SURVEY SPRING 2018

The Gabriola Island Local Trust Committee is seeking input from community members and stakeholders for the Gabriola Island Water Taxi Review Project. Your input is needed to help the Local Trust Committee consider potential changes to the Gabriola Island Land Use Bylaw, including:

1. Adding 'Water Taxi' as a permitted use in the 'Water Commercial – Marine Transportation' (WC3) zone;
2. Adding specific regulations applicable to 'Water Taxi' uses.

Following the close of this survey on [date], Islands Trust planning staff will compile and analyze the survey responses and provide these results in a staff report to the Local Trust Committee.

For more information on the Gabriola Island Water Taxi Review Project please visit the project webpage at <http://www.islandstrust.bc.ca/islands/local-trust-areas/gabriola/projects-initiatives/gabriola-water-taxi-review-project/> or contact planning staff at northinfo@islandstrust.bc.ca.

Thank you for your participation!

Laura Busheikin, Chair, Gabriola Island Local Trust Committee
Melanie Mamoser, Gabriola Local Trustee
Heather O'Sullivan, Gabriola Local Trustee

COMMUNITY SURVEY – GABRIOLA ISLAND WATER TAXI ZONING REVIEW PROJECT

The [Gabriola Island Land Use Bylaw](#) currently permits “*moorage and dockage for water taxis*” only within marine areas zoned ‘Water Commercial 1 – Marine (WC1)’.



FIGURE 1. LOCATION OF WC1 AND WC3 ZONES ON GABRIOLA ISLAND

The Gabriola Island Water Taxi Review Project will consider permitting water taxi use within the ‘Water Commercial 3 – Marine Transportation (WC3)’ zone. The WC3 zone can be found in three locations on Gabriola Island – Descanso Bay, Green Wharf and Degnan Bay.

Permitted uses in the WC3 zone currently include:

- Ferry dock;
- Public moorage and dockage;
- Public wharves; and
- Marine navigation tools.

QUESTION 1:

Would you support a change to the Land Use Bylaw to permit water taxi use within the ‘Water Commercial 3 – Marine Transportation (WC3)’ zone?

- Yes
- No
- Maybe

QUESTION 2:

Which WC3 marine zone location(s) should include water taxi use? (select all that apply):

- ☐ Descanso Bay
- ☐ Green Wharf
- ☐ Degnan Bay
- ☐ None of the above
- ☐ Other: _____

QUESTION 3:

Which of the following are issues or concerns that need to be addressed for water taxi uses in the WC3 zone? (select all that apply):

- ☐ Vehicle parking (vehicles, scooters, bicycles)
- ☐ Traffic flow
- ☐ Pedestrian access and safety
- ☐ Passenger waiting area
- ☐ Protection of the marine and adjacent upland environments
- ☐ Protection of archaeological sites and resources
- ☐ Light pollution
- ☐ Noise pollution
- ☐ Impact on neighbouring properties
- ☐ Other: _____

QUESTION 4:

Please select the statements which apply to you:

- ☐ I am a full-time resident of Gabriola Island
- ☐ I am a part-time, temporary or seasonal resident of Gabriola Island
- ☐ I own, operate or work at a business on Gabriola Island
- ☐ Other: _____

QUESTION 5:

Please provide any additional comments or questions you have about the Gabriola Island Water Taxi Review Project:

THANK YOU FOR YOUR PARTICIPATION!



File No.: 6500-20 - Mudge Island OCP/LUB
Review Project for Lot Coverage

DATE OF MEETING: April 12, 2018
TO: Gabriola Island Local Trust Committee
FROM: Teresa Rittemann, Planner 2
Northern Team
SUBJECT: Mudge Island Targeted OCP/LUB Review Project for Lot Coverage

RECOMMENDATION

1. That the Gabriola Island Local Trust Committee endorse the Mudge Island Targeted OCP/LUB Review Project Charter, v.2 [as amended].
2. That the Gabriola Island Local Trust Committee request release of \$550 from the 2018/2019 Local Trust Committees' Projects Reserve Fund for the Mudge Island Targeted OCP/LUB Review Project.
3. That the Gabriola Island Local Trust Committee request Staff to prepare a draft Questionnaire, with questions for review by the Local Trust Committee at the next business meeting.

REPORT SUMMARY

The purpose of this report is to provide the Gabriola Island Local Trust Committee (LTC) with an interim report with potential next steps, and to summarize the key discussion points supporting the recommendations in regards to the Mudge Island Official Community Plan and Land Use Bylaw Review Project for Lot Coverage.

Following the previous Staff Report dated December 14, 2017, the Staff Memorandum dated March 1, 2018, as well as a review of the Mudge Island Advisory Planning Commission (APC) minutes and public correspondence received, Staff have amended Version 2 of the Project Charter (see Attachment 1) with recommended next steps in the Project.

BACKGROUND

During the March 1, 2018 regular business meeting, Trustee Mamoser noted that Mudge Island residents had expressed a lack of interest in integrating Mudge Island as a Special Area within the Gabriola Island Official Community Plan. The LTC then passed the following resolution (draft) with respect to this Project:

GB-2018-021

It was MOVED and SECONDED

that the Gabriola Island Local Trust Committee staff do no further work on GB-2017-149 Point e. Incorporating Mudge Island as a "Special Area" under the Gabriola Official Community Plan and Land Use Bylaw. CARRIED

Therefore, this report only addresses the remaining points a – d of resolution GB-2017-149, which also correspond to the Objectives within the previously endorsed Project Charter; and Staff have thus removed the reference to the "Special Area" Objectives listed in Version 2 of the Project Charter (see Attachment 1).

ANALYSIS

a) Modifying the definition of lot coverage to exempt cisterns or other structures to support water conservation

Public correspondence received to date, as well as information provided by the Mudge Island Advisory Planning Commission (APC), indicate some public support regarding exemptions for cisterns or other rainwater collection structures, in order to support water conservation. This would also be supported by the following Policies and Advocacy Policies within the Mudge Island Official Community Plan (OCP).

Mudge Island OCP Reference	Details
3.4 Transportation, Services and Utilities: <u>Water Supply Policies</u>	
Policy 7	No island should be connected to another by pipeline and should be self-sufficient in regard to freshwater in accordance with the Islands Trust Policy Statement.
Policy 8	New lots created by subdivision should provide proof of an adequate potable water supply.
Policy 9	Potable water from ground and surface water sources should be supplemented by collection and storage of rainwater through cisterns and ponds.
Policy 10	Water conservation equipment and practices shall be utilized.
Advocacy Policy 9	Effective technologies for water collection are encouraged.
4.1 Rural Residential	
Advocacy Policy 5	Residents and land owners should not depend solely on groundwater resources and take steps to conserve water by such means as: • using less water in human waste disposal; • avoiding bulk extraction of water from underground sources; and • using rainwater catchment systems and cisterns.

b) Modifying maximum lot coverage in the rural residential zone

As noted in the Staff Memorandum dated March 1, 2018, it is the view of Staff that amendments to the LUB are warranted; however, a blanket increase in lot coverage from 10% to 20% across Mudge Island is not considered a solution to address the community's concerns. An alternative may be to amend the definition of "structure" or "lot coverage", or other LUB regulations for lot coverage in order to accommodate the siting of cisterns and potentially other structures as well. Staff are recommending that the community and key stakeholders be consulted more broadly on this issue, through a Questionnaire.

c) Regulating the size of dwellings and accessory buildings and structures

Given the correspondence received from the public to date as well as the Mudge APC, there does not appear to be support for amendments to limit the size of dwellings and accessory buildings and structures. However, as above, Staff are recommending that the community and key stakeholders be consulted more broadly on this issue as well, through a Questionnaire.

d) Regulating impermeable surface coverage

The Mudge APC did not address potential public support for minimizing impervious surface coverage. However, the Mudge Island OCP provides this policy direction. Staff are recommending that the community and key stakeholders be consulted more broadly on this issue through a Questionnaire, and will need to consider if/how exemptions will be provided for certain structures, including the consideration of impervious vs. pervious surfaces. In particular, two Mudge OCP policies shall be considered when drafting any potential bylaw amendment:

Mudge Island OCP Reference	Details
4.1 Rural Residential	
Policy 4	Areas covered by impervious surfaces, buildings and structures should be minimized, unless ecological footprints are compensated for elsewhere.
Advocacy Policy 4¹	The amount of land area developed with impervious materials should be kept to a minimum and natural drainage systems should be maintained to allow for maximum absorption into groundwater and to minimize sedimentation and contamination of surface water.

Consultation

The adopted minutes of APC meetings, as well as public correspondence received from community members to date have been posted to the project website: <http://islandstrust.bc.ca/islands/local-trust-areas/gabriola/projects-initiatives/mudge-island-targeted-ocplub-review-project/>. As per Version 2 of the Project Charter (see Attachment 1), Staff are recommending that a Questionnaire be drafted to gather input from community members and stakeholders more broadly, and suggest that this Questionnaire be circulated to solicit public feedback anonymously, as well as to gather input from local First Nations and other key agencies and stakeholders.

Statutory Requirements

Following completion of the Questionnaire, should the LTC proceed with requesting Staff to draft a bylaw amendment, the regular statutory bylaw amendment process would be followed. This would involve LTC consideration of referrals to First Nations and other agencies, and the Gabriola and Mudge Island APCs to

¹ Advocacy Policy 4 may be considered as a standard OCP policy (rather than an *advocacy* policy) as implementation of this policy through land use regulations or development permit guidelines is within the LTC's legislative authority.

provide input and recommendations; as well as readings of the bylaw and a public hearing. Staff would also revise the Project Charter to reflect the budgetary requirements of the bylaw amendment process.

OPTIONS

The LTC has the following options in regards to this project:

Option A: Maintain Status Quo

The LTC may choose to not proceed with consideration of changes to the Mudge Island OCP or LUB. However, as mentioned above, it is the view of Staff that amendments to the LUB are warranted to address lot coverage – particularly in support of water conservation objectives, and thus Staff would not recommend this Option at this time.

Option B: Direct Staff to draft LUB amendments

Under direction of the LTC, Staff would look to draft an amendment to the LUB which addresses lot coverage through amendments to definitions and/or regulations (e.g. exemptions for water conservation features). Note, the LUB is required to be consistent with the OCP; such amendments would need to align with policy direction in the Mudge Island OCP, namely the OCP policies for the Rural Residential designation.

Option C: Direct Staff to draft OCP and LUB amendments

Under direction of the LTC, Staff would look to draft amendments to the OCP and LUB in order to substantiate an increase to lot coverage (e.g. increasing lot coverage from 10% to a greater amount). Note, ministerial approval is required for OCP amendments.

Rationale for Recommendation

As noted on Page 1 of this report, Staff are recommending that community members and other key agencies and stakeholders are consulted more broadly on this issue by way of a Questionnaire before the LTC pursues any potential bylaw amendments in regards to lot coverage for Mudge Island.

ALTERNATIVES

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

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 and the rationale for this request. Recommended wording for the resolution is as follows:

That the Gabriola Island Local Trust Committee request that [specific information and rationale TBD].

2. Amend the Project Charter

The LTC may wish to amend the Project Charter, including the Workplan timeline, budget etc. Recommended wording for the resolution is as follows:

That the Gabriola Island Local Trust Committee request Staff to make the following amendments to the Mudge Island Targeted OCP/LUB Review Project Charter, v.2:

- *[List specific amendments]*

And

That the Gabriola Island Local Trust Committee endorse the Mudge Island Targeted OCP/LUB Review Project Charter, v.2 [as amended].

NEXT STEPS

The LTC is asked to consider the amended Project Charter (version 2, Attachment 1) and provide direction to Staff on the next steps of the Project.

Submitted By:	Teresa Ritemann, MCIP, RPP Planner 2	April 3, 2018
Concurrence:	Ann Kjerulf, MCIP, RPP Regional Planning Manager	April 4, 2018

ATTACHMENTS

1. Draft Project Charter, Version 2

Mudge Island Targeted OCP/LUB Review Project —

Project Charter, v.2

Gabriola Island Local Trust Committee

Date: April 12, 2018

Purpose: To review the Mudge Island Official Community Plan (OCP) and Land Use Bylaw (LUB) in relation to lot coverage.

Background: At their September 7, 2017 meeting, the Gabriola Island Local Trust Committee (LTC) moved the “Mudge Island Targeted OCP/LUB Review Project” from their Projects List to their Top Priorities list.

In Scope

- Referral to First Nations, APCs and other key stakeholders and agencies.
- Staff analysis and subsequent Staff Report(s) with recommendations to LTC.
- Questionnaire regarding potential amendments for this project

Out of Scope

- Review of the Mudge Island OCP and LUB that is unrelated to the objectives identified in this Project Charter.

Objectives

To consider potential amendments to the Mudge Island LUB and/or OCP relating to lot coverage, including:

- Modifying the regulations of lot coverage to exempt cisterns and/or other structures;
- Modifying the maximum lot coverage in the rural residential zone;
- Regulating the size of dwellings and accessory buildings and structures
- Regulating impermeable surface coverage

Workplan Overview

Deliverable/Milestone	Date
Referral to the Mudge Island Advisory Planning Commission. Staff to help arrange an APC meeting.	Winter 2018
Staff to review Mudge APC meeting minutes and any public comments received; present Staff Report to the Gabriola LTC regarding project next steps; LTC endorse an amended Project Charter	Spring 2018
Staff to draft Questionnaire questions and present to LTC for review	May 2018
Circulation of Questionnaire	Summer 2018
Staff to draft a bylaw amendment; Legislative	Autumn 2018
Adoption of proposed bylaw and circulation of communications materials	Winter 2018

Budget

Budget Sources:

2017/2018 Gabriola Island LTC Special Projects Budget and
2018/2019 LTC Projects Reserve Fund

Fiscal	Item	Cost
2017-18	APC Referral (APC Meeting)	\$300
2018-19	Communications (e.g. advertising, providing public information, and circulation of Questionnaire)	\$550
	Total	\$850

Project Team

Teresa Ritemann, Planner 2	Project Manager
Ann Kjerulf, Regional Planning Manager	Planning Support
Bylaw Enforcement Department	Bylaw Support
Islands Trust GIS Technician	Mapping Support

LTC Endorsement:

Resolution #:

Date:

RPM Approval:

Ann Kjerulf, MCIP, RPP

Date:



Top Priorities

Gabriola Island

No.	Description	Activity	R/Initiated	Responsibility	Target Date
1	Housing Options Review Project	Review Gabriola OCP and LUB policy/regulations to allow option for secondary suite in lieu of accessory cottages on lots over 2ha and over existing buildings; review definition of ""affordable housing"" in the OCP; draft new proof of water requirements for subdivision regulations; draft project charter for phase 2.	07-May-2015	Sonja Zupanec	
1	First Nations Relationship Building			Fiona MacRaild	
2	Mudge Island targeted review of OCP/LUB	Review 10% lot coverage provisions and cisterns being calculated as lot coverage on small lots.	07-Sep-2017		
3	Water taxi feasibility	Review zoning provisions for water taxi service.	14-Jul-2016	Sonja Zupanec Jaime Dubyna	

**Projects****Gabriola Island**

Description	Activity	R/Initiated
DeCourcy Island OCP and Bylaw Review	Review DeCourcy Island Official Community Plan and Regulatory bylaws; establish an Advisory Planning Commission. Topics include: park areas without park zoning, DAI Bylaw, subdivision polices and regulations (added March 2017).	21-Apr-2011
Hazardous areas/Steep Slopes DPA	Consider hazardous areas and steep slopes development permit area designation; consider how to address areas of potentially problematic soils, shoreline erosion, and localized areas of steep terrain	21-Feb-2013
Forage Fish Mapping Workshop	March, 2013 resolution	05-Sep-2013
Land Based Aquaculture	Review most recent provincial direction on land based aquaculture and develop appropriate policies and regulations.	16-Jan-2014
Biodiversity Protection	Identify measures to protect biodiversity	19-Jan-2012
Coastal areas protection	Review OCP and LUB to improve protection of coastal areas.	19-Jan-2012
Water Protection	Review OCP and LUB to protect water quality and quantity.	19-Jan-2012
First Nations cultural references	Consider First Nations cultural references in land use planning; Work with Snuneymuxw First Nation (SFN) to seek funding for archaeological mapping and host and invite SFN Councillor Geraldine Manson to make a storytelling presentation on Gabriola.	27-Jan-2011
Eelgrass protection	Consider implementing Eelgrass protection regulations (see February 19, 2014 memorandum).	14-May-2014
Snuneymuxw Protocol Agreement	Implementation of Snuneymuxw First Nation Protocol Agreement	22-Jan-2015

**Projects****Gabriola Island**

Description	Activity	R/Initiated
Gabriola Village Plan	Undertake a comprehensive review of policies and regulations with respect to the Gabriola Village Core	02-Apr-2015
Snuneymuxw Relationship Building	Strengthen relationship with Snuneymuxw First Nation	02-Apr-2015
Food Trucks	Review land use bylaw regulations with respect to food trucks	02-Apr-2015
Eagle Nest Mapping	Incorporate eagle nest mapping into the OCP	02-Apr-2015
Green Energy	Consider policy and regulatory mechanisms to encourage green and renewable energy	02-Apr-2015
Commercial Vacation Rental Review	Review bylaws with respect to temporary use permits for commercial vacation rentals	07-May-2015
CDF Conservation	Consider policies and other recommendations regarding land use planning tools that will effectively conserve Coastal Douglas-fir forest ecosystems.	14-Jan-2016
LUB Amendments	- Review of temporary sawmill regulations - Definition of personal use of animals for SRR zoned lots - Review of how cisterns and solar panels are regulated as structures subject to lot coverage calculations -Review of section B.2.1.1 for variances within DP3 -Review minimum average parcel size calculations in LUB and OCP to ensure consistent and supportive of more than 5% dedication of parkland -IN1 zoning to ensure consistent with existing Arts Council use.	08-Sep-2016
Review and update the Gabriola Build Out Map		11-May-2017



Projects

Gabriola Island

Description	Activity	R/Initiated
Develop a new Ecological Protection Zone.	Research and develop a new ecological protection zone as part of the Parks (P) OCP designation. Update zoning of Coates Marsh and Burns Acres Nature Reserve properties.	01-Mar-2017
Housing Options Review Project Phase 2	-include a review of the secondary suite above an existing farm building provisions for land in the ALR. -examining the appropriate scope of the area designated in the Official Community Plan for possible multi-dwelling affordable housing; -examining the potential for increasing density in the Village core multi-dwelling housing; and -exploring opportunities for mixed use buildings in the Village core.	01-Mar-2018



Islands Trust

Print Date: April 4, 2018

Applications

Development Permit

File Number	Applicant Name	Date Received	Purpose
GB-DP-2017.2	Zane, Michael	03-Aug-2017	PID: 009-796-045 To bring property into bylaw compliance Civic: Acorn Island

Planner: Teresa Ritemann

Planning Status

Status Date: 04-Apr-2018

Planner awaiting responses regarding draft covenants.

Status Date: 18-Dec-2017

Planner sent draft arch. covenant to Snuneymuxw FN and Arch Branch for review and comment. Environmental covenant sent to applicant to review.

Status Date: 21-Nov-2017

Applicant has entered into Cost Recovery Agreement - CR087 - and lawyers have been requested to begin work to draft the restrictive covenant.

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
GB-DVP-2016.3	Van Herwaarden, Lynn	24-Aug-2016	PID: 003-422-852 539 Wildwood Crescent, Gabriola Island. DVP to bring property into compliance.

Planner: Madeleine Koch

Planning Status

Status Date: 18-Aug-2017

Sent letter to the property owner and requested her (or her surveyor) to forward the completed survey / site plan to planning staff.

Status Date: 17-Aug-2017

Planning staff met with the owner on site, reiterated the need for a survey / site plan. The owner committed to providing a survey / site plan as per the Land Use Bylaw.

**Applications****Status Date:** 15-Jun-2017

Applicant said that he would ask the owner to contact staff to arrange a meeting to discuss the application

File Number	Applicant Name	Date Received	Purpose
GB-DVP-2017.1	Zane, Michael	03-Aug-2017	PID: 009-796-045 To bring property into bylaw compliance. Civic address: Acorn Island

Planner: Teresa Ritemann**Planning Status****Status Date:** 04-Apr-2018

Planner awaiting responses regarding draft covenants.

Status Date: 18-Dec-2017

Planner sent draft arch. covenant to Snuneymuxw FN and Arch Branch for review and comment. Environmental covenant sent to applicant to review.

Status Date: 21-Nov-2017

Applicant has entered into Cost Recovery Agreement - CR087 - and lawyers have been requested to begin work to draft the restrictive covenant.

Rezoning

File Number	Applicant Name	Date Received	Purpose
GB-RZ-2016.1	Williamson & Associates	09-Feb-2016	PIDs:006-654-941, 005-030-480, 009-735-968, 003-010-431, 006-635-121, 027-939-804, 027-939-791 Spruce to Church Streets, Mallett Creek Density Transfer

Planner: Sonja Zupanec**Planning Status****Status Date:** 06-Dec-2017

OCP Bylaw No. 289 approved by the Minister of Municipal Affairs and Housing

Status Date: 05-Oct-2017

RDN advised that the RDN Board will accept the proposed 16.4 hectare parkland dedication and will accept proposed SRW #1, #2, #3 and #4 as public trail connections through subdivision following adoption of Bylaws 289 and 290.

Applications

Status Date: 30-Mar-2017

Proposed Bylaws 289(OCP) and 290(LUB) given third reading. Request RDN Board confirm receipt of receiver park lands. Finalize restrictive covenant as per LTC resolution request. Provide clarity to LTC on process for 'right of first refusal' for remainder lot for parkland purposes

Subdivision

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2008.3	C.O. Smythies & Associates Ltd.	06-Oct-2008	To create 6 parcels btwn McCollum & Tait Roads. (PARCEL C (DD 51803I) OF THE NORTH 1/2 OF THE NORTH EAST 1/4 OF SECTION 9, GABRIOLA ISLAND, NANAIMO DISTRICT)

Planner: Teresa Rittemann

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 18-Jan-2018

Planner re-sent the revised referral report to MOTI. Will await a response from MOTI.

Status Date: 23-Feb-2017

PLA extension request. Planner waiting for updated plan from applicant which reflects the lot boundary adjustment in GB-SUB-2016.4

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2010.2	McCollum and Krul, Gary and Jane	13-Aug-2010	1520 McCollum Road Create 7 parcels

Planner: Teresa Rittemann

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 14-Jun-2017

MOTI sent PLA with conditions for the applicant to meet.

Applications

Status Date: 28-Nov-2016

Revised referral report sent to MOTI to reflect updated proposed plan of subdivision received.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2011.1	Williamson & Associates Professional Surveyors Planner: Marnie Eggen	23-Dec-2010	To create 2 parcels on Daniel Way (THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 22, GABRIOLA ISLAND, NANAIMO DISTRICT, EXCEPT PARTS IN PLANS 22029, 30038, 32376 AND VIP54644)

Planning Status

Status Date: 03-Nov-2017

No change

Status Date: 08-Jan-2016

No change

Status Date: 13-Jan-2015

Applicant working to satisfy conditions

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2012.2	Powell, Don Planner: Teresa Rittemann	24-Oct-2012	725 Church Street - subdivision to create one new lot and a remainder lot

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 01-Apr-2015

Applicants are waiting for the right time to continue with their application with MOTI and to remove the conditions in the PLNA to change it to a PLA. MOTI confirmed this is the case.

Status Date: 03-Sep-2014

Status has not changed. Still awaiting MOTI direction that reasons for non-approval have been overcome

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2013.3	Smythies & Associates Planner: Teresa Rittemann	28-Oct-2013	411 Daniel Way subdivision to create 2 parcels

Applications

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 01-Apr-2015

MOTI response that there has been no recent action on this file but it will remain open, and the applicant is working with the ALC at this time

Status Date: 19-Mar-2015

No change in status. Contacted MOTI to see if they closed the file, but have not yet heard back.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2016.2	MACKAY, IKE	23-Feb-2016	PIDs: 004-857-119 and 004-614-771 Lot Boundary Adjustment

Planner: Teresa Ritemann

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 05-May-2016

Awaiting response from MOTI to issue PLA or PLNA.

Status Date: 17-Mar-2016

File TR completed review and sent referral report to MOTI and copied to Gabriola LTC and applicant.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2016.4	C.O. Smythies & Associates	20-May-2016	PIDs: 001-271-806 and 009-735-755 Boundary adjustment. Civic address: 1610 Hess Road, Gabriola Island.

Planner: Sonja Zupanec

Planning Status

Status Date: 08-Jun-2016

Referral response sent to MOTI and copied to applicant and LTC.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2016.6	C.O. Smythies & Associates	08-Sep-2016	PID: 000-305-120 215 Easthom Road, Gabriola Island. 3 lot subdivision.

Planner: Teresa Ritemann

Applications

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 07-Nov-2017

Applicant seeking extension to PLA. Planner confirmed with MOTI and applicant via email that our office has no concerns with extending the PLA.

Status Date: 02-Oct-2017

No change in status.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2017.1	Williamson & Associates Professional Surveyors Planner: Teresa Ritemann	26-Jan-2017	PIDS: 000-427-110,025-720-821 & 025-720-830 Civic addresses: 1885 Martin Road, 1860 Martin Road & 1875 Stalker Road, Gabriola Island. Boundary adjustments.

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 05-May-2017

PLA Received. MOTI will send final plan when received.

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2017.2	Williamson & Associates Planner: Madeleine Koch	19-Jan-2017	PIDS: 009-739-602 and 000-105-287. Lot line adjustment. Civic 831 Chelwood Road, Gabriola Island, BC

Planning Status

Status Date:

File Number	Applicant Name	Date Received	Purpose
GB-SUB-2017.3	HENDRIKS, TREVOR Planner: Teresa Ritemann	24-Apr-2017	PID: 004-032-721 - 2 lot subdivision split by a road. Civic address: 1802 Stalker Road, Gabriola Island, BC.

Applications

Planning Status

Status Date: 04-Apr-2018

No change in status.

Status Date: 24-Jul-2017

Received VIHA letter approving sewage. Still need final plan of subdivision, then can send letter or approval if final plan is OK

Status Date: 30-Jun-2017

Awaiting documents to satisfy sewage disposal condition. Then final subdivision plan before giving final approval letter.

Temporary and Industrial Use Permit

File Number	Applicant Name	Date Received	Purpose
GB-TUP-2018.1	Garner, KEVAN	15-Mar-2018	PID: 003-330-460 Vacation rental in cottage Civic address:671 Balsam Street, Gabriola Island, BC

Planner: Jaime Dubyna

Planning Status

Status Date:

Islands Trust
LTC EXP SUMMARY REPORT F2018
Invoices posted to Month ending February 2018

620 Gabriola	Invoices posted to Month ending February 2018	<u>Budget</u>	<u>Spent</u>	<u>Balance</u>
65000-620	LTC "Trustee Expenses"	1,500.00	992.19	507.81
LTC Local				
65200-620	LTC - Local Exp - LTC Meeting Expenses	4,750.00	3,545.93	1,204.07
65210-620	LTC - Local Exp - APC Meeting Expenses	600.00	477.70	122.30
65220-620	LTC - Local Exp - Communications	1,250.00	990.95	259.05
65230-620	LTC - Local Exp - Special Projects	1,000.00	0.00	1,000.00
TOTAL LTC Local Expense		<u>7,600.00</u>	<u>5,014.58</u>	<u>2,585.42</u>
Projects				
73001-620-4063	Gabriola First Nations Relations	1,000.00	13.54	986.46
73001-620-4064	Gabriola Housing Options Review	2,500.00	3,380.05	-880.05
73001-620-4080	Gabriola Housing Needs Assessment	5,000.00	0.00	5,000.00
TOTAL Project Expenses		<u>8,500.00</u>	<u>3,393.59</u>	<u>5,106.41</u>

Gabriola Island Local Trust Committee

POLICIES AND STANDING RESOLUTIONS

Updated: February 2, 2016

No	Meeting Date	Resolution No.	Issue	Policy and Description
1.	January 29, 2010	GB-025-2010	Communication Towers and Antennae	It was MOVED and SECONDED that the Gabriola Island Local Trust Committee adopt the following standing resolution: - Proposals for any new or expanded communication towers and antennae require an application to the Gabriola Islands Local Trust Committee. - The application process shall comprise a public consultation component, which includes at least one notification to neighbours, one public meeting and one advertisement in both local newspapers. - The public consultation process shall be determined by the Local Trust Committee after initial review of the proposal; however, as a minimum, the proponent shall give written notice to Islands Trust Northern Office staff and the Snunéymuxw First Nation, all owners and residents of properties within a 2 kilometre radius of the subject property where the facility is proposed. The required notice shall include the following information: - the proposed location of the tower on the subject site - a description of the predicted power density level of the antenna/tower - methods to mitigate any aesthetic or visual impact - description of the natural environment, any sensitive ecosystems or other important habitat areas within 120 metres of the subject property and mitigation of impacts to such areas - physical details and example illustrations of the tower including its height, colour, type and design - the time and location of a public meeting and advertising - the name and contact information of the contact person employed by the proponent - the name and all contact information of the Islands Trust planning staff available for public comments and questions regarding the proposal; and - the proponent may be required to enter into a cost recovery agreement with the Islands Trust, in order to offset application processing costs incurred.

To:	Local Trust Committees	For the Meeting of:	Various
From:	David Marlor, LPS Karen Hurley, TAS	Date Prepared:	March 2, 2018
SUBJECT:	Land-use planning implications of Fisheries and Oceans Canada <i>Integrated Geoduck Management Framework 2017</i>		

PURPOSE: To inform local trust committees about the land-use implications of the of Fisheries and Oceans Canada *Integrated Geoduck Management Framework 2017*

BACKGROUND:

At the November 2, 2017 meeting the Executive Committee requested that:

Local Planning Services and Trust Area Services staff collaborate on the preparation of a briefing for local trust committees about the land-use planning implications of the DFO 2017 Integrated Geoduck Management Framework.

The Fisheries and Oceans Canada (DFO) *Integrated Geoduck Management Framework 2017* (IGMF) guides the management of geoduck clam aquaculture, including siting guidelines for new applications for inter-tidal and sub-tidal geoduck aquaculture, as well as for applications for size increases to existing shellfish aquaculture operations.

Currently in the Islands Trust Area, most shellfish aquaculture tenures are limited to Baynes Sound because this area has the best conditions for the raising of these types of shellfish. Wild geoduck clams are more widespread in the Islands Trust marine areas, and, under the IGMF, there is potential for geoduck clam aquaculture operations to be installed in wild geoduck habitats. As a result, staff expects that Geoduck clam aquaculture tenures could be applied for in many other locations throughout the Trust Area but would be influenced and/or limited by:

- appropriate ecological/substrate conditions;
- zoning; and
- the DFO IGMF 2017, which identifies areas available for geoduck clam aquaculture applications.

With release of the DFO Integrated Geoduck Management Framework 2017, applicants are now able to apply for aquaculture licenses throughout the B.C. coast, including the Trust Area. Shellfish aquaculture is now under the exclusive jurisdiction of DFO to manage the fishery and provide licenses to operators. The province issues tenures for the sites and manages the harmonized application process.

There are existing aquaculture licenses that include geoduck clams among many possible species that could be implemented at this time on many Gulf Islands, including: Lasqueti, Hornby, Salt Spring, and Denman. There are also many islands that have existing aquaculture licenses that do not currently include geoduck clams; however, operators could apply to have them added to the license, including: Thetis (5), Gabriola (1), Salt Spring (4 including one at Burgoyne Bay) and many near Denman.

Attached are maps of the Islands Trust Area, indicating areas that currently permit aquaculture and/or limited aquaculture.

Under IGMF 2017, there is also the potential for the opening up of wild geoduck areas to DFO applications for both intertidal and subtidal geoduck clam aquaculture licenses in various sites in the Trust Area by First Nations (red zones) and all operators (yellow and non-colour areas on attached maps).

DFO staff, however, is not expecting a large number of new or amendment applications for geoduck clam aquaculture and have advised that throughout BC there “are currently 57 facilities licensed for geoduck. Of this, 25 are licensed for intertidal, of which only 6 have approved harvest plans, and only 2 have ever reported production, the last being in 2015.” DFO staff has also confirmed that “the addition of geoduck to an existing licence requires an amendment with full DFO review. Any proposed addition of non-standard infrastructure (including geoduck tubes) would also trigger a review of the application by the BC government.

Implications of the IGMF

In British Columbia, the province has responsibility for issuing tenures for aquaculture and the federal government has responsibility for issuing licenses for the operation and management of aquaculture.

Under s.479 of the *Local Government Act*, local trust committees have the authority to zone the surface of the marine areas. However, aquaculture is a federally regulated industry and local zoning cannot infringe on the federal authority. Therefore, local trust committees are limited to determining the location that it deems suitable for aquaculture operations but cannot restrict the species grown in the tenure area. Local trust committees could regulate siting and size of buildings and structures as part of its s.479 authority, provided that such regulations do not restrict the aquaculture operations as licensed by the federal government.

Any areas suitable for geoduck clam aquaculture that are already zoned for aquaculture uses could be used to grow and harvest geoduck. Operator licenses may already include geoduck clams, or they could be added to the aquaculture license, likely without a referral process.

Areas that are not zoned for aquaculture would require a rezoning application before they could be used for aquaculture (including geoduck clams).

ATTACHMENT(S):

1. 2018 Island Trust water zoning maps (with index map)
2. Staff report on potential impacts associated with geoduck clam aquaculture in the Islands Trust Area, November 12, 2017
3. Fisheries and Oceans Canada *Integrated Geoduck Management Framework 2017* (IGMF)
4. IGMF Maps associated with Islands Trust Area -- Pacific Fisheries Management Areas: attached and at DFO website
 - a. 14 South - Denman, Hornby, Lasqueti, N. Thormanby Islands
 - b. 16 - Denman, Hornby, Lasqueti, N. Thormanby Islands
 - c. 17 - Gabriola, Galiano, Mudge and Thetis Islands
 - d. 18 - Saturna, Salt Spring Islands (all SSI Conditional Closure)
 - e. 19 - James, Sidney Islands

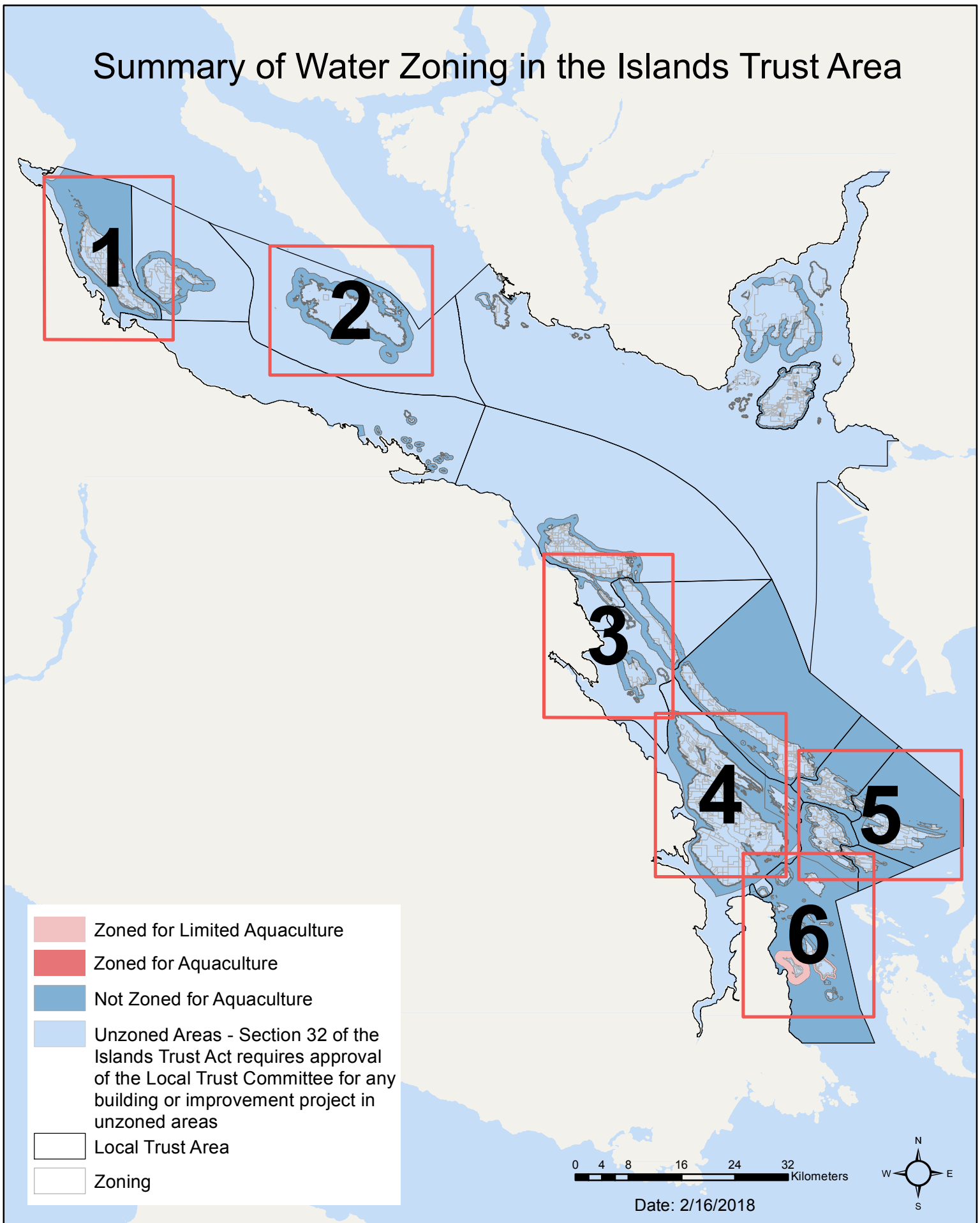
FOLLOW-UP:

TAS staff will continue to monitor any new information on geoduck clam aquaculture. Further follow-up at the direction of Local Trust Committees.

Prepared By: David Marlor, Local Planning Services
Karen Hurley, Trust Area Services

Reviewed By/Date: Clare Frater, Trust Area Services, March 5, 2018

Summary of Water Zoning in the Islands Trust Area



Summary of Water Zoning in the Islands Trust Area **3**

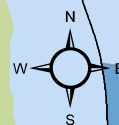
Gabriola Island

Thetis Island

-  Zoned for Limited Aquaculture
-  Zoned for Aquaculture
-  Not Zoned for Aquaculture
-  Unzoned Areas - Section 32 of the Islands Trust Act requires approval of the Local Trust Committee for any building or improvement project in unzoned areas
-  Local Trust Area
-  Zoning

0 0.5 1 2 3 4 Kilometers

Date: 2/16/2018



Staff report on potential impacts associated with geoduck clam aquaculture in the Islands Trust Area

**By Karen Hurley, PhD, Senior Policy Advisor
November 12, 2017**

On June 21, 2017, the Islands Trust Council requested Executive Committee to investigate the potential impacts associated with geoduck aquaculture in the Islands Trust Area and, as appropriate, initiate advocacy.

This report has been produced using review of the latest scientific peer-reviewed research on impacts from geoduck clam aquaculture, as well as conversations and meetings with staff from the Department of Fisheries and Oceans (DFO), the BC Ministry of Agriculture, the BC Ministry of Forests, Lands and Natural Resources Operations and Rural Development (FLNRORD), Vancouver Aquarium and members of the Association of Denman Island Marine Stewards. *Given the limited staff time available for this project, and the lack of definitive science, this report offers only an overview of potential impacts and highlights area worthy of further study.*

During a review of the issue, two major themes emerged: there is uncertainty as to the expected scale of the industry now that DFO's 2017 Geoduck Integrated Management Framework is in force and therefore there is uncertainty about the, scale of the potential impacts. There is also uncertainty about the extent to which geoduck aquaculture might occur in the intertidal zone.

The potential impacts discussed in this report include damage to habitat vital to other species including herring, reduced bird foraging, microplastic contamination, human health, chemical contamination, garbage and ocean acidification.

It is worth noting at the outset that, to date, there are no studies that evaluate the potential impacts of geoduck aquaculture at the ecosystem level or the cumulative impacts of an expanded industry in the Salish Sea, though most researchers call for this level of study to be done.

A description of geoduck clam aquaculture practice is attached as Appendix 1.

Geoduck aquaculture has taken place in British Columbia since the early 1990s. In that time, interest in geoduck aquaculture has continued to grow as demand for the giant clam, especially in China, has sent prices soaring. Many, including Trust Area First Nations, see the emerging geoduck aquaculture industry as a significant opportunity for economic development and long-term employment for local residents. Compared to Washington State the industry in BC is at an early stage, but with the recent approval of a DFO Integrated Geoduck Management Framework 2017 (IGMF) is poised to expand.

There are concerns in island communities that DFO has insufficiently considered ecosystem and cumulative impacts. In creating the IGMF, DFO chose to limit their consideration and scientific analysis geoduck aquaculture at the policy level to the principle of 'conservation', which was narrowly defined: "conservation and long-term sustainability of wild geoduck stocks is the first priority." No mention is made in the IGMF of protection of the marine environment, fish habitat or human health. DFO staff advises that broader ecological impacts will be assessed at the licence application level. This raises concern that assessment at the individual licence will result in insufficient consideration of cumulative impacts regionally.

Concerns about geoduck aquaculture impacts are not new. In 2007, the BC Legislature’s Special Committee on Sustainable Aquaculture [recommended](#) that:

“No new species are to be approved for commercial aquaculture without a consensus of independent peer-reviewed science demonstrating that the potential impact on the marine environment is minimal”. (7.5)

Recently approved geoduck clam tenures must be rescinded until conditions in Recommendation 7.5 are met”. (7.6)

Staff’s review of the available science did not result in an impression that there is scientific consensus that the potential impacts of intensive aquaculture in the Trust Area, including geoduck aquaculture, are certain to be minimal. Staff noted that many articles conclude with calls for additional research. As far as staff knows at this time, the 2007 recommendation to rescind the approved geoduck clam tenures was not acted on.

There are also strong feelings in island communities about aquaculture impacts generally. Residents are concerned that, in the past, aquaculture operators have not taken responsibility for lost equipment/garbage and that DFO is insufficiently monitoring and enforcing conditions of the licenses. Residents also seem to have a lack of trust in the adequacy of the federal government’s oversight of aquaculture, due to changes to the *Fisheries Act* in 2012 that significantly [weakened](#) the federal government’s role in fish habitat protection. There also appears to be a lack of clarity with members of the public regarding the respective roles and authorities of DFO, FLNRORD and Islands Trust.

Potential impacts of geoduck clam aquaculture

A summary of potential impacts identified by staff is below:

1. Potential damage to habitat vital to other species, including herring

There is limited local data available about habitat impacts associated with the geoduck industry so staff reviewed articles about impacts in Puget Sound, a nearby region that has more experience with intensive geoduck clam aquaculture. A review of the scientific literature related to geoduck aquaculture in Puget Sound reveals that there is an active debate among scientists as to the severity of the impacts or potential impacts. That said, most of the scientific reports call for additional research on ecological impacts even as geoduck aquaculture intensifies. Key among these are:

- *MacDonald et al.* (2013) report negative impacts on fish and snail habitat by geoduck aquaculture gear and suggest further research to understand impacts to forage fish populations.
- *Dethier et al.* (2007), marine scientists, raised [concerns and questions](#) about geoduck aquaculture impacts to habitat, marine species and ecosystem functions. Staff understands these questions remain unanswered.

In 2013, DFO scientists conducted a one-year study on potential impacts of geoduck clam intertidal aquaculture in a small study area (not a large commercial operation) near Nanoose, BC. This study concluded that there are limited ecologically-significant effects of intertidal geoduck aquaculture. The exceptions found were that after liquefaction of the geoduck site during harvesting the sediment structure took 123 days to recover, and that there was a lack of seasonal increase in infaunal (beings that live in the sand such as forage fish) abundance and richness after harvesting. The study recommended more research on a larger scale.

Robinson et al. (2013) describe how Pacific sand lance do not have a swim bladder, so when they are not foraging they bury into the intertidal or subtidal sand and they also aestivate in the sand (like hibernation) when food is scarce. A reduced number of forage fish and invertebrates living in the sand and finer ocean floor sediments after liquefaction from the stingers (inserted to a one metre depth) is not surprising because their habitat has been significantly changed. As *Dethier et al. (2007)* write: organisms in the intertidal zone are adapted to small scale disturbances – this large scale disturbance with stingers is not part of their evolutionary history.

Staff notes that it remains unclear whether geoduck aquaculture will occur in the intertidal zone. Although not specific to the geoduck industry's activities, a 2002 review of BC shellfish aquaculture in Baynes Sound assigned the impacts of site clearing with a rake and other harvesting activity as High Severity on forage fish intertidal habitat.

Doug Hay, PhD, who spent most of his career as a research scientist with DFO, and who continues to serve as scientist emeritus addressing issues related to herring and other forage fish, cautions that pertinent environmental impact analysis of risks to forage fish species have never been done. He suggests that nobody knows if geoduck aquaculture could jeopardize the amount and quality of spawning habitat for herring or other forage fish species such as surf smelt or sand lance, but that, the loss of vital spawning habitat could lead to declines in abundance of forage fish species, including herring, which in turn could impact other species, especially seabirds. Within the Trust Area, forage fish provide up to 50% of the diet of Chinook salmon that are the primary food of the Southern Resident orcas. Using spawning records back to 1928, Dr. Hay explains that the most important herring spawning areas occur on only 10% of the total BC coastline. *Lambert Channel, between Denman and Hornby Islands, is the largest area of herring habitat in BC with 35% of BC's total herring spawning area.* In addition, Dr. Doug Hay cautions that, collectively, we are all taking herring for granted, especially in the Strait of Georgia, and taking big risks with geoduck aquaculture in herring spawning areas. He recommends additional research on this topic.

The IGMF permits geoduck aquaculture in many parts of the herring spawning area of Baynes Sound and Lambert Channel (Denman and Hornby Islands). This is herring habitat that is defined as Vital by DFO.

2. Potential impacts to species due to reduced foraging

There is also concern that intensive intertidal geoduck aquaculture may negatively impact birds through alienation of foraging habitat in the inter-tidal zone as well as birds being caught in the predator netting. Baynes Sound and other marine areas within the Trust Area are important bird habitats. .

Ferriss et al. (2016) undertook modelling for Puget Sound that found that the gear associated with geoduck aquaculture including PVC pipes and anti- predator nets may, if the already intensive industry more that doubles in that region, have an impact on the Puget Sound food web because of changing forage opportunities including a substantial decrease of most resident birds including great blue herons and reduction in wild salmon.

There is widespread use of netting in the aquaculture industry. Given this, staff was interested to read studies that that the anti-predator nets (APN), which were created to reduce bird and crab predation of aquaculture clams, have not been effective in reducing bird foraging behavior or crab predation. In fact, the nets have increased the number of small predatory crabs in Baynes Sound to the point that Dr. Leah Bendell (2014) suggests that “it is likely that maximum bivalve productivity within Baynes Sound has been reached in that any further gains hoped to be achieved through seeding will not be realized as a consequence of predation.”

Staff also learned that in a 2015 study, also focused on Baynes Sound, Dr. Bendell, documents how the anti-predator nets degrades the sediment geochemical characteristics, are hazards to wildlife and humans, and provides a place for sea lettuce to take hold, which contributes to poor water quality and a likely loss of ecological function on the sea bed. More research is recommended by the author.

3. Microplastic contamination

The plastic anti-predator netting and PVC pipes used in inter-tidal geoduck aquaculture may impact the marine environment as they break down in the saltwater and sun exposure. A recent research paper from Washington State explains that the “contribution from larger marine plastic debris to microplastic formation is greatest on beaches where UV light and wave action can enhance degradation.” According to Feldman (2002) PVC is a poorly photostable polymer especially the matt finish PVC, like the ones used in geoduck aquaculture, and can be severely weathered in outdoor uses where weathering is caused by heat, mechanical action (waves), algae and their enzymes (biodegradation). During a visit to Baynes Sound in early August, staff observed abandoned and in-place anti-predator netting and PVC pipe sections that were exposed to wave action and sunlight and, as a result, were in various states of weathering.

A 2014 paper by Jean-Pierre Desforges, Peter Ross, Vancouver Aquarium researcher, and others, documented extremely high levels of microplastics in the Strait of Georgia, of which 80% is fibrous plastics. In a 2015 paper by the same researchers found that zooplankton are eating these microplastic particles. Dr. Ross also explained to staff that researchers have found that the type of microplastic differs according to where you are looking. For example PVC microplastic is denser than water and therefore tends to be found in the sediments, while fibres are more buoyant and are found in the water column. Dr. Bendell argues that aquaculture plastic gear including ‘oyster blue’ rope, netting, and plastic net bags are contributing to the highly fibrous composition of microplastics in Baynes Sound. All of the researchers suggest that additional research is required, especially in terms of ecological consequences.

DFO and the BC Shellfish Growers Association also recognise that aquaculture gear may be a source of microplastics. In 2016 they initiated a collaboratively funded research project to investigate: *Microplastics and Shellfish Aquaculture: Presence, Extent, Potential Impacts and Mitigation Measures* including the type of microplastics and potential sources. The research is expected to be completed by December 31, 2017.

4. Human health

If undertaken, intertidal geoduck clam installations would involve anti-predator nets to protect the juvenile geoducks. There is a human health concern associated with the rebar used to hold the anti-predator nets (APN) in place because it tends to erode quickly at the bend and then break off, forming a point. These points are hazardous if stepped or fallen on – as happened on Denman Island twice in the summer of 2017 in clam tenures.

5. Chemical contamination

Lead line is a product used to attempt to hold the netting in place. This product is used throughout the fishing industry. It is made of a loosely braided nylon with lead balls inside. In the intertidal zone, if the nylon braid erodes there is a risk of [animals or birds ingesting](#) the lead balls. Future research is warranted.

6. Garbage

Garbage and gear abandonment is a long standing aquaculture issue, acknowledged by provincial staff and addressed in the BC Shellfish Growers *Environmental Code of Practice*. Staff observed an unsuccessful geoduck operation intertidal zone on the south end of Denman Island where the gear was obviously abandoned and causing potential danger to humans, marine species and birds.



Abandoned geoduck aquaculture gear in the intertidal zone of Denman Island.



Lead line with anti-predator netting (APN)



APN: a hazard to humans and other species

All images Denman Island. Photo credit: Karen Hurley

7. Ocean Acidification

Marine research by *Bendell et al.* (2014) in Baynes Sound suggests that increased number of clams, including geoduck clams, could further increase acidification of the ocean. Climate change is increasing the [acidification of the ocean](#). Lower pH levels in the ocean threaten sea life, including shellfish, and in turn, acidification of the ocean may speed up climate change.

Emerging activities that will increase understanding of impacts:

On August 10th, 2017 the US Center for Food Safety launched a [lawsuit](#) against the US Army Corp of Engineers for approving a massive expansion of aquaculture, predominantly geoduck aquaculture, in Puget Sound without fully considering cumulative impacts across the state, including the use of pesticides.

As an outcome of the Herring forum hosted in February 2017 by the Association for Denman Island Marine Stewards, various stakeholders are considering possible methods to investigate the cumulative impacts of aquaculture on Baynes Sound. In November 2017, the Trust Programs Committee approved a project charter for a Baynes Sound/Lambert Channel forum project charter. It is expected that geoduck aquaculture will be one of the topics discussed.

There are upcoming opportunities for those involved in geoduck and other aquaculture to work in partnership for the health of marine ecosystems. These include a DFO working group on use of plastics in aquaculture and a planned 2018 Islands Trust/World Wildlife Fund Baynes Sound/Lambert Channel Forum that will bring together First Nations and other governments as well as industry and community stakeholders to identify issues and recommend solutions that will contribute to improving the health of the marine ecosystem.(Project charter attached).

It is possible that new research on this topic may be presented at the 2017 Salish Sea Ecosystem Conference in Seattle in April 2017.

Conclusion:

Staff's initial review of this topic reveals that, although as in any scientific topic there is ongoing debate, there are potential impacts associated with an expanded geoduck industry worthy of further study, particularly if there is to be farming in the inter-tidal zone. These include: negative impacts to herring spawning habitat, bird forage opportunities, contributions to the microplastics load, human health, contamination and garbage. There are also many long-standing requests for research into the potential ecosystem level and cumulative effects of geoduck clam aquaculture.

Attachments:

1. Appendix 1: How does geoduck clam aquaculture work?
2. Appendix 2: What part of the Trust is, or could be, available for geoduck aquaculture?
3. Appendix 3: Baynes Sound/Lambert Channel 2018 forum project charter
4. Link: [Integrated Geoduck Management Framework 2017](#)
5. Link: [Maps: Integrated Geoduck Management Framework](#)
6. Link: [Herring Spawning Map Lambert Channel and Baynes Sound](#)
7. Link: [April 2014 letter from Islands Trust Chair to DFO re draft Integrated Geoduck Management Framework](#)

Appendix 1

How does geoduck clam aquaculture work?

The geoduck is the world's largest burrowing clam and one of the longest lived species: maximum age recorded is over 140 year. It is now a lucrative wild fishery in the luxury food market. It is generally not consumed locally, but predominantly flown to consumers in China, and therefore, is expected to have a very high carbon footprint.

Aquaculture trials have been underway in BC for 18 years and geoduck hatcheries exist in BC, including Baynes Sound. It is unknown at this time what type of geoduck aquaculture will be conducted within the Islands Trust Area. DFO and FLNRO staff have indicated that there will likely not be much intertidal geoduck aquaculture, especially on the large scale conducted in Puget Sound but that small intertidal areas are possible, and subtidal aquaculture could be conducted. Both are untried methods in the Islands Trust Area and staff observed a failed and abandoned geoduck intertidal installation on Denman Island.

Geoduck aquaculture in the intertidal zone involves placing hatchery-raised juvenile geoduck clams into PVC pipes (that have been inserted into the sand with an auger), sometimes each PVC pipe is covered with a fine net under a rubber band, and then the entire area is covered with anti-predator nets (APN). Attempts are made to hold the APN in place with bent rebar and sometimes with lead line. The intertidal PVC pipes and predator nets are kept in place for 18 months to two years. Subtidal geoduck aquaculture, involves divers placing the hatchery juvenile geoducks in the sand and then installing a mesh 'canopy net' over the area. Industry standards do not exist yet for subtidal geoduck aquaculture as it is a new method.

The geoducks are then left to grow for five to seven years. During this time the site should be maintained to ensure that the netting is intact and not covered with algae or seaweed. In both intertidal and subtidal geoduck aquaculture (and similar to wild geoduck), once they reach suitable maturity the geoducks are removed by liquefying the sand with high pressure water from a 'wand' or 'stinger' and then removing the geoducks alive by hand. Adult geoducks may be buried to a depth of 1m and sediment liquefaction may occur down to such depths.

In Puget Sound, Washington geoduck clam aquaculture has been financially successful resulting in large areas of the intertidal zone being used by aquaculture companies.



Puget Sound geoduck aquaculture. Photo from *Aquaculture North America* magazine. February 4, 2014

At this time, BC does not have a large geoduck aquaculture industry and according to staff at DFO and in the geoduck industry, most geoduck aquaculture trials in BC have not been successful. A 2012 report prepared for DFO includes a profitability ratio that indicates a -2.5% rate of return after 10 years and 1.7% rate of return after 15 years. A BC Ministry of Agriculture and Lands 2005 report assessed the economics of subtidal geoduck aquaculture and concluded that because of the high costs of the juvenile geoducks and the placement and removals by divers "the results could range from highly successful businesses to unfortunate business failures. Prospective geoduck farmers [operators] will need to carefully consider the opportunities and risks associated with developing a sub-tidal geoduck enterprise."

Appendix 2

What part of the Trust Area is, or could be, available for geoduck aquaculture?

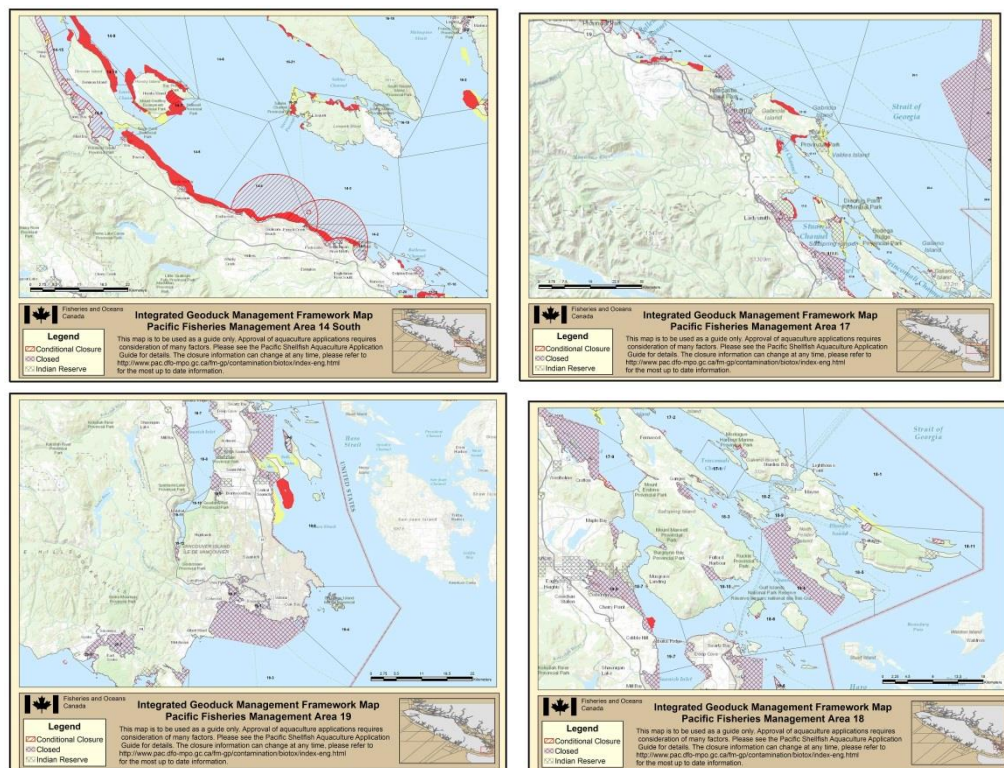
Although aquaculture impacts are now felt most strongly on Denman Island, geoduck aquaculture has the potential to be more prevalent Trust Area wide. Geoduck aquaculture could occur in various places throughout the Trust Area but would be influenced and/or limited by:

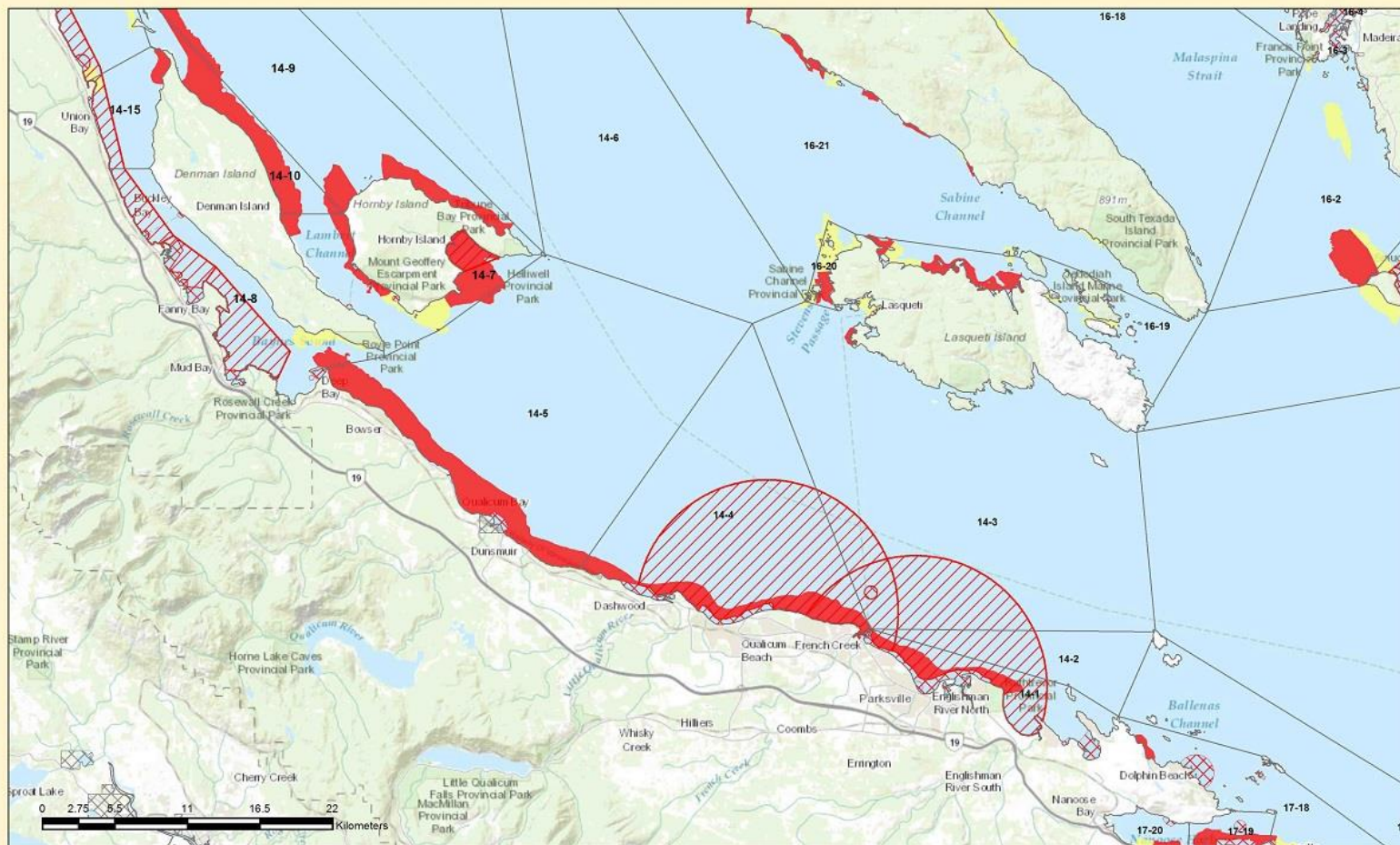
- appropriate ecological/substrate conditions;
- zoning; and
- the DFO IGMF 2017, which identifies areas available for geoduck aquaculture applications.

With release of the DFO Integrated Geoduck Management Framework (IGMF) 2017, applicants are now able to apply for aquaculture licenses throughout the BC coast, including the Trust Area. Shellfish aquaculture is now under the exclusive jurisdiction of DFO to manage the fishery and provide licenses to operators. The Province issues tenures for the sites and manages the harmonized application process.

There are existing aquaculture licenses that include geoduck among many possible species that could be implemented at this time on many Gulf Islands, including Lasqueti, Hornby, Salt Spring and Denman. There are also many islands that have existing aquaculture licenses that do not currently include geoduck; however, operators could apply to have them added to the license. These islands include Thetis (5), Gabriola, (1), Salt Spring (4 including one at Burgoyne Bay) and many near Denman. April 2014 letter from Islands Trust Chair to DFO re draft Integrated Geoduck Management Framework (attached) includes mapping Islands Trust Area that indicates current zoning in the permits aquaculture and/or limited aquaculture.

Under DFO's IGMF 2017 there is also the potential for the opening up of wild geoduck areas for both intertidal and subtidal geoduck aquaculture zones throughout the Trust Area by First Nations (red zones) and all operators (yellow and non-colour areas). [IGMF maps](#).





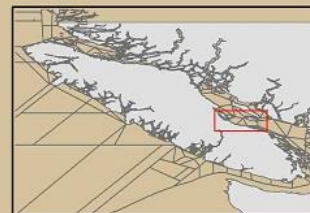
Fisheries and Oceans
Canada

Legend

- Conditional Closure
- Closed
- Indian Reserve

Integrated Geoduck Management Framework Map Pacific Fisheries Management Area 14 South

This map is to be used as a guide only. Approval of aquaculture applications requires consideration of many factors. Please see the Pacific Shellfish Aquaculture Application Guide for details. The closure information can change at any time, please refer to <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/biotox/index-eng.html> for the most up to date information.





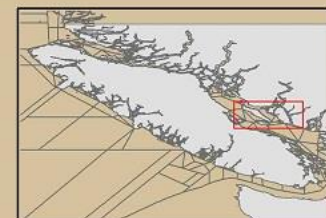
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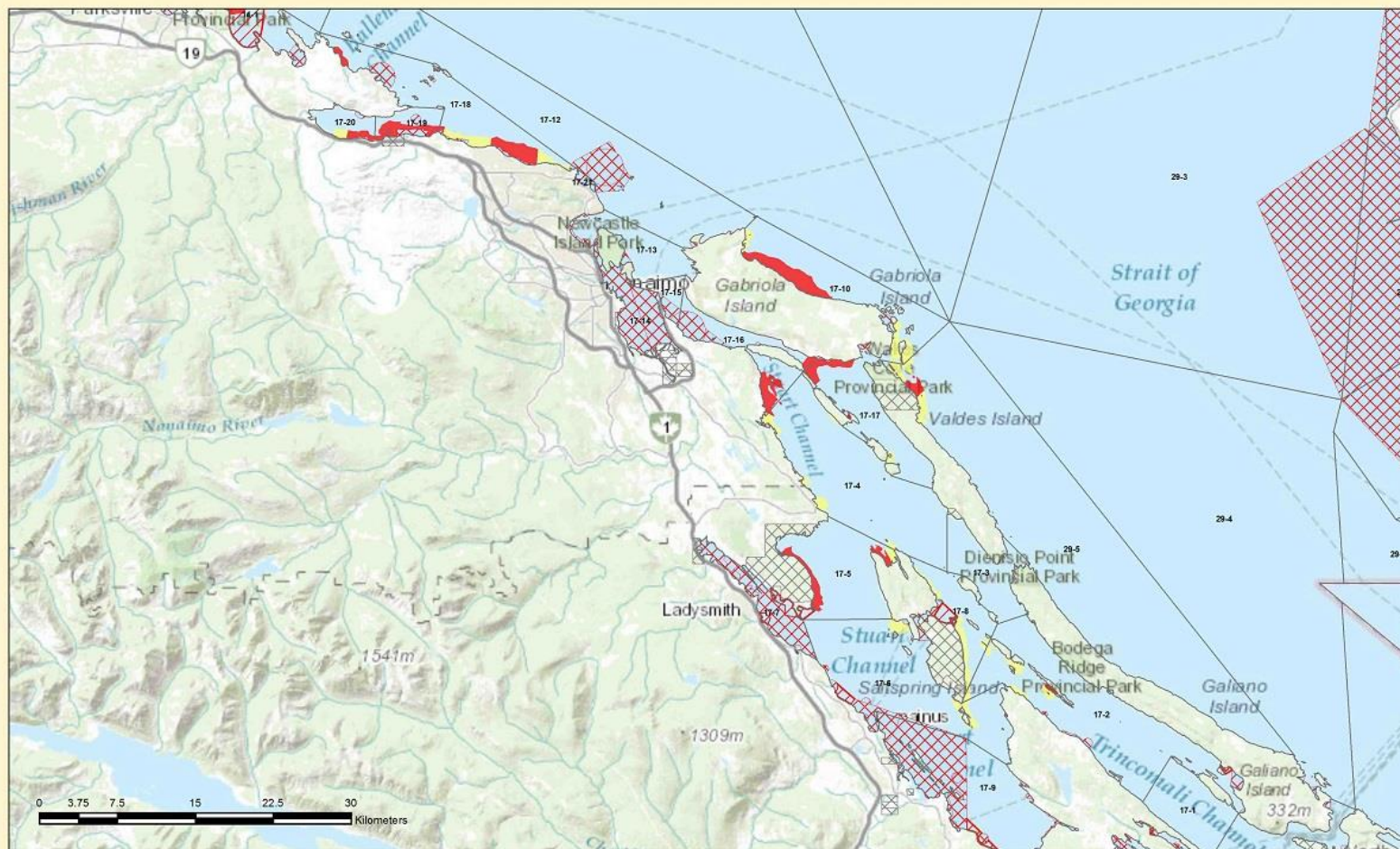
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- Conditional Closure
- Closed
- Indian Reserve

Integrated Geoduck Management Framework Map Pacific Fisheries Management Area 16

This map is to be used as a guide only. Approval of aquaculture applications requires consideration of many factors. Please see the Pacific Shellfish Aquaculture Application Guide for details. The closure information can change at any time, please refer to <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/biotox/index-eng.html> for the most up to date information.





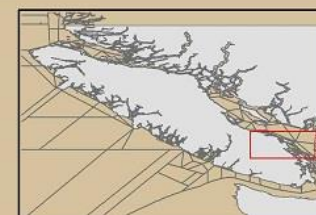
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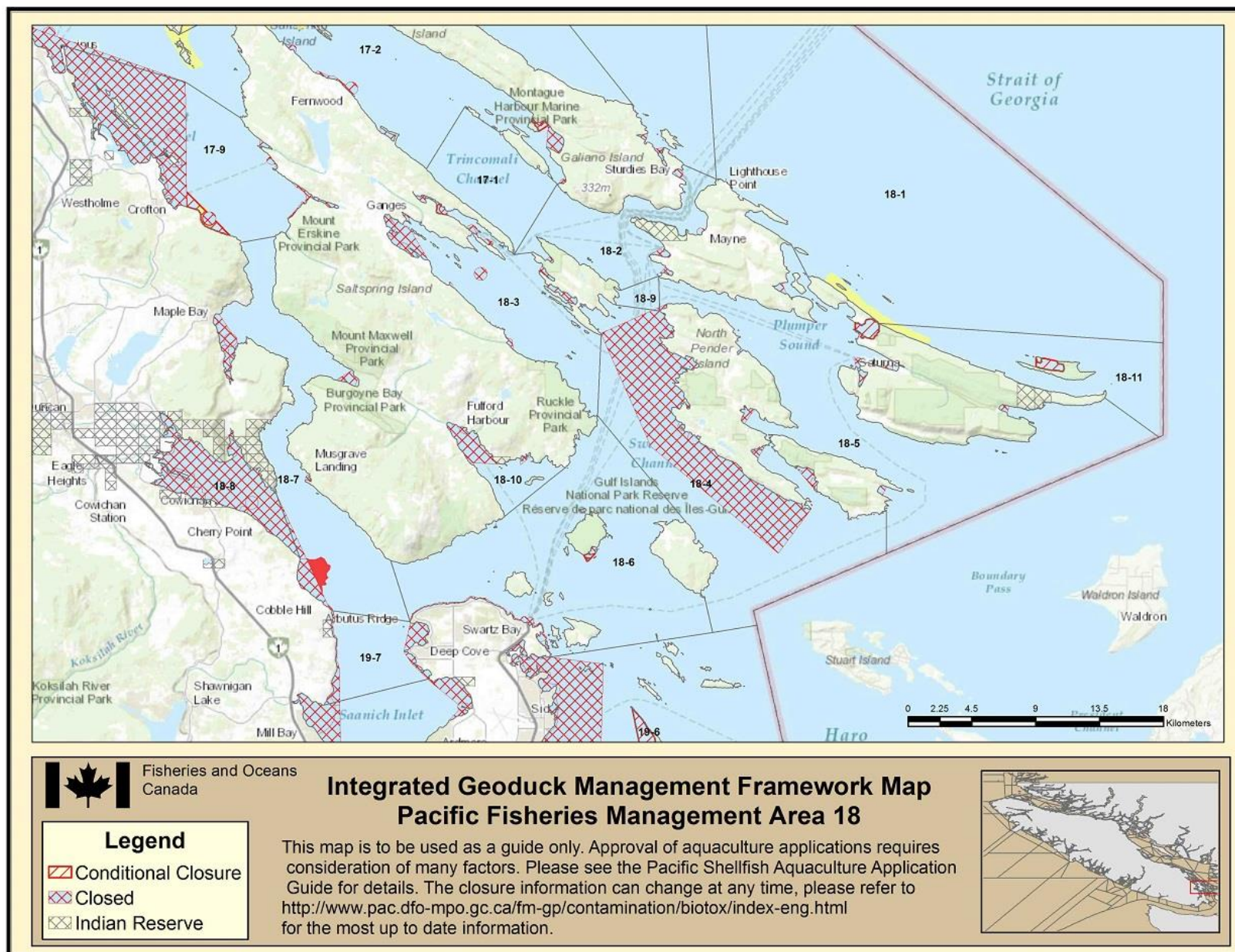
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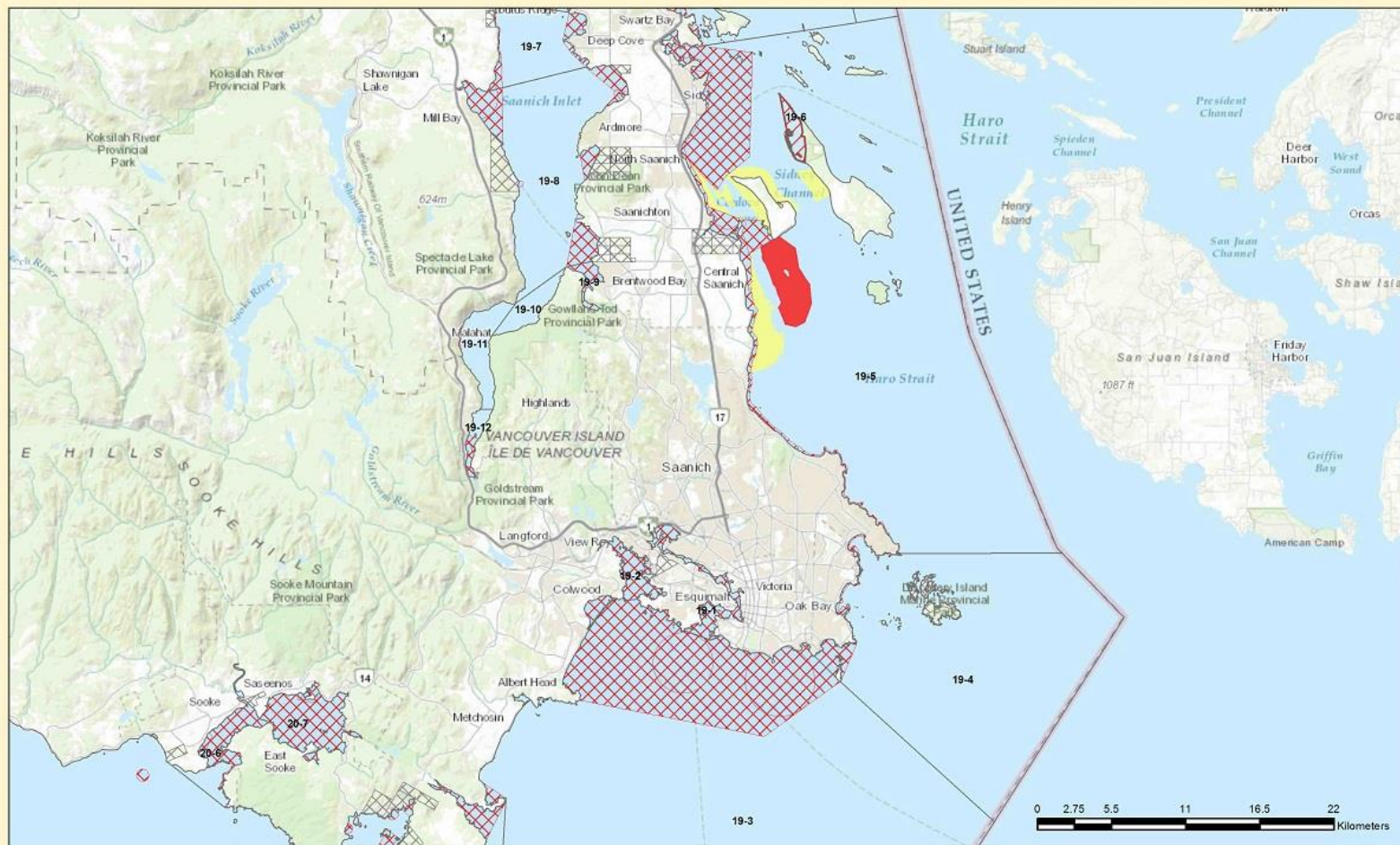
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- Closed
- Indian Reserve

Integrated Geoduck Management Framework Map Pacific Fisheries Management Area 17

This map is to be used as a guide only. Approval of aquaculture applications requires consideration of many factors. Please see the Pacific Shellfish Aquaculture Application Guide for details. The closure information can change at any time, please refer to <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/biotox/index-eng.html> for the most up to date information.







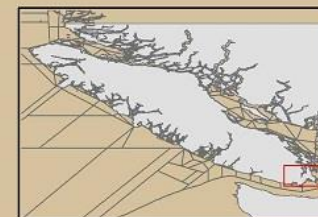
Fisheries and Oceans
Canada

Legend

- Conditional Closure
- Closed
- Indian Reserve

Integrated Geoduck Management Framework Map Pacific Fisheries Management Area 19

This map is to be used as a guide only. Approval of aquaculture applications requires consideration of many factors. Please see the Pacific Shellfish Aquaculture Application Guide for details. The closure information can change at any time, please refer to <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/biotox/index-eng.html> for the most up to date information.





File No.:

DATE OF MEETING: April 12, 2018 Gabriola Local Trust Committee
TO: Local Trust Committees and Bowen Island Municipality
FROM: David Marlor, Director of Local Planning Services
SUBJECT: Approval Process for Water Supply Systems on Salt Spring Island

PURPOSE

At its regular business meeting on February 7, 2018, the Executive Committee received the report “Approval Process for Water Supply Systems on Salt Spring” from the Salt Spring Island Local Trust Committee. The Executive Committee passed the following resolution:

that staff forward the report on approval processes for water supply systems on Salt Spring Island to local trust committees and Bowen Island Municipality.

ATTACHMENTS

1. Attachment 1: Approval Process for Community Water Systems on Salt Spring Island

BRIEFING

To: Executive Committee **For the Meeting of:** February 7, 2018

From: Susan Palmer, MCIP, RPP **Date Prepared:** January 11, 2018
SLP Consulting
Salt Spring Island Team

SUBJECT: Issue Paper: Approval Processes for Water Supply Systems on Salt Spring Island, January 11, 2018, amended

PURPOSE:

Salt Spring Island Local Trust Committee (SSI LTC) referred the attached report (*Approval Processes for Water Supply Systems on Salt Spring Island*) at its meeting on January 18, 2018 to the Executive Committee for information. The key purpose of the report was to inform the SSI LTC of the agencies involved in approving water supply systems and to propose options for implementing Official Community Plan policy regarding water supply and the following Islands Trust Policy Statement policy that:

neither the density or intensity of land use is increased in areas known to have a problem with the quality or quantity of the supply of freshwater.

It was MOVED and SECONDED,

that the Salt Spring Island Local Trust Committee forward the “Approval Process for Water Supply Systems on Salt Spring Island” report to Executive Committee for information.

ATTACHMENT(S):

1. Report: Approval Process for Water Supply Systems on Salt Spring Island

Prepared By: Susan Palmer

Reviewed By/Date: David Marlor, Director of Local Planning Services/Jan 31, 2018

V3 Water Paper.docx

SLP Consulting

1/18/2018 – including amendment submitted at the Salt Spring Island Local Trust Committee Meeting

EXECUTIVE SUMMARY

In response to an application to rezone land to allow for a multi-family residential project, the Salt Spring Island Local Trust Committee (LTC) directed staff at its meeting on October 5, 2017 to:

Report back regarding the findings of an investigation of the approval process for water supply and water quantity requirements for multi-unit residential developments.

Key findings of the investigation are:

- Islands Trust Policy Statement Policy 4.4.2 stipulates the importance of ensuring an adequate supply of water prior to increasing the density or intensity of land use ('neither the density or 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')
- the Salt Spring Island Official Community Plan (OCP) reinforces the importance of ensuring an adequate supply of water to support proposed increases in density; the OCP supports the use of alternative water sources such as groundwater, rainwater and greywater
- Islands Trust does not have a role in approving water supply systems
- the approval process(es) for water supply systems involves several provincial and local government agencies (Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD), Vancouver Island Health Authority (VIHA) and Capital Regional District Building Inspections (CRD))
- different sources of water may be used to meet demand for different types of water use (e.g., rainwater may be used for irrigation)
- indoor water use (potable water) may be met through groundwater or surface water sources approved by VIH
- demand for indoor water use is calculated on a per capita basis and the approving agencies (VIHA and CRD) have guidelines and/or regulations that stipulate the occupancy rates used to calculate water demand. Both agencies have the ability to exercise discretion in the application of the guidelines and/or regulations to address situations where the occupancy rates may not be typical
- generally, approval of a water supply system would occur after zoning is in place due to the level of detail needed and the high cost of preparing the application (e.g., engineered design of the water supply system)
- housing for special needs populations may have different occupancy rates than those set out in provincial guidelines and may require VIHA to exercise discretion in determining an appropriate occupancy rate from which to assess the proposed water supply system.

Six options for implementing Islands Trust and Salt Spring Island Official Community Plan policy regarding land use and water supply were evaluated. Five options are consistent with Islands Trust

mandate (land use planning) and the tools available to implement policy and enforce bylaws. All five options require that the water supply system be capable of supporting the proposed number of dwelling units prior to adoption of the rezoning bylaw. An option to cap occupancy rates through a legal mechanism such as an affordable housing agreement or a restrictive covenant is not recommended because Islands Trust does not have a legislative tool to enforce occupancy. That is, occupancy cannot be enforced through the land use bylaw.

APPROVAL PROCESSES FOR COMMUNITY WATER SYSTEMS ON SALT SPRING ISLAND

Due to the moratorium placed by North Salt Spring Water District (NSSWD) on adding new connections to their water system, the Salt Spring Island Local Trust Committee (LTC) has received numerous rezoning applications for multi-unit housing projects that rely on alternative water sources to service the proposed developments. All of the proposed projects include affordable housing either for the entire project or as an amenity bonus. The LTC has identified provision of affordable housing as a priority issue and therefore has indicated its desire to give serious consideration to these proposals.

Providing water to multi-unit housing developments using alternative water sources (groundwater, rainwater and water conservation) is treading into new territory for the LTC and raises numerous questions about how such applications should be assessed. In addition to Trust and OCP policies, there are numerous provincial guidelines and regulations that regulate water source and the design, construction, operation and maintenance of a water supply system.

On October 5, 2017, the LTC directed staff to:

Report back regarding the findings of an investigation of the approval process for water supply and water quantity requirements for multi-unit residential developments.

The purpose of this report is to:

- clarify the approval process for an independent water supply system and the approval agencies involved
- review Official Community Plan (OCP) policy regarding the use of groundwater, rainwater and water conservation (e.g. greywater) as it relates to the determination of density
- identify the criteria used by approval agencies to determine demand for water for multi-unit residential developments
- propose options for implementing OCP water supply policy
- assess proposed options
- make recommendations for a consistent approach to assessing rezoning applications based on new water supply systems and the use of alternative water sources
- test the proposed approach using the Croftonbrook rezoning application (SS-RZ-2017.4) as an example.

1. APPROVING AGENCIES AND SEQUENCE OF WATER SUPPLY SYSTEM APPROVALS

Development proposals that require rezoning based on a community water supply system using groundwater must receive approval from four different agencies before they can proceed to the construction phase. First, approval of a groundwater license from the Ministry of Forest, Lands Natural Resource Operations and Rural Development (MFLNRORD) is required to support the rezoning application. Rezoning is the next phase of the approval process and decisions on rezonings are made by the LTC. The third phase involves Vancouver Island Health Authority (VIHA) which is responsible for issuing construction and operating permits for water supply systems. The final phase of a project requires issuance of a building permit from CRD Building. Table 1 elaborates on the mandate for each

agency and provides an overview of the criteria and conditions considered before a license or permit is approved. Figure 1 illustrates the approval sequence for rezoning based on a rural residential community water supply system and the approving agencies involved.

A. Well Water License (MFLNRORD)

Application to the Water Authorization Section of the MFLNRORD for a well water license is a first step for approval of a water supply system. This determines the amount of groundwater that may be withdrawn without impacting long-term sustainability of the water supply for the proposed development as well as supply to neighbouring wells and water sources that support fish habitat. The SSI OCP also requires that agricultural activities not be impacted.

Water quality is also determined at this stage and any measures required to ensure the water supply meets Canadian drinking water guidelines are identified.

B. Zoning (LTC)

The rezoning phase is a preliminary design phase that sets the basic parameters for the development – primarily land use, density and/or intensity of use, built form, access and traffic circulation among other things. The rezoning application is assessed in terms of how well it addresses Trust Policy Statement directives and OCP policy. Applicants must demonstrate that there is sufficient water to support the proposed development based on provincial regulations. As well, community input is invited and the LTC considers all of the relevant information at a public hearing before proceeding with third reading of a bylaw. A schematic plan is often provided at this stage to assess whether the site is suitable for the proposed land use.

C. Community Water Supply System (VIHA)

VIHA defines a water supply system as a system which services more than one dwelling unit.

Water supply systems must be designed and operated to ensure that there is sufficient water to service the proposed development and that the quality of water meets the Guidelines for Canadian Drinking Water Quality. The focus is on ensuring a safe drinking water supply.

There are two main considerations regarding water supply systems – water demand and water source.

i. Water Supply System Construction Permit

The Drinking Water Protection Regulation requires that a construction permit be obtained from a Public Health Engineer or Drinking Water Officer prior to construction of the water supply system (VIHA). The Guidelines for the Approval of Water Supply Systems recommend that application for a construction permit should be made at least 60 days before construction is anticipated to begin. Applicants are advised to refer to the

MFLNRORD Design Guidelines for Rural Residential Community Water Systems, 2012 (Design Guidelines) prior to designing the system and applying for a construction permit.

ii. **Water Supply System Operating Permit**

The Drinking Water Protection Regulation requires that an operating permit be obtained from a local Environmental Health Officer or the Drinking Water Officer before the water source(s) can be used. This permit would be issued after a water supply system has been constructed.

D. Building Permit (CRD Building)

Before the Building Inspector can issue a building permit they must ensure a sufficient supply of water to meet all water demand requirements of the specific project. This includes water for indoor use, irrigation and fire protection. If a community water supply system is proposed, issuance of a construction permit by VIHA must be confirmed. In the event that water for fire protection is being provided by a water district, confirmation from the relevant agency (i.e., North Salt Spring Water District – NSSWD) must also be received.

The BC Building Code makes provision for consideration of alternative solutions including:

- the use of greywater for toilet flushing
- the use of rainwater for irrigation
- alternative occupancy rates for determining indoor use water demand
- enhanced water conservation features.

Alternative solutions must be supported by evidence provided by a code consultant and/or a report from a professional engineer certifying that the alternative proposal is appropriate for the specific situation.

2. TRUST AND OCP POLICY

Broad land use policy is established in the entire Trust area in the Islands Trust Policy Statement. Policy (4.4.2) requires that Official Community Plans (OCP) and regulatory bylaws (e.g. zoning bylaws) ensure that:

‘neither the density or 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’.

This statement is reinforced by OCP objectives and policies aimed at protection of water resources (Policy A.4.2.2) and ensuring that proposed developments have an adequate supply of potable water and water for fire protection (Policy B.2.2.3.b). The SSI Official Community Plan (OCP) supports the use of rainwater and water conservation programs to supplement the use of groundwater to meet the demand for water for proposed projects (Policies C.3.2.2.1 and C.3.3.2.2). (See Attachment 1 for OCP

Policies) That is, the policy supports using greywater and rainwater catchment in order to achieve higher densities than would otherwise be possible.

3. CRITERIA USED BY APPROVING AGENCIES FOR ASSESSING WATER SUPPLY

Criteria used in determining water demand for a project varies dependent on the mandate of each agency and the stage of the proposal. Different agencies also have different roles in evaluating the appropriateness and capacity of the proposed supply. Following is an overview of agency mandate, evaluation criteria and conditions.

A. Water Demand

i. LTC

Land Use Bylaw 355 does not specifically address standards for water supply unless a subdivision is involved. In that context, it notes that a proposed water supply system is subject to provisions of VIHA regulations (LUB Sec 5.5.2) (See Attachment 2). Trust and SSI OCP policy require that the SSI LTC ensure an adequate supply of water at the rezoning stage. Options for establishing criteria for a rezoning application are provided in the following section (Section 4).

ii. VIHA (Water Supply System – Construction)

MFLNRORD's *Design Guidelines for Rural Residential Community Water Systems* (2012) identify four basic demand parameters for the design of a new water system:

- a. Average Day Demand (ADD) is used *"to verify source capacity in form of license limitations; to derive peak demands from metering data"*
- b. Maximum Day Demand (MDD) is a *"critical design parameter for sizing reservoirs, pumps and treatment works between source and balancing storage..."*
- c. Peak Hour Demand is used to size *"pipes, pumps and treatment works between balancing storage and customers"*
- d. Fire Flow Demand is a *"critical design parameter for determining maximum network flows, verifying minimum system pressures, sizing pipes/pumps/treatment works between fire storage and customers/fire hydrants."*

MDD is the *"single highest total 24 hour daily consumption occurring over a one year period"* and is comprised of the following components:

- a. Indoor demand – is calculated based on a **per capita demand of 230 Litre/day and occupancy rates based on the BC census (e.g., 2.5 persons per multi-family dwelling)**

Indoor water demand is further broken down as follows:

- Drinking
 - Sanitary
 - Toilets
 - Showers/bathwater
 - Dishwashing, household cleaning
 - Laundry
- b. Irrigation demand – is dependent on a number of factors such as climatic zone, evapotranspiration, size of area, soil type, type of crop, etc.
- c. Water loss allowance- is calculated based on physical design parameters such as length of mains, number of service connections, average operating pressure
- d. Fire flow demand - is based on the Fire Underwriters Survey.

The *Design Guidelines* state that when groundwater is the proposed source, the **Maximum Day Demand (MDD) must not exceed total developed groundwater capacity or the dependable yield of the well**. Total water demand for a project is determined in accordance with Table 2: Water Demand.

iii. CRD Building

BC Building Code bases all design parameters on two persons per bedroom. An applicant can propose alternative solutions (e.g., different occupancy rates per bedroom) under seal of a professional engineer (civil).

B. Water Source

If not connected to a public water utility, groundwater is typically the major source for supplying water to service a development. A well water license is issued by MFLNRORD which will specify how much water may be withdrawn on a daily basis. If the availability of groundwater is not sufficient to meet the needs of the development, supply may be supplemented by water from a water district for fire protection and/or the use of rainwater and/or greywater as allowed by provincial regulations. However, use of these latter two water sources is limited as follows:

- Rainwater – irrigation
- Greywater – toilet flushing.

Demand for water can also be reduced through other water conservation measures such as metering, low- flush toilets, composting toilets, low-flow plumbing fixtures, and water efficient appliances (washing machines and dishwashers).

Highlights of the approval process for the use of a water source are outlined in Table 3: Water Source.

4. OPTIONS FOR IMPLEMENTING OCP POLICY

Islands Trust mandate is land use planning and Trust policy is clear that proposals must have sufficient water to support proposed density and intensity of land use. Tools available to Islands Trust for managing density and intensity relate to the built form and include factors such as number of dwelling units, floor area, site coverage, building height, and building envelope. Proposals that require more water than is available through groundwater sources alone (e.g., rainwater, greywater, etc.), pose a dilemma at the zoning stage since approval of a water supply system is granted by other agencies after zoning is in place. It is generally not feasible to design a water supply system until zoning is secured due to the level of detail the design entails and the costs involved in engineering the design of the system.

VIHA and CRD Building play important roles in ensuring a sufficient supply of water for developments that propose to service the development through a community water supply system. At a minimum, an approved water construction permit will take into account indoor use based on the number of dwelling units and water loss allowance. A building permit cannot be issued unless there is a proven supply of water sufficient to meet all water demands generated by a specific project design (e.g. indoor use, water loss allowance, irrigation and fire protection). Both agencies use occupancy rates as the basis for determining water demand for indoor use for residential projects. Occupancy rate refers to the number of people per dwelling unit or bedroom.

If the well water license authorizes daily withdrawal that is less than that required in the Subdivision Regulations for dwelling units, submission of a preliminary water study by a civil engineer is needed in order to confirm that the Maximum Day Demand (MFLNRORD *Design Guidelines*) will not exceed the dependable yield of the well. The content recommended for the water report is outlined in Section 6 (Recommendations for Implementing Trust and OCP Policy).

5. ASSESSMENT OF OPTIONS

Assessment of rezoning applications that rely on alternative water sources requires the following information in addition to a hydrogeological report:

- Confirmation that a well water license has been issued from MFLNRORD
- submission of a preliminary water study prepared by a civil engineer that:
 - confirms there is sufficient groundwater available to support all water demand types for the proposal (i.e., Maximum Day Demand does not exceed the licensed daily withdrawal amounts), or
 - where MDD would exceed the sustainable yield as set out in the well water license, the preliminary water study shall:
 - identify all proposed water sources

- identify how each type of water demand will be serviced (i.e., which water source will service which water demand type)
- estimate the total number of residents the available groundwater will support based on the sustainable yield of the well (as approved in the well water license) and use of supplementary water sources (e.g., greywater, rainwater)
- estimate how many dwelling units the proposed water supply system would service based on occupancy rates set out in MFLNRORD's *Design Guidelines for Rural Residential Community Water Systems*.

Six options were developed to test how Trust and OCP policy regarding density and the adequacy of water supply could be satisfied under different conditions (Table 4: Assessing Alternative Options for Implementing Trust and OCP Water Policy). The options were developed during discussions with the applicant for the Croftonbrook proposal. Analysis of the options was prepared by SSI Islands Trust staff and planning consultant. Two key situations were tested:

- occupancy rates are based on those set out in provincial guidelines and regulations
- occupancy rates are lower than those set out in provincial guidelines and regulations.

Options One to Three rely on occupancy rates set out in provincial guidelines and regulations (MFLNRORD Design Guidelines and BC Building Code) as the basis for determining how many dwelling units (density) the supply of water can support. **These options are all consistent with the Trust mandate, the number of dwelling units there is sufficient water for would be known or confirmed prior to bylaw adoption.** All of these options can be enforced through the bylaw. Options Four to Six are based on occupancy rates that relate to a specific project design and/or target occupant type (e.g., those at risk of homelessness).

Options Four and Five are proposed in order to allow consideration of proposals that have unique household and water supply characteristics (e.g., small household size and use of alternative water sources). Option Four sets density based on built form parameters (e.g. dwelling unit size) intended to limit total occupancy. The number of dwelling units there is sufficient water for would be known at the public hearing stage.

Option Five proposes that third reading be given to the bylaw and that final bylaw adoption be withheld until confirmation has been received from VIHA that a water supply system construction permit has been issued that would support the proposed density. This option has the advantage of providing the applicant with the comfort that the rezoning will proceed provided the condition for proof of sufficient water supply has been met. It further ensures that density would not be increased unless the water supply system construction permit verifies a sufficient supply of water to service the proposed development. If a permit is issued for a lower density, the applicant would need to request that third reading be rescinded and re-read with the lower density consistent with the approved water supply system construction permit.

6. RECOMMENDATIONS FOR IMPLEMENTING OCP POLICY

Trust and OCP policy require the applicant to demonstrate there is sufficient water for the density (number of dwelling units) they are seeking approval for. In situations where there is insufficient groundwater to meet all water demand types in accordance with the Subdivision Regulations, then consideration of the use of rainwater for irrigation and greywater for toilet flushing would be consistent with OCP policy. As well, water for fire protection purposes may, subject to their approval, be supplied by NSSWD for proposals that are within the service area. Use of these other water sources reduces the demand for groundwater so that only drinking water and sanitary requirements (except potentially for toilet flushing) need be provided for.

It is *recommended* that rezoning proposals that rely on alternative water sources be assessed based on information that can be confirmed at the time of public hearing (Options 1-4). Alternatively, LTC could consider giving third reading of a bylaw and withhold final adoption pending confirmation from VIHA that there is a sufficient supply of water to support the proposed development. In all cases, information required prior to public hearing would include a preliminary water study submitted by a professional engineer (civil). The study should:

- identify all proposed water supply sources
- identify the amount of water available from each water supply source
 - if the proposal relies on NSSWD to supply water for fire protection purposes, written confirmation of the agreement is required from the District
- identify which water source will supply each type of water demand
- estimate how much water is required to service each type of water demand
- estimate how many residents the net water supply will support based on demand for indoor use (VIHA standards - 230 l/person/day)
- calculate how many dwelling units the proposed water supply system would support based on occupancy rates set out in MFNLRORD Design Guidelines.

Note: The MDD must not exceed total developed groundwater capacity as set out in the well water license.

It is noted that preparation of a preliminary water study by a professional engineer does not guarantee that the approving agencies would accept it without modification. However, SSI Islands Trust staff is comfortable that it is reasonable to rely on the conclusions of such a report at the public hearing stage based on reliance on professional standards. If the LTC wants to consider situations where there is insufficient water to meet MDD based on MFLNRORD occupancy rates, there are two recommended options for advancing a bylaw.

- i. The bylaw would be drafted with specific parameters defining the maximum number of dwelling units, maximum floor areas for specific unit types and the maximum number of dwelling units based on floor area (Option 4). The number and size of units should be calculated based on an occupancy rate of 2 persons per bedroom as per the BC Building Code. This approach is consistent with the Trust mandate for land use and would be enforceable through the bylaw. It poses a slight risk that overcrowding may occur that may lead to overuse of the groundwater. This approach limits the applicant's flexibility to vary the design of the project as they get into the more detailed design phases of the project.
- ii. Final adoption of the bylaw is withheld until a water supply system construction permit has been issued by VIHA (Option 5). This option has the advantage of providing assurance to the applicant that the rezoning will be finalized pending confirmation from VIHA that the water supply system is sufficient to meet the water demands of the proposal. It also gives LTC the tools to implement ITPS and OCP policy by withholding final bylaw adoption if confirmation of sufficient water supply for the proposed density is not confirmed through the VIHA approval process. In this event, LTC has the option to rescind third reading of the bylaw and, subject to the applicant's consent, to re-read it with a density consistent with that set out in the VIHA water supply construction permit.

7. CROFTONBROOK: HOW MUCH DENSITY CAN THE WATER SUPPLY SUPPORT

The Croftonbrook proposal for the provision of water is relatively complex – it relies on a combination of groundwater, greywater, and rainwater to meet water needs for indoor use, toilet flushing and irrigation respectively. NSSWD has confirmed that they will provide water for fire fighting and suppression – i.e., a sprinkler system as well as fire hydrants. With respect to supply, the MFLNRORD *Design Guidelines for Rural Residential Community Water Systems* stipulate that the “total developed groundwater capacity or dependable yield of well(s) must equal or exceed the Maximum Day Demand”.

A. Supply:

A preliminary water study prepared by Stantec is based on the following information and assumptions for water supply:

- A maximum of 19.2 cubic metres of water per day or 19,180 litres per day may be withdrawn per day in accordance with the well water license issued by MFLNRORD
- Greywater use for toilet flushing based on LEED Canada data
- Rainwater use for irrigation.

B. Demand:

The Stantec study calculates water demand based on assumptions provided by the applicant (78 residents in 54 dwelling units) and applies MFLNRORD Operations Design Guidelines design parameters to determine Maximum Day Demand (MDD). The calculation for MDD is based on:

- Estimate of water loss allowance based on project design assumptions (e.g., number of connections, pipe length, etc.)
- Groundwater use for all indoor uses except for toilet flushing (assuming 78 residents)
- Greywater use for toilet flushing
- Irrigation demand is met solely through rainwater catchment
- NSSWD provides water for sprinklers and fire hydrants (NSSWD has confirmed they will provide the necessary hook-ups).

Accordingly, the MDD for the project equals 18,240 litres per day. Based on these assumptions, the Stantec preliminary report indicates that there is sufficient water to support 78 residents assuming that greywater is used for toilet flushing.

C. Analysis

The occupancy rates assumed in the Stantec study were provided by the applicant based on the housing director's experience to date managing Salt Spring subsidized housing and the small size of the proposed dwelling units.

These rates are not consistent with those set out in the MFLNRORD's *Design Guidelines* (e.g., 2.5 persons per multi-family dwelling).

i. MFLNRORD's *Design Guidelines*

Using MFLNRORD's occupancy rates, 78 residents would result in the equivalent of 31 dwelling units. Conversely, 54 dwelling units would be assumed to support 135 people.

The Stantec study did not consider how many residents there is sufficient water for if greywater is not used. The following calculations indicate that 71 residents could be supported if greywater is not used for toilet flushing:

Total amount of groundwater available (approved groundwater license): 19,180 L/day
Estimate of water loss (Stantec study): 2,640 L/day

Amount of water available for indoor use: 16,540 L/day

VIHA per capita demand for indoor use: 230 L/day

There is enough water for $(16,540/230)$: 71 residents

ii. CRD Building Code Requirements

The BC Building Code establishes an occupancy rate of 2 persons per bedroom for all design parameters. Based on this criterion, the unit mix in the Croftonbrook proposal would require water for 144 residents.

iii. Alternatives

VIHA and CRD Building both have discretion in applying design parameters related to occupancy rates. With respect to VIHA approvals for a water supply construction permit, it is feasible that the applicant may receive approval for more dwelling units than the usual occupancy rates would yield based on small unit sizes proposed (especially for units less than 400 sq.ft.) and submission of supporting information acceptable to the agency. In this event, the actual number of dwelling units VIHA deems the water system is suitable for would not be determined until after third reading has occurred— when the water construction permit is approved.

Similarly, the applicant can submit an alternative solutions report to CRD Building to support the proposal for a reduced occupancy rate based on the relatively small unit sizes. It would not be known at the public hearing stage whether or not the Building Inspector would approve a building permit based on alternative occupancy rates since a permit cannot be applied for until zoning is in place.

A proposal based on land use planning tools that LTC can employ for converting occupancy rates into dwelling unit density is set out in Attachment 1.

8. CONCLUSIONS

This paper provides an overview of the approval process for water supply systems and examines the various methods for addressing Trust and SSI OCP policy aimed at ensuring there is a sufficient supply of freshwater to support proposed land use density. The tools available to the Trust and LTC to ensure this policy is addressed appropriately are limited to land use and built form parameters and do not include the ability to control occupancy rates. VIHA and CRD Building both play important roles in ensuring that proposed projects have a sufficient supply of water to meet demand. Further, VIHA is also charged with ensuring that water supply systems comply with limits on the amount of groundwater that may be withdrawn on a daily basis.

Six options were assessed for addressing Trust and OCP water policy when a new water supply system is proposed types (Table 4: Assessment of Options for Implementing Trust and OCP Water Policy). Five options explore the situation when there is insufficient groundwater to meet all water demand types. The assessment indicates that there are five viable options (Options 1-5) under the Trust mandate – all rely on submission of a preliminary water study by a professional engineer (civil) that estimates how many residents that water supply will support and converts that number into dwelling units.

The fact that both VIHA and CRD Building must also ensure the sufficiency of water supply for a specific project, does not relieve the Trust and LTC from the obligation to address the Trust Policy Statement directive that:

‘neither the density or 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’.

As previously identified in this paper, these agencies have specific mandates to fulfill that are distinct from land use planning. They use design parameters suitable to their mandate, such as occupancy rates, for ensuring that water supply is sufficient. The Trust and LTC must rely on the tools available to them under the *Islands Trust* and *Local Government Acts* for implementing the mandate and policies of the Trust (land use, density, built form, etc.). This has implications for how rezoning proposals that rely on the approval of a water supply system by VIHA can be evaluated by the Trust and LTC. In summary, this means that either:

- the proposal demonstrates a sufficient supply of water for the proposed number of dwelling units based on provincial occupancy rates, or
- final adoption of the bylaw is withheld pending issuance of a water supply system construction permit from VIHA confirming sufficient water supply to service the proposed development.

Figure 1: Sequence of Water Supply Approvals and Approving Agencies

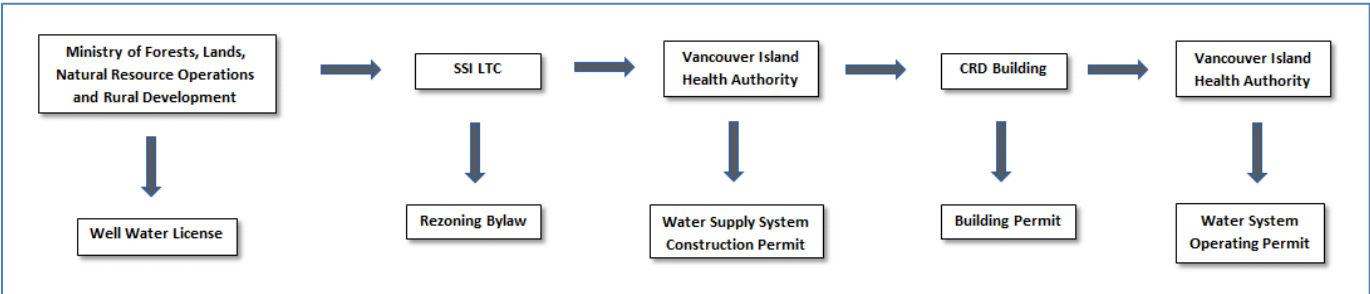


Table 1: Water Supply Systems Approval Process

License/Permit	Approving Agency	Mandate	Considerations and Conditions
Well Water License	MFNRORD – Water Authorization Branch	1. Protect quality and quantity of groundwater source 2. Approve groundwater use for drinking water, irrigation, firefighting, water loss allowance, agriculture, industry, etc.	1. Results of hydrogeological report and drill tests 2. Specifies how much water may be withdrawn on a daily basis 3. Specifies treatment to make water potable (if necessary)
Water Supply System Construction Permit	VIHA-Water Supply Systems Construction	1. Ensure safety of drinking water supply from source to tap	1. Water Quantity: Based on Maximum Day Demand (MDD) a. Indoor Use: Based on per capita demand for drinking water, showers, laundry, household cleaning, toilet flushing b. Average Day Demand (ADD): Used to derive peak demands and to verify source capacity for lake sources c. Water Loss Allowance: Based on specifics of system design and construction d. Irrigation: Based on specifics of land area, climatic zone, soil type, etc. e. Firefighting: Fire Underwriters Survey <i>Note: MDD cannot exceed dependable yield of well.</i> 2. Water Quality: Treatment based on Canadian guidelines for safe drinking water 3. Other: a. Must approve water source b. VIHA requires confirmation from a water district that it will agree to independent system w/l their service area before moving ahead with the application

License/Permit	Approving Agency	Mandate	Considerations and Conditions
Building Permit	CRD	Ensures building code requirements are met for drinking water quality and water quantity needs for indoor, irrigation, and firefighting purposes	1. Requires confirmation from VIHA re water system construction permit. 2. Requires confirmation from NSSWD that water will be provided for firefighting purposes. 3. Determines if greywater can be used for toilet flushing.
Water System Operating Permit	VIHA-Water System Operations	Ensures water supply system is operated according to provincial regulations for safe drinking water	1. Certifies operator – annual renewal required 2. Monitors system operation

Table 2: Water Demand

Water Demand Type	Approval Authority	Permit	Legislation, Regulations and Guidelines	Water Quantity
Indoor Use • Drinking • Sanitary ○ Showers/bathwater ○ Toilet Laundry, dishwashing, etc.	VIHA -Water Supply System	Construction permit for water supply system	Drinking Water Protection Act and Regulations	230L/person/day
	CRD – Building Permit	Building permit	BC Building Code	230 L/day based on 2 persons /bedroom
Water Loss Allowance	Water Supply System – VIHA	Construction permit for water supply system	Drinking Water Protection Act and Regulations	Variable*
Irrigation	Water Supply System – VIHA	Construction permit for water supply system	Drinking Water Protection Act and Regulations	Variable**
	CRD Building	Building permit	BC Building Code	
Fire Protection	CRD Building	Building permit	BC Building Code	NSSWD***
Total	MOTI		Subdivision Regulations	1600L/DU/day

*Factors that determine the water loss allowance relate to specifics of water system design and construction – length of pipes, etc.

**Factors that determine water demand for irrigation include area of land to be irrigated, climatic zone and evapotranspiration rates, crop or planting types, etc.

*** NSSWD has confirmed a commitment to provide water for fire protection purposes (sprinklers and fire hydrant for the Croftonbrook proposal).

Table 3: Potential Water Sources

Water Source	Approval Authority	Legislation, Regulations and Guidelines	Water Demand Type	License/Permit Required
Groundwater	MFLNRORD - Water Authorizations Section	Water Sustainability Act and Regulations	Potentially all	Well water license
Rainwater	Drinking Water Protection Act and Regulations	Drinking Water Protection Act and Regulations	Irrigation	Construction permit for water supply system
	CRD Building	BC Building Code		
Greywater	CRD Building Inspections	BC Building Code	Toilet flushing	Building permit
Water Conservation	Water Supply System – VIHA	Drinking Water Protection Act and Regulations	All	Construction permit for water supply system
	Water Supply Operating – VIHA	Drinking Water Protection Act and Regulations	All	Operating permit for water supply system
	CRD Building Inspections	BC Building Code		Building Permit
Water District	NSSWD	Letters patent	Fire Protection	N/A

Table 4: Assessment of Options for Implementing Trust and OCP Water Policy

All options are for proposals that require construction of a new water supply system in order to provide sufficient water to service a proposed development. In all cases, the proposal would require submission of a preliminary water study prepared by a civil engineer. The options were developed in consultation with the applicant for the Croftonbrook application. The analysis was conducted by SSI Islands Trust staff and planning consultant.

Option 1: There is sufficient groundwater to meet all water demand types – the exception may be that NSSWD has confirmed they will supply water for fire protection (sprinklers and hydrant).

Occupancy rates are as set out in MFLRORD *Design Guidelines for Rural Residential Community Water Systems*.

Option 2: Greywater use is needed in order to supplement groundwater use for indoor water demand. Rainwater is used for irrigation. NSSWD has confirmed they will supply water for fire protection (sprinklers and hydrant) Occupancy rates are as set out in MFLRORD *Design Guidelines*.

Option 3: The engineer's preliminary water study indicates there is not sufficient water (groundwater with or without greywater) available to support the proposed number of dwelling units. The applicant chooses to either drill for more water and/or reduce the density so that there is sufficient water to support the proposed number of dwelling units. If another well is drilled, the new proposal shall be supported by issuance of another well water license and a revised preliminary water study.

Options 5-6: Occupancy rates are lower than those set out in provincial guidelines and regulations. This scenario can be adapted to include the potential use of greywater, rainwater and water from NSSWD for fire protection.

Option	Timeliness	Enforceability	Flexibility	Feasibility
Option 1: Proposed bylaw establishes maximum number of DUs based on preliminary water study	The number or dwelling units there is sufficient water for would be known at PH stage as per professional engineer's report.	Islands Trust would enforce any land use violations. VIHA would enforce regulations regarding water supply.	N/A	Fits well with Trust mandate Clear and transparent with respect to density considered at third reading
Option 2: Proposed bylaw establishes maximum number of DUs based on water supplied with and without use of greywater as per preliminary water study	The number of dwelling units there is sufficient water for would be known at PH stage as per professional engineer's report. Two densities would be proposed based on whether greywater was used.	As above. The number of DUs built would be confirmed at the building permit stage depending on whether greywater was used or not.	Provides flexibility to applicant.	As above.
Option 3: Drill another well and/or reduce the density to align with the supply of water	Application for a wellwater license takes 6-8 months. This may affect project funding.	As above for Islands Trust and VIHA.	This provides another option for applicants to consider.	As above.
Occupancy Rates are Lower than set out in Provincial Guidelines and Regulations				
Option	Timeliness	Enforceability	Flexibility	Feasibility
Option 4: Convert occupancy rates to DUs* (as per Attachment 3)	The number of dwelling units the proposed development is for would be known at public hearing stage.	As above.	Limited – the applicant needs to be confident of the size and type of units they intend to build	As above
Option 4: Convert occupancy rates to DUs* (as per Attachment 3)	The number of dwelling units the proposed development is for would be known at public hearing stage.	As above.	Limited – the applicant needs to be confident of the size and type of units they intend to build	As above
Option 5: Withhold final adoption of bylaw pending VIHA confirmation there is	Confirmation that there is there is sufficient water for the proposed number of dwelling units would not be known at the PH	As above. The construction permit for the water system should clearly indicate the number of dwelling	Reduces risk for the applicant to undertake detailed design of water supply system.	A conditional approval of the bylaw is consistent with normal practice provided the condition is

Option	Timeliness	Enforceability	Flexibility	Feasibility
sufficient water** if VIHA approval is for a lesser density, third reading could be rescinded and re-read with a density consistent with VIHA permit.	stage.	units the approval is for.		identified at the public hearing stage.
Option 6: Occupancy caps written into housing agreement or restrictive covenant	The number of dwelling units there is sufficient water for would not be confirmed at the public hearing stage. Occupancy would be determined by public hearing stage based on the preliminary water study.	Islands Trust does not have a mandate to enforce occupancy. Enforcement would require court action. CRD Building would be required to enforce any Building Code violations.	Islands Trust enforcement options would be limited to court action.	This is not feasible for Islands Trust as it extends beyond the land use planning mandate.

*Converting occupancy rates to dwelling units: This option provides a method for converting the number of occupants into physical design parameters that can be written in a land use bylaw – i.e., maximum number of total units, maximum floor areas per unit type (e.g., studio, one bedroom, 2 bedroom), and the maximum number for each unit type (Attachment 3). The purpose of capping dwelling unit size is to place a zoning bylaw control on the number of occupants each dwelling unit can accommodate.

**After third reading of the bylaw, the applicant would submit an application for a water supply system construction permit based on occupancy rates that are lower than those set out in MFLNRORD's *Design Guidelines*. VIHA would exercise their discretion in determining if the water supply was adequate to meet the water demand for the proposed number of dwelling units.

Final adoption of the bylaw would be withheld until confirmation is received from VIHA that a water supply system construction permit has been issued and that the number of dwelling units serviced is consistent with the proposed bylaw. This process is based on the premise that the Trust and OCP water policy would be satisfied because final adoption of the bylaw would not occur until after the project has been approved for a water construction permit and building permit.

Attachment 1: SSI Official Community Plan Policies

A.4.2.2 To maintain and restore the community's natural capital as represented by such items as our agricultural and forest land base, our potable water supplies, and primary value of our natural and unspoiled rural character.

B.2.2.2.3.b All rezoning applications for affordable housing projects should include evidence of

- a. need for housing
- b. an adequate water supply for potability and fire protection
- c. means of sewage disposal
- d. energy and water efficient building design
- e. not degrading a sensitive ecosystem
- f. not being sited in an area subject to hazardous conditions.

C.3.2.2.1 When the Local Trust Committee receives rezoning applications for land use inside the boundaries of a community water system, it will refer the application to the operators of the affected system. They will ask if water could be supplied to the new development, considering the needs of their existing customers and the provision of water for firefighting, and any properties already zoned for further development. When it considers zoning changes within a community water system, the Local Trust Committee will also consider the amount and percentage of any remaining supply capacity that would be used by the proposed new use. The Committee will not make zoning changes within a community water supply system if the change would mean water could not be supplied (under the existing license) to existing customers. It should not normally make zoning changes if the change would mean water could not also be supplied to vacant or underdeveloped properties already zoned for further development. Should such zoning changes be proposed, the applicant could be encouraged to supplant other water supplies so that the application should be considered. Examples are rainwater catchment, groundwater use or a water conservation program.

The Local Trust Committee should make an exception to the above policy within the North Salt Spring Waterworks District to allow community facilities or affordable housing projects to proceed. However such changes should only be made if the Committee is satisfied that the District is likely to receive a sufficiently larger water license.

C.3.3.2.2 In addition to Policy C.3.2.2.1, the Local Trust Committee should not make zoning changes within the North Salt Spring Waterworks District that could mean that water will not be available (under the District's existing license) for the following projects (in order of priority):

- a. essential services such as hospitals and schools needed within the district to serve the island's projected population
- b. special needs and affordable housing needed in the community.

Attachment 2: SSI Land Use Bylaw Excerpt

Section 5.5.2 Each lot in a proposed subdivision must be supplied with sufficient water to supply all uses, buildings, and structures permitted on the lot by this Bylaw according to the standards set out in Table 1. Where more than one use is permitted on a lot, the amount of water to be supplied is the sum of the amounts required for each permitted use, calculated separately.

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

Attachment 3: Converting Occupancy Rates into Dwelling Units

Use of this method requires submission of a preliminary water study by a professional engineer (civil) that:

1. Identifies all proposed water supply sources
2. Identifies the amount of water available from each water supply source
3. Identifies which water source will supply each type of water demand (indoor use, water loss allowance, irrigation, fire protection)
4. Estimates how much water is required to service each type of water demand (Maximum Day Demand (MDD))
5. Estimates how many residents the net water supply will support based on demand for indoor use (VIHA standards - 230 l/person/day).

Note: The MDD must not exceed total developed groundwater capacity as set out in the well water license.

Determination of Maximum Density:

Prepare a proposal based on the maximum number of residents that the water supply system can service:

1. Establish maximum floor areas based on BC Building Code occupancy rates of two persons /bedroom (e.g., two bedroom units would be a maximum of XX m²)
2. Establish the distribution of unit sizes
3. Calculate total occupancy based on the number of units and unit size
4. Total occupancy is not to exceed the number of residents there is sufficient water for as estimated in the engineer's preliminary water study.

Croftonbrook Example

The following calculations are based on the Croftonbrook rezoning proposal in order to test a method for converting occupancy rates into dwelling unit density. The application proposes a maximum of dwelling 54 units and 78 residents. The Stantec preliminary water study provides an estimate of water loss allowance and how much greywater would be used for toilet flushing (Scenario 2).

Scenario 1: Without Greywater

Total amount of groundwater available (approved groundwater license):	19,180 L/day
Estimate of water loss:	<u>2,640 L/day</u>
Amount of water available for indoor use:	16,540 L/day

VIHA per capita demand for indoor use:	230 L/day
There is enough water for (16,540/225):	71 residents

Average occupancy rate for 54 dwelling units (71/54): residents/DU	1.31
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*Single occupant units: Maximum floor area - 400 sq ft.

*Double occupancy units: Maximum floor area – 600 sq.ft.

Distribution: 37 single occupant units – 37 residents

17 double occupant units – 34 residents

Total Occupants: 71

Total Dwelling Units: 54

*These unit sizes need to be confirmed as being appropriate for one and two person occupancies.

Scenario 2: With Greywater (Stantec Study)

Total amount of groundwater available (approved groundwater license):	19,180 L/day
Indoor use (based on 230 L/day for 78 residents):	17,940 L/day
Greywater:	-2,340 L/day
Water Loss Allowance:	<u>+2,640 L/day</u>
Maximum Day Demand:	18,240 L/day

Average occupancy rate for 54 dwelling units (78/54): residents/DU	1.44
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*Single occupant units: Maximum floor area - 400 sq. ft.

*Double occupancy units: Maximum floor area – 600 sq.ft.

Distribution: 36 single occupant units – 36 residents

21 double occupant units – 42 residents

Total Occupants: 78

Total Dwelling Units: 54

*As noted above.

Sources

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