



Islands Trust

Preserving Island communities, culture and environment

**A NOTICE OF A BUSINESS MEETING OF
THE ISLANDS TRUST EXECUTIVE COMMITTEE ACTING AS A LOCAL TRUST COMMITTEE**
to be held Wednesday, October 9, 2013 at 10:00 am
Islands Trust Office, 700 North Road, Gabriola Island, BC

AGENDA

		Page No.	*Approx. Time*
1.	CALL TO ORDER		10:00 am
2.	APPROVAL OF AGENDA		
3.	CLOSED MEETING: The Islands Trust Executive Committee Acting as a Local Trust Committee closes the next part of the October 9, 2013 business meeting to discuss matters pursuant to Section 90(1)(i) of the <i>Community Charter</i> to consider advice subject to Solicitor-client privilege and that Staff be invited to attend this meeting.		
4	RECALL TO ORDER Rise and Report from Closed Meeting		
5.	MINUTES		10:45 am
5.1	Local Trust Committee Draft Meeting Minutes of May 3, 2013 – <i>attached for adoption</i>	1-8	
5.2	Section 26 Resolutions Without Meeting - <i>none</i>		
6.	BUSINESS ARISING FROM MINUTES		10:50 am
6.1	Follow-up Action List dated September 30, 2013 – <i>attached for information</i>	9	
7.	CORRESPONDENCE - <i>none</i>		
7.1	Letter dated July 12, 2013 from Association for Denman Island Marine Stewards regarding Geoduck Aquaculture - <i>attached</i>	10	
7.2	Letter dated May 31, 2013 from I.K. Birtwell, R.C. de Graaf, D.E. Hay and G.R. Peterson regarding Seaweed Harvesting on the East Coast of Vancouver Island - <i>attached</i>	11-40	
8.	REPORTS		11:00 am
8.1	Work Program		
	8.1.1 Top Priorities Report dated September 30, 2013 – <i>attached</i>	41	
	8.1.2 Projects List - <i>none</i>		

8.2	Trustee and Local Expenses		
8.2.1	Expenses posted to March 31, 2013 – Fiscal Yearend - attached	42	
8.2.2	Expenses posted to May 31, 2013- <i>attached</i>	43	
8.2.3	Expenses posted to June 30, 2013- <i>attached</i>	44	
8.2.4	Expenses posted to July 31, 2013- <i>attached</i>	45	
8.2.5	Expenses posted to August 31, 2013- <i>attached</i>	46	
9.	LOCAL TRUST COMMITTEE PROJECTS		11:10 am
9.1	Ballenas-Winchelsea Islands Proposed Official Community Plan Bylaw No. 27 and Proposed Land Use Bylaw No. 28	47-161	
9.1.1	Staff Report dated September 30, 2013 - <i>attached</i>		
10.	BYLAWS		
10.1	Proposed Bylaw No. 27 may be cited for all purposes as the “Ballenas-Winchelsea Islands Official Community Plan Bylaw, 2013” - <i>for consideration of second reading</i>		
10.2	Proposed Bylaw No. 28 may be cited for all purposes as the “Ballenas-Winchelsea Islands Land Use Bylaw No. 28, 2013.” - <i>for consideration of second reading</i>		
11.	NEW BUSINESS		
11.1	Local Trust Committee Proposed Meeting Schedule 2014 - <i>attached</i>	162	
11.2	2014-2015 Budget Submissions		
11.2.1	Memorandum dated August 1, 2013 - <i>attached</i>	163-171	
12.	ISLANDS TRUST WEBSITE		
12.1	Ballenas-Winchelsea Islands Pages – <i>for discussion</i>		
13.	NEXT MEETING DATE		
	• <i>To be announced</i>		
14.	ADJOURNMENT		12:30 pm

*Approximate time is provided for the convenience of the public only and is subject to change without notice.

**REGULAR BUSINESS MEETING OF
THE ISLANDS TRUST EXECUTIVE COMMITTEE ACTING AS A LOCAL TRUST COMMITTEE
FRIDAY, MAY 3, 2013 AT 10:00 AM
AT THE ISLANDS TRUST NORTHERN OFFICE,
700 NORTH ROAD, GABRIOLA ISLAND, BC**

MEMBERS PRESENT:

Sheila Malcolmson	Chair
Ken Hancock	LTC Member
David Graham	LTC Member
Peter Luckham	LTC Member

STAFF PRESENT:

Courtney Simpson	Regional Planning Manager
Marnie Eggen	Acting Planner 2
Theresa Warren	Recorder

1. CALL TO ORDER

Chair Malcolmson called the meeting of the Ballenas - Winchelsea Local Trust Committee to order at 10:05 am. She acknowledged that the meeting is being held in the traditional territory of the Coast Salish First Nations.

2. APPROVAL OF AGENDA

Chair Malcolmson asked if there were any additions or changes to the agenda. The agenda was approved by consent with the following amendments:

Add Late Items: 7.1.5 Letter from Pat McLaughlin, ADIMS Chair, dated April 28, 2013
 7.1.6 Email from David Steen, dated May 1, 2013

Add New Business Item

8.1 Grant Opportunity: Community to Community Forum email from Lisa Gordon, dated April 25, 2013

3. MINUTES

3.1 Local Trust Committee Draft Meeting Minutes of February 25, 2013 – attached for adoption

Chair Malcolmson asked for any amendments to the minutes. The minutes were adopted by consent with the following amendments:

- Strike "Trustee Luckham spoke to concern regarding resistance"
- Page 3 - Strike "unanimously"

- Page 3, second sentence strike “Planner Eggen spoke to the Regional District’s current intentions in regards to seaweed harvesting”
- Check with numbering of amended resolutions for clarity.
- Page 4, 6.1 Strike “Regional Planning Manager Simpson suggested moving to number 2 in the priorities list.”

3.2 *Section 26 Resolutions Without Meeting – none*

Received for information.

4. **BUSINESS ARISING FROM MINUTES**

4.1 *Follow-up Action List dated April 25, 2013 – attached for information*

Received.

4.2 *Consistency in Referencing the Local Trust Area and the Local Trust Staff Report dated April 18, 2013 – attached*

Planner Eggen summarized the report. Discussion followed regarding any legal impacts regarding use of the title Ballenas - Winchelsea Islands instead Executive Committee as a Local Trust Committee.

Chair Malcolmson asked Regional Planning Manager Simpson for her advice.

Regional Planning Manager Simpson spoke to the advice given by Legislative Services Manager Carmen Thiele and suggested bringing new information from the Executive Committee Acting as a Local Trust Committee back to her for discussion as they would need to adhere to the Islands Trust Act.

Legislative Services Manager Carmen Thiele was called for advice regarding a change to referencing the Executive Committee Acting as a Local Trust Committee to the Ballenas - Winchelsea Islands Local Trust Committee. Carmen noted that she had sent a letter requesting advice from the Ministry of Community, Sport and Cultural Development and was waiting to hear back prior to making decisions.

EXLTC-015-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee request staff advice on renaming using the names “Ballenas - Winchelsea Islands Local Trust Committee” and Local Trust Area.

CARRIED

5. **CORRESPONDENCE** – None.

6. REPORTS

6.1 *Work Program*

Received.

6.1.1 *Top Priorities Report dated April 25, 2013*

Received. Discussion ensued. Staff indicated that a Development Approval Information Bylaw would be included as an administrative bylaw in Top Priority number 2.

6.1.2 *Projects List – None.*

Received.

6.2 *Trustee and Local Expenses*

6.2.1 *Expenses posted to February 28, 2013- attached*

6.2.2 *Expenses posted to March 31, 2013- attached*

Received.

Chair Malcolmson called a recess at 11:05 am.

Chair Malcolmson reconvened the meeting at 11:14 am.

7. LOCAL TRUST COMMITTEE PROJECTS

7.1 *Executive Islands Area (Ballenas-Winchelsea Group) Draft Official Community Plan and Land Use Bylaw*

7.1.1 *Staff Report dated April 17, 2013 – attached*

Planner Eggen summarized the Staff Report.

Discussion followed regarding First Nation interests policy 3.10.1. and geoechange installation guidelines, section 5.1.1 24. Chair Malcolmson requested staff advice.

EXLTC-016-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee request staff to amend the Draft Official Community Plan, page 26, Section 24 by deleting “fresh”.

CARRIED

Discussion followed regarding the definition of “short-term vacation accommodation.”

Chair Malcolmson requested staff advice. Discussion followed.

EXLTC-017-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee request staff advice on the proposed Ballenas - Winchelsea Land Use Bylaw definition for short-term vacation accommodation as to whether changes are necessary.

CARRIED

Discussion ensued regarding Section 1.3 of the Official Community Plan first paragraph, last sentence.

EXLTC-018-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee ask staff to amend the Draft Official Community Plan in Section 1.3, first paragraph, final line by replacing “to resolve existing and future possible conflicts” with the words “for development and consideration”.

CARRIED

By consensus, the Executive Committee Acting as a Local Trust Committee moved to section 7.1.5 for discussion

7.1.5 Letter from Pat McLaughlin, ADIMS Chair, dated April 28, 2013

7.1.6 Email from David Steen, dated May 1, 2013

Received. Chair Malcolmson asked staff for advice. Discussion followed.

EXLTC-019-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee ask staff to draft a letter in response to David Steen and Pat McLaughlin’s letters.

CARRIED

Chair Malcolmson returned the discussion to 7.1.2 Draft Official Community Plan Bylaw No. 27

7.1.2 Draft Official Community Plan Bylaw No. 27 – attached

7.1.3 Draft Land Use Bylaw No. 28 – attached

In reference to page 24 of the agenda, Chair Malcolmson requested advice from staff regarding removal of the wording Executive Islands Area and

Executive Islands Planning Area from the Official Community Plan and using the Ballenas - Winchelsea Islands Planning Area instead.

EXLTC-020-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee ask staff to amend the Draft Official Community Plan by replacing the words "Executive Islands" with the words "Ballenas - Winchelsea Islands" throughout.

CARRIED

EXLTC-021-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee give first reading to Bylaw 27, cited as "Executive Islands Area Official Community Plan Bylaw No. 27, 2011" as amended.

CARRIED

EXLTC-022-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee give First Reading to Draft Bylaw No. 28, cited as "Executive Islands Area Land Use Bylaw No. 28, 2011."

CARRIED

EXLTC-023-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee rescind First Reading of Bylaw No. 28, cited as Executive Islands Area Land Use Bylaw No. 28, 2011".

CARRIED

EXLTC-024-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee re-name the Draft Land Use Bylaw No. 28 to "Ballenas-Winchelsea Islands Land Use Bylaw No. 28".

CARRIED

EXLTC-025-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee give First Reading to Draft Land Use Bylaw No. 28, cited as “Executive Islands Area Land Use Bylaw No. 28, 2011”, as amended”.

CARRIED

EXLTC-026-2013

It was MOVED and SECONDED,

that the Executive Committee acting as a Local Trust Committee refer Bylaw 27, cited as “Executive Islands Area Official Community Plan Bylaw No. 27, 2011”; and refer Bylaw 28, cited as “Executive Islands Area Land Use Bylaw No. 28, 2011”, to the following agencies and First Nations:

- City of Parksville
- District of Lantzville
- Town of Qualicum Beach
- Regional District of Nanaimo
- School District #68 (Nanaimo-Ladysmith)
- School District #69 (Qualicum)
- Provincial Ministry of Community, Sport and Cultural Development
- Provincial Ministry of Forests, Lands and Natural Resource Operations – Ecosystems Branch
- Ministry of Agriculture
- Ministry of Environment – BC Parks
- Ministry of Forest, Lands & Natural Resources – Aquaculture
- Ministry of Forest, Lands & Natural Resources - Ecosystems Protection
- Ministry of Forests, Lands & Natural Resource Operations - Archaeology Site Inventory
- Ministry of Forests, Lands and Natural Resource Operations - Crown Lands & Resource
- Ministry of Natural Resource Operations - Water Stewardship Division
- Ministry of Tourism, Recreation Site and Trails Branch
- Ministry of Transportation and Infrastructure
- Vancouver Island Health Authority
- Fisheries and Oceans Canada
- Department of National Defence
- Transport Canada
- Te'Mexw Treaty Association
- Cowichan Tribes
- Halalt First Nation
- Stz'uminus First Nation
- Lake Cowichan First Nation
- Lyackson First Nation
- Penelakut Tribe
- Snaw'Naw'As Nation
- Qualicum First Nation
- Hul'qumi'num Treaty Group
- *K'omoks First Nation*

- *Laich-Kwil-Tach Treaty Society*
- *Nanoose First Nation*
- *We Wai Kai First Nation*
- Islands Trust Fund
- Gabriola Island Local Trust Committee
- Denman Island Local Trust Committee
- Hornby Island Local Trust Committee
- Lasqueti Island Local Trust Committee
- Islands Trust, Bylaw Enforcement
- The Land Conservancy

CARRIED

The Executive Committee Acting as a Local Trust Committee will consider adding a special meeting by Resolution Without Meeting.

7.1.4 Regional District of Nanaimo Marine Zoning Information

Chair Malcolmson requested an update from Planner Eggen. Discussion followed.

8. NEW BUSINESS

8.1 Local Trust Committee 2012/13 – Annual Report Memorandum dated March 4, 2013 – attached

Discussion followed.

EXLTC-027-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee add to the end of the annual report submission that “The Executive Committee Acting as a Local Trust Committee has faced challenges regarding capacity for First Nations consultation, and aquaculture leases including seaweed harvesting”

CARRIED

EXLTC-028-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee approve for publication the 2012-2013 Annual Report submission.

CARRIED

8.2 Grant Opportunity: Community to Community Forum email from Lisa Gordon, dated April 25, 2013.

Regional Planning Manager Simpson spoke to the email from Lisa Gordon and the possibility of applying for the Grant and adding an event to the Community to Community (C2C) Forum as well as a lack of staff time. Discussion followed.

Chair Malcolmson asked for advice from Regional Planning Manager Simpson regarding long-term planning for future grant opportunities.

EXLTC-029-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee ask staff to convey to the Grants Administrator that the Local Trust Committee has been informed the Northern Office doesn't have the capacity to apply for Community to Community funding at this time, but would like support to develop a grant application for future deadlines.

CARRIED

EXLTC-030-2013

It was MOVED and SECONDED,

that the Executive Committee Acting as a Local Trust Committee ask staff to recommend to Financial Planning Committee that it consider funding First Nations liaison in the 2014/2015 budget.

CARRIED

9. **BYLAWS** – None.

10. **ISLANDS TRUST WEBSITE**

10.1 *Executive Islands Area (Ballenas-Winchelsea Group) Page - attached*

Received.

11. **NEXT MEETING DATE**

The next regular business meeting of the Executive Committee acting as a Local Trust Committee will be held on Wednesday, October 9, 2013 at 10:00 am in the Northern Islands Trust Office boardroom, 700 North Road, Gabriola Island, BC.

12. **ADJOURNMENT**

Chair Malcolmson adjourned the meeting of the Executive Committee as a Local Trust Committee at 12:43 pm.

Chair

Recorder



Islands Trust

Follow Up Action Report w/ Target Date

"Executive Area" Islands Feb-07-2012

No.	Activity	Responsibility	Target Date	Status
1	Upon completion of OCP and LUB, follow-up on the issue of an agreement with the Crown under section 9 and 29(4) of the Islands Trust Act to Trust Council for consideration.	Marnie Eggen	May-17-2012	On Going

May-03-2013

No.	Activity	Responsibility	Target Date	Status
1	Revise OCP and LUB re: minor amendments, LTC and LTA referencing	Marnie Eggen		Done
1	Draft letter to ADIMS and Gulf Alliance for Chair's signature.	Marnie Eggen		Done
1	Refer Bylaw 27 and Bylaw 28 to agencies and First Nations.	Marnie Eggen	May-14-2013	Done
1	Provide advice on renaming the LTC and LTA as the "Ballenas-Winchelsea Islands"	Marnie Eggen	Jun-14-2013	Done

Association for Denman Island Marine Stewards
e-mail; shelleymckeachie@gmail.com or, edijohnston@gmail.com

July 12, 2013

Sheila Malcolmson, Chair, Islands Trust Council
 Islands Trust
 200 - 1627 Fort St
 Victoria, BC
 V8R 1H8

Dear Chair Malcolmson,

On June 27th, 2013 I attended the Pacific DFO Shellfish Aquaculture Management Advisory Committee meeting as a director of the Association for Responsible Shellfish Farming and the only environmental ngo representative.

In the afternoon session a geoduck management framework proposal was discussed. DFO has created green zones for potential geoduck aquaculture tenures and intertidal coastal areas of the Strait of Georgia are one of the two categories they have identified for this. The shellfish industry representatives were very anxious for DFO to speed up and streamline the process to allow foreshore geoduck aquaculture tenures to get started. This is worrisome as the method of culture and harvest of geoduck in the inter-tidal coastal zone is very invasive, creating highly negative impacts to marine habitat and alienation of other species and uses of the foreshore.

The Association for Denman Island Marine Stewards (ADIMS) feels that it's critical for the Islands Trust Council and our Local Trust Committee to be knowledgeable about the methods of geoduck aquaculture production and harvest on the foreshore so that you can give your input to DFO during their consultation phase for the management of shellfish aquaculture. This type of aquaculture is not appropriate for Trust Islands whose mandate is to preserve and protect and is definitely not compatible with the marine section of the Denman Island OCP objectives.

ADIMS has suggested to our Local Trust Committee that either ADIMS or the DI Marine Advisory Planning Committee could prepare a presentation for our LTC on geoduck aquaculture production and harvest methods that would include information from Puget Sound, Washington where inter-tidal geoduck aquaculture has been happening for years. We would also be willing to present this to the Trust Council after it's completion, at a time that would be convenient.

Many thanks for your consideration in this matter.

Sincerely,
Shelley McKeachie
 Co-Chair, ADIMS
 Director, Association for Responsible Shellfish Farming

cc: Trustee Busheikin
 Trustee Graham
 Trustee Luckham

4801 Ocean Trail

May 31, 2013

P.O. Box 13, Bowser, B.C. V0R 1G0



Islands Trust (Chair, Islands Trust Executive Committee)

200 – 1627 Fort St.

Victoria, B.C. V8R 1H8

Ms Malcolmson;

Re: Seaweed harvesting on the east coast of Vancouver Island

We are contacting you because we are concerned that the commercial harvesting of seaweed in the area of Deep Bay/Bowser on Vancouver Island is proceeding without a satisfactory understanding of the effects of this new fishery on other marine resources and those that rely upon them. This assertion is based on our collective knowledge and scientific experience in the areas of intertidal, foreshore and marine ecology.

It is our view that: (1) the harvesting activities could cause deleterious impacts to the local ecosystem and especially several forage fishes that spawn in the area of the proposed seaweed harvesting, and which constitute a vital part of the food chain for commercial and recreational species such as salmon, lingcod, rockfish and other species, and (2) the seaweed itself, upon decomposing on the beach, contributes significantly to the nourishment of the marine environment which in part supports the economically valuable finfish and the expanding shellfish aquaculture industry – something that we feel no government wishes to put at risk.

The attached document outlines in some detail our scientific concerns and provides our recommendations for consideration by senior governments in addressing any future permitting of seaweed harvesting in this area. It is our understanding that the area where the seaweed grows, and has been harvested, lies within the areas over which the Islands Trust has particular interest and jurisdiction. Accordingly, this potential new industry may merit your consideration.

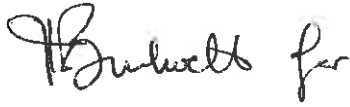
We have forwarded our document to Provincial Ministry of Agriculture (the permitting agency for seaweed harvesting) and Federal Department of Fisheries and Oceans (the agency with protection authority for marine resources). In our cover letter to Ministry of Agriculture we have suggested that the process of any future permitting include a meaningful program of public consultation, including contact with local government and the Islands Trust. We have also urged the Ministry to undertake a study of social impacts, including beach access, noise, lights and altered views as perceived by neighbouring property owners.

We would be pleased to meet with you to discuss these issues further.

Please forward any correspondence in response to this document to Dr. I.K Birtwell at the above address.

Sincerely,

I.K Birtwell

A handwritten signature in black ink, appearing to read 'I.K. Birtwell for', written in a cursive style.

R.C. de Graaf

D.E. Hay

G.R. Peterson

Enc. 1. Seaweed harvesting on the east coast of Vancouver Island – a biological review.

2. A CD of photographs and comments on the biology of the seaweed harvest area, seasonal changes and use (Nile Creek Enhancement Society; for local educational purposes: Powerpoint).

**SEAWEED HARVESTING
ON THE EAST COAST OF
VANCOUVER ISLAND, BC:
A BIOLOGICAL REVIEW**

I. K. Birtwell, R. C. de Graaf, D. E. Hay and G. R. Peterson

PREFACE

This report provides the opinions of the authors whose careers involved research and the management of aquatic resources in western Canada:

Ramona de Graaf is a “forage fish” research specialist and Executive Director of Emerald Sea Biological, and the coordinator of the Coastal Conservation Institute of BC – BC Shore Spawners Alliance.

Ross Peterson is a retired government biologist and an environmental consultant who has specialized in resource and environmental management for over 40 years.

Doug Hay and Ian Birtwell are both retired research scientists from Fisheries and Oceans Canada, each has over 40 years experience in the research and management of fish and fish habitat and the effects of human activities upon them.

All the authors are currently involved in research and related activities associated with the management and protection of organisms and their habitat.

The findings, opinions, and conclusions provided in this document are solely those of the authors who voluntarily undertook this review to ascertain if there was a scientific basis for concern over the initiation of seaweed harvesting along the shores on the east coast of Vancouver Island.

This report addresses specific concerns over the harvest of seaweed near Deep Bay and Bowser on the east coast of Vancouver Island but the content and comments have relevance to other coastal areas of BC.

It is hoped that the provision of this science-based report will assist in understanding the ecological issues associated with this new industry and support a cautionary approach and thorough evaluation in support of sound regulatory and managerial decision-making.

May 19 2013

Report citation:

Birtwell, I.K., R.C. de Graaf, D.E. Hay, and G.R. Peterson. 2013. Seaweed harvesting on the east coast of Vancouver Island, BC: a biological review. Unpublished report. 28p.

Cover page: *herring eggs on red algae in the low inter-tidal zone, Bowser, March 2013.*

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SUMMARY

Seaweed harvesting at Deep Bay and Bowser; east coast Vancouver Island

1. The stimulus for this report was the initiation of beach-cast seaweed harvesting in 2012, close to Deep Bay and Bowser on the east coast of Vancouver Island. This area supports valuable fish habitat, recreational and commercial fisheries, seabirds and eagles and other animals that rely on the shore line and adjacent marine waters. This coastal area provides food, spawning habitats, nursery and rearing habitats, and migration pathways for many species of fish, birds and mammals. The area is adjacent to, and the waters are contiguous with, Baynes Sound which is used for an expanding shellfish aquaculture industry that supplies approximately fifty percent of BC's total shellfish aquaculture production. Seaweeds provide food and cover for many organisms when growing. However, it has been well-documented that when detached and washed ashore they provide readily-available nourishment for organisms at the base of the food chain. In the location of Baynes Sound that food chain includes the organisms that are used for food by fish, birds and mammals aside from that needed to meet the requirements for aquaculture.
2. Wide ranging ecological changes have already occurred throughout Baynes Sound due to extensive commercial aquaculture. The needs of all resources supported by the area require thorough assessment to evaluate impacts on the carrying capacity of the area to meet current and foreseeable requirements.
3. The harvest of thousands of tonnes of detached seaweed has occurred as a pilot project on the east coast of Vancouver Island in an area bounded by Deep Bay to Parksville. The project was authorized by the Provincial Government's Ministry of Agriculture and targeted a recently introduced species of red algae *Mazzaella japonica* which grows in shallow sub-tidal waters. Valuable components (carrageenans) may be extracted from the algae for commercial use; 5000 tonnes were permitted for removal by licensees in the 2012 pilot project.
4. Detached, storm-cast *Mazzaella japonica* fronds were collected manually in the late fall and early winter of 2012. The material was gathered by rakes and placed into large bags on the beach. At a number of locations large all-terrain vehicles moved along beaches collecting the bagged algae for transport to drying and processing locations. Some of these same beaches are spawning habitats of importance to "forage fish" species whose embryos incubate in the inter-tidal and sub-tidal areas placing habitats and fish embryos at risk from the present seaweed harvesting methods.
5. There is substantial scientific literature on the role of seaweeds in marine ecosystems. This body of knowledge supports concerns that this new seaweed fishery, as it is currently practised, could be detrimental to habitats of species supporting existing commercial aquaculture ventures as well those existing commercial, recreational, and Aboriginal fisheries. This concern is based on the documented significant role that seaweeds play in the near shore aquatic environment and the ecological effects that will accrue due to its removal. There are particular concerns about the physical and

mechanical impacts of collection process. Previous studies have identified key knowledge and research gaps related to the removal of beach-cast seaweeds from the coastal environment. These gaps include: (i) inadequate quantitative data on the distribution of beach-cast seaweeds; (ii) the relationship between beach-cast seaweed and off-shore algal stands; (iii) the residence time of the seaweed on the beach; (iv) the ecological fate of beach-cast seaweeds; (v) the ecological role of floating seaweeds; (vi) the effects of seaweed removals on coastal ecosystem and fisheries resources. These aspects are also of relevance in relation to the seaweed harvest along the east coast of Vancouver Island.

Conclusions and recommendations

- There is a scientific basis for concern about the implementation of a potential new industry that would harvest seaweed along the east coast of Vancouver Island, and perhaps other areas in British Columbia.
- The seaweed fishery, as a potentially new sustainable resource extraction activity, should be subject to the Fisheries and Oceans regulations for “new fisheries”. The criteria for such are to be found at the web site defining emerging fishery policy:
<http://www.dfo-mpo.gc.ca/fm-gp/policies-politiques/efp-pnp-eng.htm#sec6a>
- A scientific and ecological review of the *Mazzaella japonica* fishery is required; equivalent to reviews usually conducted through a Fisheries and Oceans Canadian Science Advisory Secretariat evaluation and reporting process.
- A thorough evaluation of the effects of seaweed harvesting should be undertaken in relation to the requirements of the impacted areas affected to support continued aquaculture activities and their future growth, and maintain the supporting habitat for other highly valuable components of the local ecosystem. This is a prerequisite so that appropriate, sensible, and sound decisions may be made based on pertinent factual information.
- The recommendations of Jamieson et al. (2001) regarding Baynes Sound are endorsed and should be reviewed and reconsidered in light of this new proposed industry, as follows:
 1. Establish a multi-agency initiative to identify existing and potential future impacts;
 2. Develop a network of protected areas in Baynes Sound that includes sensitive habitats, key bird habitats and which exclude shellfish culture;
 3. Identify potential adverse impacts from inter-tidal shellfish aquaculture and implement mitigation where appropriate. Consider inter-tidal aquaculture both as an economic asset and as an ecological disturbance;
 4. Investigate the overall carrying capacity of the Baynes Sound ecosystem with respect to phytoplankton production and its removal by filter feeders.

- Restrictions should be specified to protect certain ecologically valuable areas from any future harvesting (e.g. inter-tidal pool and lagoon areas within 3 km of Deep Bay, unconsolidated-sediment areas comprising spawning beaches for “forage fish”, and marine riparian habitats).
- A moratorium on seaweed harvesting and licensing should be imposed until such time as the ecological impacts of the *Mazzaella* fishery have been identified and assessed.

SEAWEED HARVESTING: ITS REGULATION AND ECOLOGICAL SIGNIFICANCE

Report objective

The stimulus for this report was the initiation of a seaweed harvesting pilot program in 2012, close to Deep Bay and Bowser on the east coast of Vancouver Island. This area supports valuable fish habitat, recreational and commercial fisheries, seabirds and eagles and other animals that rely on the shore line and adjacent marine waters. This coastal area provides food, spawning habitats, nursery and rearing habitats, marine riparian habitats, and migration pathways for many species of fish, birds and mammals. The area is adjacent to, and the waters are contiguous with, Baynes Sound which is used for an expanding shellfish aquaculture industry that supplies approximately 50 percent of BC's total shellfish aquaculture production.

The objective of this document is to comment on the ecological importance of seaweeds to coastal near shore areas and explain the rationale for concerns about the proposed harvesting of an introduced species of red algae (*Mazzaella japonica*). The information in this report relies on published scientific literature and personal knowledge of the authors and others they have contacted. The scientific literature on the ecology of near shore environments is extensive and varied but a fundamental aspect that is universally accepted is the significant role of near shore habitats in coastal food webs. Seaweed plays a significant role in this process and accordingly its removal can be problematic to sustaining the integrity of aquatic communities.

Commercial versus ecological values

The commercial interest in the seaweed is based on substances (carrageenans) that can be extracted from red algae. Phycocolloids are the major polysaccharides found in algae (alginates, carrageenans, agars, fucanes, laminarans, ulvans, and floridean starch). The annual global production of phycocolloids is just less than 100,000 tonnes, with a gross market value of \$1 billion (US) annually; 80% of the global agar and carrageenan production and 30% of the global alginate production is used in the food industry (refer to Jaspers and Folmar 2013). They are valuable, and widely used in the food industry for their gelling, thickening and stabilizing properties (Jaspers and Folmar 2013). In 1995 annual carrageenan sales were over \$200 million (US) or about 15% of the world use of hydrocolloids (Bixler, 1996). Carrageenan markets grew exponentially at 5% per year between 1970 and 1995: 5,500 metric tons in 1970, and over 20,000 metric tons were expected in 1995 (Bixler, 1996).

In contrast, seaweeds are, fundamentally, of high ecological importance (Harley et al. 2012) and accordingly their removal whether while living, or dead, will have an ecological impact. The scale of the impact depends on the location and nature of the harvest, its timing, the methods used to harvest the seaweed, the organisms impacted directly and indirectly, and their role in the ecosystem productivity.

Background: seaweeds, ecology, mariculture and Baynes Sound

Seaweeds are essential valued ecosystem components that sustain other aquatic organisms, including those that support valuable commercial, recreational, and Aboriginal finfish and

shellfish fisheries. Seaweeds also maintain the local primary and secondary productivity. Seaweeds are, therefore, a basic and vital component of the marine ecosystem. Seaweeds are of fundamental importance to the protection of fish and their habitat as required under the *Fisheries Act* (Government of Canada 2012).

Jamieson et al. (2001) wrote a comprehensive ecological review of environmental impacts of inter-tidal shellfish aquaculture in Baynes Sound. At that time (2001) seaweed harvesting was not undertaken so potential impacts were not addressed. Also the timing of, and occurrence of, spawning by important “forage fish” (i.e. surf smelt and Pacific sand lance) in Baynes Sound had not been investigated. However, the report made recommendations pertaining to shellfish aquaculture practices that had significantly modified Bayne Sound’s fish habitat, especially the inter-tidal areas. The planned expansion rates (10% per year) of farmed areas generated concern over the sustainability of the industry in the area.

The concerns of Jamieson et al. (2001) were not just restricted to future shellfish production but also included comments on deleterious impacts on biodiversity and productivity. Such impacts are known to have occurred in other areas including: changes in species composition of benthic communities; exclusion of some species from foraging activity; reduced size of some fish spawning, nursery and rearing habitats; and altered the natural coastal hydrography (Simenstad and Fresh 1995, cited by Jamieson et al. 2001). The authors suggested that such impacts in Baynes Sound could affect growth and survival of transient fish and seabirds including juvenile salmonids (chinook, coho, chum, pink and steelhead), herring and migratory waterfowl and local shorebirds.

Scientific data gaps exist on impacts of shellfish aquaculture in BC and accordingly this hampers evaluation of potential adverse effects of existing practices and of new aquaculture proposals (Jamieson et al. 2001). To rectify some deficiencies Jamieson et al. (2001) proposed recommendations which we endorse because seaweed harvesting has the potential to become another constraint and concern regarding the productivity in Baynes Sound and adjacent local coastal waters.

The recommendations of Jamieson et al. (2001) remain valid today, and they are abbreviated below:

1. A multi-agency research initiative should be established to identify both the nature of existing impacts, potential future impacts and, where necessary, how they can be minimised.
2. An effective network of protected areas in Baynes Sound that exclude shellfish culture should be established. The network should include sensitive habitats and key bird habitat.
3. The significance of Baynes Sound in the Georgia Basin ecosystem appears not to have been recognized by resource managers to date. Potential adverse impacts from inter-tidal shellfish aquaculture in this broader context needs to be identified and mitigation implemented, where appropriate. Ocean management in Baynes Sound should be considering inter-tidal aquaculture both as an economic asset and as an ecological disturbance that may be influencing important ecosystem processes (i.e. productivities of other important species).

4. With increasing bivalve culture in Baynes Sound, the overall carrying capacity of the system with respect to phytoplankton production and its removal by filter feeders needs investigation, both with respect to annual and seasonal fluctuations.

Seaweed harvesting along the east coast of Vancouver Island

The recently introduced species of red algae *Mazzaella japonica* occurs close to the low tide level and in shallow sub-tidal waters in the area around Deep Bay and Bowser on the east coast of Vancouver Island. It is a target species for a proposed commercial harvest venture extending from Deep Bay and Bowser to locations approximately 20 km southwards. A pilot project, initiated by commercial interests but authorized by the Provincial Ministry of Agriculture, was carried out in the late fall and early winter of 2012 with 5000 tonnes licensed for removal. Within this specific permitted area for harvesting the seaweed there is variable and often limited access to the marine foreshore. Harvesters and vehicles were on beaches at a number of locations collecting the algae by pitch forks and rakes, raking along the shore, and then placing the collected material into large bags. In some locations these large bags were collected by all-terrain vehicles on the beaches. The filled bags were then loaded onto large trucks for transport to drying and processing locations.

Location of activities, and concerns related to seaweed and its function

Seaweed harvesting has focussed on particular beaches near Deep Bay and Bowser which often receive substantial accumulations of algae following storms and powerful wave action. Deep Bay is located at the southern extremity of Baynes Sound which supports a vibrant and significant shellfish aquaculture industry. The shellfish production is approximately 50 percent of British Columbia's total production of native and introduced species (Jamieson et al. 2001) and has been increasing by as much as 10% a year.

The net shoreline movement of materials floating in sea water is into Baynes Sound proper from the Deep Bay/Bowser area. Immediately south of, and within 3 km of Deep Bay are inter-tidal areas with much habitat complexity. The complex shoreline in this area of Bowser directly supports many important organisms of high economic and ecological value especially in the unique and extensive tidal lagoons which are, in part, a legacy from the Qualicum First Nations who modified the shoreline and constructed fish traps and clam gardens (personal communication; M. Racalma, Qualicum First Nations).

Importance of shoreline habitat to food production and feeding

Many organisms derive food from the inter-tidal lagoon areas and the beaches from which seaweed has been harvested in the Deep Bay/Bowser area. Depending on the time of year large numbers of ducks and geese, seals, sea lions and otters, eagles and humans can be found harvesting prey resources reliant upon these areas (Jamieson et al. 2001). These areas also accumulate storm-cast algae in the fall and winter, consequently promoting local productivity.

Marine riparian zones and unconsolidated-sediment beaches provide critical habitat for marine fishes and invertebrates (Levings and Jamieson 2001). Marine riparian vegetation produces

terrestrial insects, vital prey for foraging juvenile chinook salmon (Brennan and Culverwell (2005). Sandy/gravel beaches are spawning habitat for surf smelt and Pacific sand lance, “forage fish” species that are critical prey for hundreds of marine predators (Penttila 2007).

Eagles feed in the summer along the BC coast (Elliott et al. 2003). The annual concentration of eagles in the Bowser lagoon areas in early summer often exceeds the published highest numbers recorded during this season on the BC coast. Fifty percent of the eagle’s diet consists of Plainfin midshipman (*Porichthys notatus*) that migrate in May from deep waters to spawn in the inter-tidal areas. They are particularly conspicuous and susceptible to avian predation at this time. The Plainfin Midshipman construct nests, often burrowing beneath the cobbles and boulders found along the shores. In Bowser, the peripheral sand/cobble areas of tidal lagoons, extending up to the mid inter-tidal level, provide much habitat for nests which are occupied by males from May until the middle of August; the males provide parental care. The larval fish hatch from eggs which adhere to the ceilings of the nest. The larval fish remain attached to the nest ceiling until mid August after which time they move to protective vegetated (seaweeds and eelgrass - which occur in the proximal lagoons) nursery habitats (Bass 1995; Sisneros et al. 2009).

Forage fish

The term “forage fish” has a variable set of definitions but in general this term usually refers to small, low-trophic level schooling species. Typically, they are abundant species that provide food for other piscivorous animals, especially other fishes, marine mammals and seabirds. In the vicinity of Baynes Sound “forage fish” would include species such as herring (*Clupea pallasii*), surf smelt (*Hypomesus pretiosus*) and sand lance (*Ammodytes hexapterus*). However, there are many other species of fish that are important prey in the near shore marine food web, including species of cottids, gunnels and pricklebacks that reside in shallow, near shore habitats.

Several species of “forage fishes” are of vital importance to key commercial fish species, especially salmonids, rockfish, halibut, and seabirds. These include, but are not limited to, sand lance, juvenile herring, and surf smelt. These three species are of special interest and they all spawn in shallow sub-tidal or inter-tidal habitats. Two of the species, sand lance and surf smelt could be spawning at the same times, and at the same locations as the pilot *Mazzaella* harvest occurred (unpublished report; de Graaf 2012).

Once hatched, the larvae of sand lance and surf smelt can be found in the sand/gravel beaches, then in the adjacent shore line aquatic habitats. These fish are, therefore, directly at risk from human activities on the beach such as raking the substrates and vehicular traffic. A separate report by de Graaf (2012) is appended to this document to provide information on these “forage fish” and their beach spawning habit. It was prepared to highlight the importance of the fish and the need for their protection in the face of seaweed harvesting that is likely detrimental.

The seaweed harvesting areas between Deep Bay and Bowser represent some of the most important herring spawning locations in BC (Hay and McCarter 1999, 2006). The present seaweed regulations preclude harvesting during herring spawning times but these areas also are used by larval and juvenile herring for rearing (herring are an important “forage fish” for salmon

and other animals, and other important fish species spawn each year along these shores (Hay and McCarter 1997).

[The progressive demise of kelp beds in Georgia Strait over the last 30 years has been a significant loss to near shore habitat complexity (Birtwell, personal observation; Nile Creek Enhancement Society). The kelp provided habitat for many organisms, food while it was growing and also when it was decomposing. The significant loss of this habitat emphasizes the need to maintain plant material which provides for alternative habitat and supports the aquatic food chains. That is, the other vegetation that currently performs a similar function, such as, the eelgrass and algae of the tidal lagoons and natural beaches in the Deep Bay/Bowser area].

Legislation, and regulation of seaweed harvesting in British Columbia

The BC Ministry of Agriculture is responsible for the management of the commercial harvest of marine plants in British Columbia. Their mandate is to “ensure that the harvest of marine plants is done in an approved manner, and that the harvest will not compromise habitat or traditional First Nations use of the resource”. In February 2009, however, the B.C. Supreme Court ruled that marine finfish aquaculture on the coast of B.C. is a “fishery” and a matter of exclusive federal jurisdiction. In December 2010, the federal government assumed regulation of the finfish and shellfish aquaculture industries in B.C. However, the provincial government continues certain roles under the applicable legislation of the *Fisheries Act* (Government of Canada RSBC c-149 1996). This includes: licensing marine plant cultivation; issuing tenures where operations take place on Crown land, issuing business licences under the *Fisheries Act*; maintaining the mandate to protect the provincial public interest in sustainable aquaculture development.

Existing Provincial guidelines for the harvest of marine plants are as follows: “Before an application can be considered, the applicant should be able to demonstrate that the product will be used for a viable business. The applicant should provide a comprehensive outline of the proposed harvest operation and processing arrangements. When an application is approved, a licence quota may be set based on the amount of product requested and historical inventories (where they exist) of the marine plant resources in the area. *In all cases, the conditions of licence will stipulate that no more than 20% of the total biomass of a marine plant bed may be harvest. Other conditions related to particular species of marine plants may also be imposed.* These measures ensure the long term sustainability of the resource and minimize the impact to fish and fish habitat.” (http://www.agf.gov.bc.ca/fisheries/commercial/commercial_mp.htm).

The provincial government’s guidance regarding the harvesting stipulates certain requirements and consequences for non-compliance:

(http://www.agf.gov.bc.ca/fisheries/Manuals/Licensing/gt_MarinePlantHarvesting.pdf)

“(10) In addition to the powers that may be exercised by the minister under section 18, the minister may suspend, revoke or refuse to issue a licence under this section in the minister’s opinion

- (a) the licensee has failed to comply with a condition of a licence, or
- (b) the harvesting of kelp or other aquatic plants under the licence would

- (i) *tend to impair or destroy a bed or part of a bed on which kelp or other aquatic plants grow,*
- (ii) *tend to impair or destroy the supply of any food for fish, or*
- (iii) *be detrimental to fish life.*

(The underlined and italicized sections shown above relate to the concerns expressed in this document regarding the harvesting of seaweed and the fisheries and ecologically important areas that support them).

The context of this aspect of regulation relates to the federal *Fisheries Act* (Government of Canada 2012 R.S.C., 1985, c. F-14, Last amended on June 29, 2012) wherein the definition of fish also includes (a) parts of fish, (b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (c) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals. Also, “fish habitat” which means the spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

Guidance documents from the provincial Ministry of Agriculture that were applicable to the pilot seaweed harvesting project are appended to this document (Appendix 1). The draft “guideline” document provided by Fisheries and Oceans Canada staff in 2007 is also in Appendix 1.

Commercial harvest and impacts

The harvesting of seaweed and its artificial production occurs world wide and it was reported that about 13 million tonnes (fresh weight) annually was collected world-wide (Zempke-White et al. 2005 and references therein). Almost all of the seaweed was harvested live or cultured but there was also harvesting of material cast on beaches. Such harvesting can, however, result in adverse effects to aquatic communities (Schmidt et al. 2011; Krumhansi and Scheibling 2012; Seeley and Schlesinger 2012).

In 2009 the European Union declared that the commercial harvest for macroalgae should not be done in any way so as to cause a significant impact on ecosystems (Stagnol et al. 2013). On the east coast of Canada seaweed harvesting, which has occurred for decades, was not sustainable for all species targeted because of the methods used to collect the seaweed while it was growing, when detached, and the escalating quantities taken over time (Chopin and Ugarte 2007). The ecological consequences of harvesting were often considered only in relation to algal communities and re-growth in support of a sustainable harvest of algae (Sharp and Pringle 1990, Chopin and Ugarte 1998); less attention has been given to the ecological effects on the communities impacted by the harvest (Black and Miller 1994; Rangeley 1994; Lorentsen et al. 2010).

Concern over the sustainability of the commercial ventures to harvest seaweed and the potential effects on communities of aquatic organisms has prompted regulations to be formulated to control the timing and modes of harvest, species of algae taken and allowable quotas. In certain circumstances a moratorium has been placed on these activities so that studies may be undertaken to assess impacts (e.g. New Zealand, Zempke-White et al. (2005).

Beach harvest

A thorough review of the beach harvesting of seaweed was carried out by Zempke-White et al. (2005). These authors stated that there are few published studies that have investigated the impacts of harvesting beach-cast seaweeds on the coastal environment. Most studies completed to date indicated an immediate short-term decrease in densities of strandline species extending to fish species in estuaries. While recovery of these species occurred relatively rapidly after single events, long-term harvesting created a beach fauna and flora very similar to beaches that had no input of beach-cast seaweeds. Differences in beach topography and habitat values were also noted between raked and un-raked beaches and, where in use, vehicles in the coastal environment were identified as a source of negative impacts on coastal ecosystems. The review by Zempke-White et al. (2005) identified a number of key research gaps related to the removal of beach-cast seaweeds from the coastal environment. Knowledge gaps include quantitative data on distribution of beach-cast seaweeds, the relationship between beach-cast seaweed and off-shore algal stands, residence time of the seaweed on the beach, the fate of seaweeds when not collected and the communities they support, the role of floating seaweeds, and the effects of removals on the coastal ecosystem and fisheries resources.

Role of algae in the food chain and relationships to aquatic productivity

In some locations in the Deep Bay/Bowser area seaweed washed up along shoreline accumulates in dense mats often exceeding a metre deep (Birtwell; personal observation). This visible vegetation along the shore is often referred to as wrack. Wave and tidal actions continuously move this material and large quantities become mixed into the beach substrate. During tidal changes the material can be re-suspended, fractured, decomposed and transported with subsequent wave action.

Living, dead and decomposing algae provide food for many components of food webs. Aside from the physical aspects of algae and the role they play in the structural complexity of waters which constitute fish habitat, this "primary production" has a direct influence on those organisms higher in the food chain (e.g. Levings et al. 1983; re Georgia Strait). Algae and other plant material are part of this primary production which provides nourishment while alive but also when dead and decaying and producing detritus. It has been stated that more energy and materials flow through detrital food webs than through grazer food webs (Mann 1988). This means that, "more is transmitted to other trophic levels from dead decomposing plant tissue than from living tissue consumed by a grazer. Nevertheless, those who manage aquatic systems for high productivity of fish, shellfish, or other invertebrates will be interested not so much in the total flow of energy and materials as in those pathways leading directly to nutrition for species of interest" (Mann 1988).

The nature of primary production influences how detritus may be beneficial to other organisms (Jones and Iwama 1991; Rodhouse and Roden 1987). For example, marsh grasses and other vascular plants require a longer time to be broken down by fungi and bacteria into smaller particles (detritus/particulate organic matter which in turn are consumed by invertebrates that digest the microbial content) than do algae which decompose at faster rates and are more nutritious and available.

Animals can obtain much nourishment directly from algal material (Findlay and Tenore 1982; Tenore 1981, 1988). Thus the importance of particulate macroalgae detritus is documented and emphasized due to its significant and important role in the productivity of invertebrates (e.g. amphipods: Rossi et al. 2010; oysters: Crosby et al. 1989; snails: Smith et al. 1985; fish: Levings et al. 1983; Mann 1988). Some inter-tidal fish have been reported to directly use algae as food such as the cockscomb pricklebacks (Peppar 1965, cited by Levings et al. 1983) which occur in the lagoons at Bowser/Deep Bay. Benthic inter-tidal communities, especially crustaceans, within Georgia Strait have been reported to be important in the diet of many juvenile fish such as salmon (refer to Levings et al. 1983).

Floating and shore cast seaweed (wrack)

Seaweed that washes ashore and becomes stranded is termed wrack. Typically it is a complex mixture of vegetated materials from vascular plants and seaweeds, dead and dying organisms with an associated community of micro and macro organisms.

The onshore deposition of macroalgae and macrophyte wrack provides a potentially significant marine “subsidy” to inter-tidal and supra-tidal herbivore and decomposer communities. Based on the study of daily input loads to beaches, Orr et al. (2005) estimated summer wrack deposition in Barkley Sound, British Columbia. Cobble beaches retained approximately 10 times and 30 times more wrack than did gravel and sand beaches, respectively (Orr et al. 2005): the beaches upon, and in which detached seaweed occurs in the area of Deep Bay and Bowser are primarily of cobble, pebble and coarse sand.

Tyron (2012) provided information on the ecological importance of wrack and emphasized that it supports a diversity of animals and contributes towards nutrient and carbon cycling in marine and terrestrial environments. The comments in this paragraph are attributable to Tyron’s assessment. For example, accumulation on sandy beaches provides thermal insulation from temperature extremes, and maintains a humid environment for the organisms that thrive in the wrack and in the substrate below (Columbini and Chelazzi 2003). Nutrients and carbon from beach wrack can be transported via various means to sub-tidal zones (Romanuk and Levings 2006), to interstitial spaces in sandy beaches (Dugan et al. 2011), and to marine riparian systems (Levings and Jamieson 2001; Polis and Hurd 1996). Tyron (2012) also reported that beach wrack is associated with highly diverse infaunal assemblages and their predators, including talitrid amphipods and staphylinid beetles (Richards 1984), oligochaetes and nematodes (Sobocinski 2003) and birds (Bradley and Bradley 1993). The diets of commercially important fish, including juvenile salmonids, herring and surf smelt overlap with the invertebrate food items found in beach wrack. In a review of marine riparian systems, epi-benthic crustaceans, including amphipods partially derived from inter-tidal areas of detrital build up, provide important food web connections for salmon in Puget Sound (Brennan and Culverwell 2005) and British Columbia (Levings and Jamieson 2001; Romanuk and Levings 2005). This has important implications for fisheries values in the area; both salmonids and “forage fish”, along with many other species, will consume amphipods, worms, and insects that are dislodged in the inter-tidal zone during the high tide. Many birds also take advantage of the beach wrack communities, and may be affected by the loss of beach wrack to the ecosystem (Bradley and Bradley 1993). As the area is home to a diversity of birds, unintended consequences of beach wrack removal may have localized or larger effects, depending on the extent of the harvest.

The wrack is an important nitrogen and carbon source for coastal waters due to the relatively rapid release of nutrients during breakdown, which facilitate primary productivity (benthic algae and phytoplankton) and on up the food chain (refer to Zempke-White et al. 2005; Mews et al. 2006).

The seaweeds that become detached from substrates where they grew may form floating masses of organic material. These floating masses, which may or may not impinge on the shore, provide habitat for a variety of organisms e.g. invertebrates and fish. Hence the material is of functional significance even though it has been removed from its benthic attachment site. Zempke-White et al. (2005) provided a review of the effects of beach harvesting of seaweed in New Zealand. They concluded that “the floating component of the drift algae may also play a significant role in the dispersal of beach invertebrate species and also appears to play a role in the dispersal of juvenile fish”. Furthermore, “the sources of energy and nutrients that may wash back into the sea include whole seaweed, inhabitants of the wrack, and dissolved and particulate organic matter. When whole seaweed washes back into the sea it can form an important habitat for juvenile fishes, can be eaten by herbivores, or can be further decomposed and used by detritivores and filter feeders, or the dissolved nutrients be taken up by primary producers” (Zempke-White et al. 2005; Shaffer et al. 1995).

Rossi et al. (2010) documented the importance of seaweed wrack derived from an invasive species of algae (*Sargassum muticum*) which is present in the inter-tidal areas of Deep Bay and Bowser, to sustain part of the benthic food web. Similarly, McGwynne et al. (1988) and Olabarria et al. (2010) comment on the relationship of buried and decaying seaweed wrack to beach organisms and the role it plays in influencing the composition and structure of meiofaunal and macrofaunal assemblages respectively. Lastra et al. (2008) also report the importance of beach cast materials to invertebrate populations and community structure in the inter-tidal zone, and Pennings et al. (2000) commented that invertebrate “consumers” (an isopod, and rocky and sandy-shore amphipods) tended to prefer wrack (aged, stranded seaweeds) over fresh seaweeds of the same species. Romanuk and Levings (2003) documented the increased importance of such vegetated material to organisms that dwell in the transitional supra-littoral zone between the terrestrial and aquatic environment.

Zempke-White et al. (2005) concluded that most studies of seaweed harvesting indicated an immediate short-term decrease in densities of strandline species extending to fish species in estuaries. But, although the recovery of these species occurred relatively rapidly after single events, “long-term harvesting created a beach fauna and flora very similar to beaches that had no input of beach-cast seaweeds. Differences in beach topography and habitat values have also been noted between raked and un-raked beaches. Where in use vehicles in the coastal environment have also been identified as a source of negative impacts on coastal ecosystems” (Zempke-White et al. 2005).

Multi-species effects of seaweed harvesting

There is little research on the effects of *M. japonica* harvesting, but given the stated importance of algal species in beach wrack in marine ecosystems, one must conclude that its removal in any significant proportion will have profound effects on adjacent marine and inter-tidal ecosystems.

An example of the ramifications of seaweed removal practices on higher members of coastal food chains is exemplified by Lorentsen et al. (2010) in Norway. They stated that “coastal kelp forest ecosystems provide important habitats for a diverse assemblage of invertebrates, fish and marine top-predators such as seabirds and sea mammals” and that little is known about the multi-trophic consequences of this habitat removal. The authors investigated how kelp fisheries, which remove feeding and nursery grounds of coastal fish, influence local food webs and the availability of food to a marine top predator, the great cormorant (*Phalacrocorax carbo*). Their results demonstrated that cormorants preferentially foraged within kelp-forested areas and performed significantly more dives when feeding in harvested versus un-harvested areas suggesting lower foraging yield in the former case. In kelp areas that were newly harvested the number of small (<15 cm) gadoid fish was 92% lower than in un-harvested areas. This effect was persistent for at least 1 year following harvest. Lorentsen et al. (2010) stated that to their knowledge “this is the first time that the ecological consequences of kelp harvesting have been tested at a multi-trophic level. The results presented strongly suggest that kelp harvesting affects fish abundance and diminishes coastal seabird foraging efficiency. Kelp fisheries are currently managed in order to maximize the net harvest of kelp biomass, and the underlying effects on the ecosystems are partly ignored”. The authors recommended that there should be a “re-assessment” of such management practices.

Schmidt et al. (2011) stated that marine vegetation provides important habitat, nitrogen, and carbon storage services, yet the extent of these services depends on the foundation species and its architecture. Changes in canopy structure will therefore have profound effects on associated food webs and ecosystem services. Thus, as increasing human pressures on coastal ecosystems threaten the continued supply of essential functions and services, the protection of marine vegetated habitats should be a management priority (Schmidt et al. 2011).

CONCLUSIONS AND RECOMMENDATIONS

There is a scientific basis for concern about the implementation of a potential new industry that would harvest seaweed along the east coast of Vancouver Island, and perhaps other areas in British Columbia.

A general concern expressed in this report is related to the scientifically-documented importance of seaweeds to marine ecosystems and the plants and animals supported within existing ecosystems. Specific concerns are related to the lack of assessments of the potential impacts the industry. We therefore advise that such studies be undertaken. This is the only way to ensure that if such an industry were to develop it would be based on sound decisions with low socio-economic and ecological risks. Also, it is important to recognize the present ecological value of the putative harvesting areas and the contribution of such areas to sustain commercial, recreational and Aboriginal fisheries and aquaculture.

Based on the review of harvesting beach-cast seaweeds Zempke-White et al. (2005) concluded that there were “a number of key research gaps related to the removal of beach-cast seaweeds from the coastal environment. Knowledge gaps included quantitative data on distribution of beach-cast seaweeds, the relationship between beach-cast seaweed and off-shore algal stands, residence time of the seaweed on the beach, the fate of seaweeds when not collected and the communities they support, the role of floating seaweeds, and the effects of removals on the

coastal ecosystem and fisheries resources.” These aspects are also of relevance in relation to the seaweed harvest along the east coast of Vancouver Island.

It is recommended that:

- The seaweed fishery, as a potentially new activity should be subject to the Fisheries and Oceans regulations for “new fisheries”. The criteria for such are to be found at the web site defining emerging fishery policy:
<http://www.dfo-mpo.gc.ca/fm-gp/policies-politiques/efp-pnp-eng.htm#sec6a>
- A scientific and ecological review of the *Mazzaella japonica* fishery is required; equivalent to the reviews usually conducted through a Fisheries and Oceans Canadian Science Advisory Secretariat evaluation and reporting process.
- A thorough evaluation of the effects of seaweed harvesting should be undertaken in relation to the requirements of the impacted areas affected to support continued aquaculture activities and their future growth, and maintain the supporting habitat for other highly valuable components of the local ecosystem. This is a prerequisite so that appropriate, sensible and sound decisions may be made based on pertinent factual information.
- The recommendations of Jamieson et al. (2001) regarding Baynes Sound are endorsed and should be reviewed and reconsidered in light of this new proposed industry, as follows:
 1. Establish a multi-agency initiative to identify existing and potential future impacts;
 2. Develop a network of protected areas in Baynes Sound that includes sensitive habitats, key bird habitats and which exclude shellfish culture;
 3. Identify potential adverse impacts from inter-tidal shellfish aquaculture and implement mitigation where appropriate. Consider inter-tidal aquaculture both as an economic asset and as an ecological disturbance;
 4. Investigate the overall carrying capacity of the Baynes Sound ecosystem with respect to phytoplankton production and its removal by filter feeders.
- Restrictions should be specified to protect certain ecologically valuable areas from any future harvesting (e.g. inter-tidal pool and lagoon areas within 3 km of Deep Bay, unconsolidated-sediment areas comprising spawning beaches for forage fish, and marine riparian habitats).
- A moratorium on seaweed harvesting and licensing should be imposed until the ecological impacts of the *Mazzaella* fishery have been identified and assessed.

REFERENCES

- Bass A.H. 1995. Alternative life history strategies and dimorphic males in an acoustic communication system. Pp. 258–260. In: Goetz, F.W. and P. Thomas, editors. Proceedings of the fifth international symposium on the reproductive physiology of fish. Austin, Texas.
- Bixler, H.J. 1996. Recent developments in manufacturing and marketing carrageenan. Proceedings of the Fifteenth International Seaweed Symposium held in Valdivia, Chile, in January 1995. Edited by S.C. Lindstrom and D.J. Chapman. Published by Springer Netherlands; Developments in Hydrobiology 116: 35-57.
- Black, R., and R.J. Miller. 1994. The effects of seaweed harvesting on fishes: a response. *Environmental Biology of Fishes*. 39: 325-328.
- Bradley, R. A., and D.W. Bradley. 1993. Wintering shorebirds increase after kelp (*Macrocystis*) recovery. *The Condor*, 95(2), 372–376.
- Brennan, J.S., and H. Culverwell. 2004. Marine Riparian: An Assessment of Riparian Functions in Marine Ecosystems. Published by Washington Sea Grant Program. Copyright 2005, UW Board of Regents. Seattle, WA. 34 p.
- Chopin, T., and R. Ugarte 2007. The seaweed resources of eastern Canada. University of New Brunswick, Centre for Coastal Studies and Aquaculture. 46p.
- Columbini, I., and L. Chelazzi. 2003. The influence of marine allothonous input on sandy beach communities. *Oceanography and Marine Biology: Annual Review*, 115–159.
- de Graaf, R.C. 2012. Potential Impacts of Beach Wrack Seaweed harvesting to inter-tidal forage fish spawning habitat. Unpublished report Emerald Sea Biological.
- Dugan, J.E., Hubbard, D.M., Page, H.M., and J.P. Schimel. 2011. Marine Macrophyte Wrack Inputs and Dissolved Nutrients in Beach Sands. *Estuaries and Coasts*, 34(4), 839–850.
- Elliott K.H., C.L. Struik, and J.E. Elliott. 2003. Bald Eagles, *Haliaeetus leucocephalus*, feeding on Spawning Plainfin Midshipman, *Porichthys notatus*, at Crescent Beach, British Columbia. *Canadian Field-Naturalist* 117(4): 601-604.
- Government of Canada 2012. *Fisheries Act* R.S.C., 1985, c. F-14, amended June 29, 2012, Published by the Minister of Justice, Ottawa Canada 70p.
<http://laws-lois.justice.gc.ca>.
- Government of Canada 1996. *Fisheries Act* [RSBC c 149] 1996. Section 24. General terms concerning the harvest of marine plants in British Columbia. Queen's Printer, Victoria, British Columbia, Canada.
<http://canlii.ca/t/5207r>.

- Harley, C.D.G., K.M. Anderson, K.W. Demes, J.P. Jorve, R.L. Kordas, T.A. Coyle, and M.H. Graham. 2012. Effects of climate change on global seaweed communities. *Journal of Phycology*. 48 (5) 1064–1078.
- Hay, D. E. and P. B. McCarter. 1999. Distribution and timing of herring spawning in British Columbia. Canadian Stock Assessment Secretariat Research Document 99/14 (Working Paper H98-5).
- Hay, D.E. and P.B. McCarter. 2006. Herring spawning areas of British Columbia: A review, geographical analysis and classification. Revised MS Rept. 2019
<http://www.pac.dfo-mpo.gc.ca/science/species-especes/pelagic-pelagique/herring-hareng/herspawn/pages/project-eng.htm>
- Hay, D.E. and P.B. McCarter. 1997. Larval retention and stock structure of British Columbia herring. *J. Fish. Biol.* 51:155-175
- Jamieson, G.S., L. Chew, G. Gillespie, A. Robinson, L. Bendell-Young, W. Heath, B. Bravender, D. Nishimura, and P. Doucette. 2001. Phase 0 review of the environmental impacts of inter-tidal shellfish aquaculture in Baynes Sound. Fisheries and Oceans Canada, Canadian Science Advisory Secretariat, Ottawa, Ontario. 103p.
- Jaspers, M., and F. Folmar. 2013. Sea Vegetables for Health. A report prepared for Food and Health Innovation Service. Department of Chemistry, School of Natural and Computing Science, University of Aberdeen, Scotland. 29p.
- Krumhansi, K.A, and Scheibling R.E. 2012. Production and fate of kelp detritus. *Mar. Ecol. Prog. Ser.* 467: 281-302.
- Lastra, M., H.M. Page, J.E. Dugan, D.M. Hubbard, and I.F. Rodil. 2008. Processing of allochthonous macrophyte subsidies by sandy beach consumers: estimates of feeding rates and impacts on food resources. *Mar. Biol.* 154: 163-174.
- Levings, C.D., and G. Jamieson. 2001. Marine and estuarine riparian habitats and their role in coastal ecosystems, Pacific Region. Fisheries and Oceans Canada, Canadian Science Advisory Secretariat, Ottawa, Ontario. 42p.
- Levings, C.D., R.E. Foreman, and V.J. Tunnicliffe. 1983. Review of the benthos of the Strait of Georgia and contiguous fjords. *Can. J. Fish. Aquat. Sci.* 40: 1120-1141.
- Lorentsen, S.-H., K. Sjøtun and D. Grémillet. 2010. Multi-trophic consequences of kelp harvest. *Biological Conservation*. 143 (9): 2054–2062.
- Mann, K. H. 1988. Production and use of detritus in various freshwater, estuarine, and coastal marine ecosystems. *Limnol. Oceanogr.*, 33: 910-930.
- McGwynne, L.E., A. McLachlan, and J.P. Furstenberg. 1988. Wrack breakdown on sandy beaches-its impact on interstitial Meiofauna. *Marine Environmental Research*. 25: 213-232.

- Mews, M., M. Zimmer, and D.E. Jelinski. 2006. Species-specific decomposition rates of beach-cast wrack in Barkley Sound, British Columbia, Canada. *Mar. Ecol. Prog. Ser.* 328: 155–160.
- Olabarria, C., M. Incera, J. Garrido, and F. Rossi 2010. The effect of wrack composition and diversity on macrofaunal assemblages in inter-tidal marine sediments. *Journal of Experimental Marine Biology and Ecology*. 396 (1): 18–26.
- Orr, M., M. Zimmer, D.E. Jelinski, and M. Mews. 2005. Wrack deposition on different beach types: spatial and temporal variation in the pattern of subsidy. *Ecology* 86: 1496–1507.
- Pennings, S.C., T.H. Carefoot, M. Zimmer, J.P. Danko, and A. Ziegler. 2000. Feeding preferences of supra-littoral isopods and amphipods. *Canadian Journal of Zoology*. 78(11): 1918–1929.
- Penttila, D. 2007. Marine Forage Fishes of Puget Sound. Puget Sound Near shore Partnership report No. 2007-03. Published by Seattle District, U.W. Army Corps of Engineers, Seattle, Washington.
- Peppar J.L. 1965. Some features of the life history of the cockscomb prickleback *Anoplarchus purpureus* Gill. M.Sc. thesis, University of British Columbia, Vancouver. B.C. 159 p.
- Polis, G. A., and S.D. Hurd. 1996. Linking Marine and Terrestrial Food Webs : Allochthonous Input from the Ocean Supports High Secondary Productivity on Small Islands and Coastal Land Communities. *The American Naturalist*. 147(3) 396–423.
- Rangeley, R.W. 1994. The effects of seaweed harvesting on fishes: a critique. *Environmental Biology of Fishes*. 39: 319–323.
- Richards, L. J. (1984). Field studies of foraging behaviour of an inter-tidal beetle. *Ecological Entomology*, 9(2), 189–194.
- Romanuk, T.N., and C.D. Levings. 2003. Associations between arthropods and the supralittoral ecotone: dependence of aquatic and terrestrial taxa on riparian vegetation. *Environmental Entomology*. 32: 1343–1353.
- Romanuk, T.N., and C.D. Levings. 2005. Stable isotope analysis of trophic position and terrestrial vs. marine carbon sources for juvenile Pacific salmonids in near shore marine habitats. *Fisheries Management and Ecology*, 12(2), 113–121.
- Romanuk, T.N., and C.D. Levings. 2006. Relationships between fish and supra-littoral vegetation in near shore marine habitats. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 16(2), 115–132.
- Rossi F., C. Olabarria, M. Incera, and J. Garrido. 2010. The trophic significance of the invasive seaweed *Sargassum muticum* in sandy beaches. *Journal of Sea Research*. 63 (1): 52–61.

- Schmidt, A.L., M. Coll, T.N. Romanuk, and H.K. Lotze. 2011. Ecosystem structure and services in eelgrass *Zostera marina* and rockweed *Ascophyllum nodosum* habitats. *Marine Ecology Progress Series* 437: 51-68.
- Seeley, R.H., and W.H. Schlesinger. 2012. Sustainable seaweed cutting? The rockweed (*Ascophyllum nodosum*) industry of Maine and the Maritime provinces. *Annals of the New York Academy of Science*. 149: 84-103.
- Shaffer, J.A., D.C. Doty, R.M. Buckley, and J.E. West. 1995. Crustacean community composition and trophic use of the drift vegetation habitat by juvenile splitnose rockfish *Sebastes diploproa*. *Mar. Ecol. Prog. Ser.* 123: 13-21.
- Sharp, G.J. and J. Pringle. 1990. Ecological impact of marine plant harvesting in the northwest Atlantic: a review. *Hydrobiologia*. 204/205: 17-24.
- Sisneros, J.A. P., W. Alderks, K. Leon, and B. Sniffen. 2009. Morphometric changes associated with the reproductive cycle and behaviour of the inter-tidal-nesting, male Plainfin midshipman *Porichthys notatus*. *J. Fish. Biol.* 74: 18-36.
- Sobocinski, K.L. 2003. The impact of shoreline armouring on supratidal beach fauna of central Puget Sound. MSc. Thesis, University of Washington. 89p.
- Stagnol, D., M. Renaud, and D. Davoult. 2013. Effects of commercial harvesting of inter-tidal macroalgae on ecosystem biodiversity and functioning. *Estuarine, Coastal and Shelf Science*. *In press*.
- Tenore, K. R. 1981. Organic nitrogen and caloric content of detritus. I. Utilization by the deposit-feeding polychaete *Capitella capitata*. *Estuar. Coast. Mar. Sci.* 12: 39-47
- Tenore, K.R. 1988. Nitrogen in benthic food chains. Pp 192-206 In: Nitrogen cycling in coastal marine environment, edited by T.H. Blackburn and J. Sorenson. John Wiley and Sons Ltd.
- Tyron, L. 2012. Ecological concerns regarding proposed beach wrack harvest. Unpublished report to Comox Valley Project Watershed Society, BC. 19p
- Zempke-White, W.L., S.R. Speed, and D.J. McClary. 2005. Beach-cast seaweed: a review. *New Zealand Fisheries Assessment Report*, 2005/44. 47p.

APPENDIX 1.

Requirements from the provincial and federal government

BC Ministry of Environment (C. 2007)

- No harvesting is to occur in provincially protected areas, including parks, conservancies, recreation areas, ecological reserves, marine protected areas and wildlife management areas, or any other lands administered by the Ministry of Environment for conservation purposes;
- Harvest areas should be limited to a few small sites for experimental harvest for scientific purposes until science data is collected and a management strategy prepared;
- Quotas should be set by area, based on biomass estimates, and once the annual quota has been met the area is closed;
- Species and the consequences of harvesting (by catch) species other than those specified on the licence must be clearly defined;
- Hand harvesting of drift seaweed, of the target species only, should be permitted and there should be no cutting of attached seaweed;
- Mechanized access to the harvest area should be limited to one well-maintained ATV or boat;
- Hail-in information must include the number of harvesters. The licensee should submit a list of harvesters who will assist in the harvest;
- Include a requirement for monthly harvest logs, with harvest location, date and time of harvest, tide, biomass collected (wet), size of patch, percent cover of target species, average length of target species, reproductive state of target species, harvesters, and photographs of the area before and after harvest;
- Harvest routes must utilize hard substrate areas and be limited to one access path. Travel down or across streams is prohibited;
- Harvesting should exclude the peak herring spawning period (February to April);
- If there are eagle or heron nests with 100 metres of the foreshore, harvesting should be excluded during the nesting periods (January to September, and February to August); and,
- Licensees should provide a proposal that includes a harvest plan, including measures to minimize damage and disturbance to wildlife and the marine environment.

Comment: *The underlined portions indicate concern, non-compliance, and the need for a comprehensive impact assessment based on the information provided in this report.*

Fisheries and Oceans Canada 2007; draft advisory notice

Only detached algae is to be collected under these guidelines.

Detached algae located in the estuary of any stream or river is not addressed by these guidelines. Should it be deemed necessary to collect algae from estuaries, a formal application with site specific mitigation measures should be submitted to DFO.

No riparian vegetation shall be removed or altered to provide beach access. Established waterfront and shoreline access points are to be used.

Disturbance to the foreshore and substrate below the high water mark for equipment access shall be minimized at all times. Machines are to work at or above the deposited algae and in general in portions of the intertidal zone that do not support encrusting or attached life.

Access and work is to take place on un-encrusted bedrock shores or sand/gravel/cobble shores without encrusting life or infauna (clams etc.). Soft, muddy substrates are not to be used for site access or during retrieval.

Beach access points should be stabilized upon completion of work (replacement of boulders or drift logs) and restored to a pre-disturbed state or better.

No equipment will be permitted in the water or to retrieve drift algae from the water. Works are to be conducted when the site is not wetted by the tide.

Filling, dredging or blasting below the HWM is not authorized by these guidelines.

Works are to be conducted in a manner that does not result in the deposit of toxic or deleterious substances (e.g. sediment, uncured concrete, fuel, lubricants, etc.) into waters frequented by fish.

Vehicle and equipment re-fuelling and maintenance shall be conducted at least 15m inland from the high water mark. Each piece of equipment is to be supplied with an appropriate spill kit.

Riparian vegetation, intertidal saltmarsh, oyster beds, clam beds and other sensitive fish habitat must not be harmfully affected by access or retrieval of the product. You are advised to seek the advice of a professional biologist if vegetation will be affected in any way by your proposed works.

Stockpiles, should they be necessary, are to be placed in the upper intertidal zone immediately below the log line or HWM. Guidelines to avoid sensitive fish habitat (riparian, sedges, pickleweed and saltmarsh) are to be followed for stockpile placement.

A notification is to be forwarded to DFO prior to the commencement of works. For works south of the Oyster River, Nanaimo (250-756-7162). For works north of the Oyster River, Campbell River (250-286-5852).

APPENDIX 2.

Inter-tidal forage fish spawning habitat and potential impacts of beach wrack seaweed harvesting

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1. Introduction

Beach spawning forage fish are important prey for marine predators in the Strait of Georgia. Two beach spawning forage fish species with substantial commercial, recreational or ecological value in the Strait of Georgia are the surf smelt (*Hypomesus pretiosus*) and Pacific sand lance (*Ammodytes hexapterus*). Pacific sand lance are often referred as the most important fish in the North East Pacific due to its unique role as forage to marine fishes, seabirds and marine mammals (Robards et al. 1999). Surf smelt are also important prey to marine predators. Surf smelt fisheries are managed by Fisheries and Oceans Canada (DFO) under the Surf Smelt Management Plan for commercial and recreational fishers; their population abundance in the Strait of Georgia is declining (Therriault et al. 2002).

The comments provided in this document apply only to the beach spawning Pacific sand lance and surf smelt.

2. Beach Spawning Forage Fish Habitat

The physical location of embryo deposits of surf smelt and Pacific sand lance overlap with that of beach wrack along marine shorelines. Beach wrack harvesting, both through commercial licensee and by private land owners, conflicts with protection of the spawn deposits of surf smelt and Pacific sand lance.

Washington Department of Fish and Wildlife (USA) has conducted extensive surveys in Puget Sound and produced maps of spawning habitat (Penttila, 2007). Approximately 10% of Puget Sound beaches are used by surf smelt for spawning and 10% are used by Pacific sand lance (Penttila 2007). Critical spawning habitat of these two forage fishes has not been mapped in British Columbia. Citizen Science groups have been working throughout the Strait of Georgia and their data have been compiled in an online forage fish spawning data atlas (Community Mapping Network (de Graaf, personal communication)

3. Spawning Behaviour

Sand lance exhibit the unusual behaviour of actively burrowing into near shore sand-gravel bottom sediments (Penttila 2007). Surf smelt spawn during high to low high tide cycles throughout the day. Females release ova and males then release milt (sperm) as the fish swim into shallow water: only a few centimetres of depth. When spawning they move in groups creating a “spawning pit” for females in which they deposit their eggs (Penttila 2007). After

fertilization, the small 0.6 mm egg capsules become adhesive. Eggs stick together and to sand or pebble particles (Penttila 1995). Surface sediments entrained within the surf zone may become attached to an adhesive attachment pedestal of the egg capsules. The adhering “pea-sized” pebbles allow the developing embryos to sink between the larger beach particles so that embryos incubate a few centimetres below the beach surface (Penttila 2007). After repeated tide cycles, the embryos become buried below the sediment surface to a depth of a centimetre or more (Penttila 1995).

4. Spawning seasons

Surf smelt are known to spawn year round in Puget Sound and also have distinct winter and summer spawning populations (Penttila 2007). In British Columbia, spawning beaches have been used particularly in summer but their use throughout the year has also been determined (de Graaf; unpublished data). Sand lance spawning is from November – January with incubating embryos detected into February (30-45 day fall/winter incubation period).

Data compilation for spawning periods for regions of British Columbia has begun due to the efforts of more than thirty communities working with the author through the BC Shore Spawners Project of the Coastal Conservation Institute of BC.

5. Spawning Habitat characteristics

Inter-tidal Elevation

The highest densities of embryos found to date have been in the upper beach slope between the high water seaweed wrack zone and the low high water seaweed wrack zone. Consistently, mixed embryo stages ranging from one hour in age to near hatching are found in samples taken from +1.5 m to +4.5 m above chart datum. Sand lance also spawn on the sand flat edge near the beach slope (Penttila 2007, de Graaf; unpublished data); this area of the inter-tidal zone has been sparsely sampled.

Sediment Characteristics

Both surf smelt and sand lance embryos can be found in the same sediment sample collected along the upper beach slope. Surf smelt are reported to spawn in sediments of fine “pea pebble”/sand to coarse pebble/sand beaches (size generally 1-10 mm; although full grain size spectra show numerous sample sets with a wide range of pebble/sand including coarse pebble greater than 2.6 cm (Penttila 2001)). Surf smelt do not spawn in coarse sand beaches without pebbles due to the unique attachment pedestal of this egg (they are gravel-dependent spawners). Sand lance are reported to spawn in sediments of coarse sand/pebble (67% having material of a median grain size of 0.2–0.4 mm and 25% being gravel-coarse sand from 1–7 mm (Penttila 2001; 2007). Recent findings in British Columbia reveal that sand lance embryos are also found in beaches bearing a high percentage of coarse pebble greater than 2.6 cm (de Graaf; unpublished data). Sand lance embryos can be found throughout the range of surf smelt bearing sediments as well as coarse sand. Sand lance do not spawn on fine silt and cobble (Penttila 2001). In British

Columbia, both surf smelt and sand lance embryos can be found throughout the erosion, transportation and accretion zones on beaches (de Graaf; unpublished data 2011)

Biophysical Characteristics

Beaches in British Columbia bearing surf smelt and Pacific sand lance spawning sites are typically of sand/pebble in the upper component of the beach slope, a cobble component seaward, followed by a sand or mud flat toward the low tide level. The width of the sand/pebble component is variable and can range from 0.5 m to over 10 m in width.

6. Threats to the Habitat of Beach Spawners

Shoreline modifications can negatively impact the near shore marine food web in many ways, and are therefore a primary threat to the integrity of surf smelt and sand lance spawning beaches (Penttila 2005). Many human activities impact and alter marine shorelines either through disruption of the sediment drift cell or by physical alteration of the beach, including: piers, pilings, docks, jetties, groins, breakwaters, riprap, and seawalls. In some Counties of Puget Sound up to 60% of the shoreline has been drastically altered by armouring, habitat types lost and shorelines shortened due to changes in littoral drift (K. Fresh, USGS; personal communication). Along White Rock shores, the largest historical surf smelt spawning beach in BC has been lost due to the railway bed and hardening; there is only one area where spawning now occurs (de Graaf 2007).

7. Risk to Beach Spawning Forage Fish

Potential Impacts of Beach Wrack Harvesting on Beach Spawning Forage Fish Habitat

Prior to 2012, within the BC Government seaweed harvest permitted area, no standard surveys have been conducted to identify spawning or potential spawning habitat for surf smelt and Pacific sand lance. Outside the permit area from Baynes Sound to Parksville, some limited data are available for surf smelt and Pacific sand lance spawning beaches (de Graaf, unpublished data). In December 2012, Pacific sand lance embryos were detected at a beach within the seaweed harvest permitted area (referred to as Deep Bay RV Park). This beach was subjected to the most substantial harvest of beach-cast seaweed (de Graaf; unpublished data). Due to the timing of spawning by surf smelt and Pacific sand lance and the presence of suitable habitat, it is the opinion of this author that there is a high likelihood of embryos being present on beaches throughout the year. As a result of the lack of information and the known spawning seasons of these two species, a mitigation strategy to protect potential and actual spawning locations is necessary.

Damage by use of vehicles/machinery on beaches

Due to the spatial overlap between spawning/spawn deposition and the presence of seaweed wrack on beaches, harvest operations will, if permitted, most probably occur on forage fish spawning sites (adult fish, spawning deposits, and their spawning habitat are protected under the *Fisheries Act*). Department of Fisheries and Oceans operational statements that guide erosion

control methods (e.g. seawalls) as well as preliminary advice to the Ministry of Agriculture by DFO (approximately 2007) with respect to beach wrack harvest provide some protection of beach spawning forage fish.

The Fisheries and Oceans Canada Best Management Practices guide for seawalls restricts access to the beach for heavy machinery to ensure that fish habitat is not affected. Proponents undertaking any projects near water (e.g. seawall works) must have the site examined for potential forage fish spawning.

DFO prescribed preliminary draft guidelines to guide seaweed wrack harvest in BC. In general, specific guidelines regulating shoreline works for routine infrastructure maintenance by municipalities in BC to mitigate damage to forage fish embryos have not been developed by DFO. The City of Campbell River, in association with DFO and the author, developed guidelines to assist with shoreline works to repair water/sewer lines as well as boat ramp maintenance and beach restoration. However, they were not intended for use to regulate frequent access along beaches by machinery/vehicles. These guidelines were developed by the author and are part of the City of Campbell River Marine Foreshore Fish Habitat report and the City's Foreshore Development Permit Area. Generally, for beaches with no survey data for beach spawning forage fish, embryo surveys are conducted prior to beach works and works cannot start until the beach no longer bears embryos. This is done to avoid triggering the need for a Project Approval by DFO due to damage to fish and fish habitat. DFO Shellfish Aquaculture Licence Condition 10.3 specifically states that licence holders are not to disrupt specific sand lance spawning substrates in the upper inter-tidal during spawning windows (Nov-Feb). Condition 10.2 restricts certain operations due to herring spawn deposition from February through May.

Long-term compaction of beaches by vehicles

Spawning sediments can become compacted due to the use of vehicles on beaches. In Puget Sound, under current regulatory provisions, shellfish aquaculture harvesting operations are limited to the use of boats and barges as vehicles are not permitted on the sites. In British Columbia, several Non-Government Organizations are encouraging the newly-formed DFO Shellfish division to investigate beach areas along Denman Island which appear to be compacted in the upper inter-tidal area due to vehicular use. This is an area of research that should be considered together with the implementation of a risk-management approach that eliminates the use of any machinery within beach spawning forage fish habitat areas. This would benefit resident meiofaunal species as well as invertebrate species that recruit in gravel beaches.

Damage due to the use of rakes or pitchforks to the beach sediment surface

Surf smelt and Pacific sand lance spawn deposits occur on the beach within a few centimetres of the surface. Washington Department of Fish and Wildlife has recorded damage to surf smelt spawn deposits by recreational fishermen using traditional "smelt rakes" (Penttila; personal communication). Disturbing the beach sediment surface using rakes and pitchforks could result in embryo mortality. Without monitoring and enforcement, there is likelihood that seaweed harvest using rakes and pitchforks will be a high risk to the survival of forage fish embryo survival. Rakes cannot be easily controlled and their shape and weight too easily lend

themselves to being dragged along the sediment surface. In Puget Sound, traditional smelt rakes disturb the beach sediment surface exposing embryos to desiccation by heat and wind as well as physically damaging/destroying embryos.

Ideally seaweed wrack harvesting should not be permitted on forage fish spawning beaches.

References

de Graaf, R.C. 2007. Boundary Bay inter-tidal Forage Fish Spawning Habitat Project. Summary of the Project and Findings July 2006 – October 2007. For The Friends of Semiahmoo Bay Society.

Penttila, D. 1995 Investigations of the spawning habitat of the Pacific sand lance (*Ammodytes hexapterus*), in Puget Sound. Pp. 855-859 in Puget Sound Research-95 Conference Proceedings, Vol. 2. Puget Sound water Quality Authority, Olympia, Washington.

Penttila, D. 2001. Grain-Size analyses of spawning substrates of the surf smelt (*Hypomesus*) and Pacific sand lance (*Ammodytes*) on Puget Sound spawning beaches. State of Washington, Department of Fish and Wildlife. Manuscript Report.

Penttila, D. 2007. Marine Forage Fishes of Puget Sound. Puget Sound Near shore Partnership report No. 2007-03. Published by Seattle District, U.W. Army Corps of Engineers, Seattle, Washington

Robards, M.D. et al. 1999. Sand Lance: A review of Biology and predator relations and annotated bibliography. US Department of Agriculture. Portland Oregon. Research Paper PNW-RP-521



Islands Trust

Top Priorities

"Executive Area" Islands

No.	Description	Activity	Received/Initiated	Responsibility	Target Date	Status
1	Development of an Official Community Plan and Land Use Bylaw	Obtain additional resources and expertise to support LTC interaction with First Nations	Oct-23-2007	Marnie Eggen		On Going
2	Amendment of the Meeting Procedures Bylaw No. 24		Feb-25-2013	Marnie Eggen	Oct-25-2013	On Going
3	Consider adopting relevant administrative bylaws following adoption of OCP and LUB		Jul-26-2011	Marnie Eggen		On Going

From: Nicole Ranger
Sent: May-06-13 9:37 AM
To: David Graham; Ken Hancock; Peter Luckham; Sheila Malcolmson; Marnie Eggen; Courtney Simpson; Becky McErlean
Cc: Nancy Rogers
Subject: Ballenas/Winchealsea Group Final expenses to March 31/13

Islands Trust LTC EXP SUMMARY REPORT F2012 Invoices posted to March 31, 2013 (Final for Fiscal Year End)				
610 Executive	Invoices posted to March 31, 2013	Budget	Spent	Balance
73001 610 4001	Ballenas/Winchealsea Group OCP/LUB	2,500.00	-	2,500.00
TOTAL Project Expense		2,500.00	0.00	2,500.00

Nicole Ranger

Finance Clerk
Islands Trust
200-1627 Fort Street
Victoria, BC V8R 1H8
Phone: (250) 405-5152
Fax: (250) 405-5155

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From: Nicole Ranger

Sent: June-07-13 5:12 PM

To: David Graham; Ken Hancock; Peter Luckham; Sheila Malcolmson; Marnie Eggen; Courtney Simpson; Becky McErlean

Cc: Nancy Roggers

Subject: Balenlenas/Winchealsea expense report to May 31, 2013

610 Ballenas/Winchealsea	Invoices posted to May 31, 2013	Budget	Spent	Balance
65230 610	LTC Local Exp Special Projects	2,000.00	-	2,000.00
	TOTAL Project Expense	2,000.00	0.00	2,000.00

Thanks!

Nancy Roggers
Finance Officer

Islands Trust
#200 1627 Fort Street
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From: Nicole Ranger
Sent: June-26-13 12:16 PM
To: David Graham; Ken Hancock; Peter Luckham; Sheila Malcolmson; Marnie Eggen; Courtney Simpson; Becky McErlean
Cc: Nancy Roggers
Subject: Ballenas/Winchealsea Group OCP/LUB - June 30/13

<i>Islands Trust</i>				
LTC EXP SUMMARY REPORT F2014				
Invoices posted to June 30, 2013				
610 Executive	Invoices posted to June 30, 2013	Budget	Spent	Balance
73001 610 4001	Ballenas/Winchealsea Group OCP/LUB	-	-	-
TOTAL Project Expense		0.00	0.00	0.00

Nicole Ranger

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From: Nicole Ranger
Sent: July-29-13 10:19 AM
To: David Graham; Ken Hancock; Peter Luckham; Sheila Malcolmson; Marnie Eggen; Courtney Simpson; Becky McErlean; Penny Hawley
Cc: Nancy Roggers
Subject: Ballenas/Winchealsea Group OCP/LUB - July 31/13

Islands Trust LTC EXP SUMMARY REPORT F2014 Invoices posted to July 31, 2013				
610 Executive	Invoices posted to July 31, 2013	Budget	Spent	Balance
TOTAL Project Expense		0.00	0.00	0.00

Nicole Ranger

Finance Clerk
 Islands Trust
 200-1627 Fort Street
 Victoria, BC V8R 1H8
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From: Nancy Roggers

Sent: August-26-13 1:54 PM

To: David Graham; Ken Hancock; Marnie Eggen; Peter Luckham; Sheila Malcolmson; Becky McErlean

Subject: Ballenas/Winchealsea Group expenses - August 2013

Islands Trust				
LTC EXP SUMMARY REPORT F2014				
Invoices posted to August 31, 2013				
610 Executive	Invoices posted to August 31, 2013	Budget	Spent	Balance
TOTAL Project Expense		0.00	0.00	0.00

Thanks!

Nancy Roggers
Finance Officer

Islands Trust
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Phone: (250) 405-5154
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STAFF REPORT

Date: September 30, 2013

File No.: 6500-0020

To: Executive Committee acting as Local Trust Committee
for the meeting of October 9, 2013

From: Marnie Eggen, A/Planner 2

CC: Courtney Simpson, Regional Planning Manager

**Re: Proposed Bylaws No. 27 & 28 – Ballenas-Winchelsea Islands OCP
and LUB**

SUPPLEMENTAL REPORT

The purpose of this report is the following:

- review agency and First Nations referral responses received to date regarding proposed bylaws No. 27 and 28, and recommend revisions to OCP and LUB;
- provide staff advice as requested with regard to the “short term vacation accommodation” definition in the LUB;
- request LTC approval of minor revisions to the OCP and LUB;
- recommend the LTC proceed with second reading of the Ballenas - Winchelsea Islands OCP and LUB;
- recommend notification of a community information meeting and public hearing on November 21, 2013 in the Nanoose area; and
- request direction with respect to Nanoose First Nation’s requests resulting from referral response.

REFERRAL RESPONSES:

Agency and First Nation referrals were sent out May 28, 2013. Several referral responses have been received to date. Copies of referral responses are attached. The following are responses received:

Fisheries and Oceans Canada

FYI that Fisheries and Oceans Canada does not have a regulatory role related to the review of OCPs or LUBs. Such a review is not related to the Fisheries Protection Program.

Transport Canada, Navigable Waters Protection Program

OCP – interests unaffected.

LUB - Approval recommended subject to including reference to mooring buoys conforming to Private Buoy Regulations of the *Canada Shipping Act* 2001. Staff recommend making revisions to the LUB by adding the following to the definition section of the LUB: “mooring buoy – means a fixed buoy to which a boat is moored and that meets the Private Buoy Regulations of the *Canada Shipping Act*”

Transport Canada, Property Services

Interests Unaffected.

Provincial Ministry of Community, Sport and Cultural Development

Received by Ministry as an FYI.

Provincial Ministry of Forests, Lands and Natural Resource Operations – Ecosystems Branch

Suggestions for the OCP:

- require only native species use and control invasive species;
Staff suggests no revisions to the OCP because request is best accomplished using DPA which recommends native species use and restricts invasive species use.

- For shoreline DPA:
 - o steer towards “greenshores” solutions;
 - o in Shoreline DPA Exemptions no. 10, use “International Society of Arboriculture (ISA)” certified arborist” instead of “arborist”;
 - o in Shoreline DPA General Guideline no. 21, suggest replanting should be maintained 3 years instead of 2 years;
 - o In DAI bylaw – direct to Ministry of Environment’s “Develop with Care.”

Staff recommend revising the DPA Exemptions no. 10 and General Guideline no. 21 of the OCP as suggested above. Staff suggests referencing the Ministry of Environment’s “Develop with Care” when developing the DAI bylaw and will flag this for future consideration. Staff suggests it is not necessary to include direct reference to “greenshores,” as the DPA sufficiently addresses “greenshores” principles and approaches.

Suggestions for the LUB:

- Note a conflict between 3.3(4) and 3.4(1).
Staff note there is no conflict.

- Reduce machine activity or permanent construction at or below natural boundary of sea;
Staff suggest no revisions to LUB, because uses in the marine zones limit construction in the foreshore already. W2 zone is limited to moorings and no other construction, and the W1 zone only permits one dock per island, and it further imposes limits on size and coverage of structures in the foreshore.
- Create barge landing zone.
Staff suggest no revisions to the LUB. The marine zone around West Ballenas Island and one small cove on Mistaken Island (both privately owned islands), are the only marine areas zoned W1 in the plan area, where barge ramps are permitted. W2 zoning, the majority of the marine zoning, does not permit barge ramps. The use of barge ramps in the W1 zone is appropriate for the designated areas. It provides barge access to the upland lot for the residents of the islands. All the marine area surrounding West Ballenas Island is zoned W1. This is likely to allow for more than one barge ramp area, which is probably necessary given how highly exposed the island is to the elements. Staff note that there are at most only 3 or 4 small areas on the island suitable for barge landing on West Ballenas Island.

Ministry of Forests, Lands & Natural Resource Operations - Archaeology Site Inventory
Interests unaffected. The Ministry reports that there is a potential risk of encountering archaeological sites on the islands for those constructing on the islands. The Ministry reports that there are several recorded archaeological sites on the islands, and a high potential for unrecorded sites. Since there is no building inspection or siting and use permits in place for the islands, staff will follow up with the Ministry to explore ways to coordinate efforts to distribute appropriate information about archaeological sites on the islands to current and future land owners. Staff recommend no change to OCP or LUB.

Ministry of Natural Resource Operations - Water Stewardship Division

OCP – approval recommended, supporting policies including 3.12, 3.15, 4.44.

LUB – approval recommended subject to inclusion of clauses referring to provincial statutes related to well construction/permitting and water supply systems. Staff recommends revisions to LUB, adding the following at the end of Section 3.1 of the LUB: “Information Note: Water supply facilities must comply with the *Water Act*, Groundwater Protection Regulation, *Public Health Act*, Drinking Water Protection Regulation, and Health Hazard Regulation.”

Island Health

OCP - Approval recommended, agreement with disposition of lands for ecological purposes.

Ministry of Environment – BC Parks

BC Parks intends to evaluate an extension to Gerald Island Provincial Park to include marine waters surrounding the Island and explore the feasibility of a larger provincial marine park in the vicinity of the Ballenas and Winchelsea Islands in the future. The OCP and LUB do not conflict with any future expanded marine park presence in the area.

District of Lantzville

OCP - Approval recommended as OCP establishes strong preservation ethic for islands, ensuring the ecological attributes of the islands are protected.

LUB – interests unaffected.

Islands Trust Fund (Staff)

OCP, LUB – approval recommended, zoning is consistent with TFB's covenant.

Regional District of Nanaimo (Long Range Planning)

Interests unaffected

Ministry of Transportation and Infrastructure

No objections or comments.

Snaw'Naw'As (Nanoose) First Nation

The First Nation requested to meet with Islands Trust planning staff to discuss how the proposed bylaws may affect their rights. The bylaw process was put on hold until a meeting was held. RPM and planning staff met with the operational manager/member of the Council of the Snaw'Naw'As Nation on September 13th. The manager expressed an interest including a clause in the OCP stating that the bylaw does not abrogate or derogate from existing aboriginal or treaty rights. In consultation with legal counsel, staff recommend revisions to be made to the OCP by adding the following to Sec. 3.10 Cultural and Heritage Policies: "The LTC recognizes that portions of the planning area may be subject to unextinguished aboriginal rights or title that are protected under the *Constitution Act*, 1982."

Staff note, that during the meeting, that the manager communicated that there is very little interest currently of the Nanoose First Nation pursuing aquaculture on the Ballenas – Winchelsea Islands, and does not expect that to change in the future.

The manager also expressed an interest in working with the EC as an LTC in the following ways:

- siting in as a member of the LTC;
- having an annual meeting with the EC as an LTC and/or staff, and
- participating in reviewing crown land application referrals, particularly for new aquaculture tenures.

Staff suggest that for crown land referral applications in the EC LTA that do not appear to be referred to Nanoose FN, that staff recommend to the province to

include the FN in the referral list. Staff also suggest that in the interest of building relationships with First Nations, the LTC direct staff to explore ways in which the other two requests can be facilitated.

We Wai Kai First Nation

No concerns about proposed bylaws.

Denman, Hornby, Lasqueti, Gabriola Local Trust Committees

Interests unaffected

Agency and First Nation referrals where no responses were received and assumed interests unaffected:

Department of National Defence
Ministry of Agriculture
Ministry of Forest, Lands & Natural Resources – Aquaculture
Ministry of Forests, Lands and Natural Resource Operations - Crown Lands & Resource
Ministry of Tourism, Recreation Site and Trails Branch
School District #68 (Nanaimo – Ladysmith)
School District #69 (Qualicum)
City of Parksville
Town of Qualicum Beach
Islands Trust, Bylaw Enforcement
The Land Conservancy
Te'Mexw Treaty Association
Cowichan Tribes
Halalt First Nation
Stz'uminus First Nation
Lake Cowichan First Nation
Lyackson First Nation
Penelakut Tribe
Qualicum First Nation
Hul'qumi'num Treaty Group
K'omoks First Nation
Laich-Kwil-Tach Treaty Society

Staff have not identified any significant issues to date that would warrant postponing a community information meeting or public hearing. All input received up until the close of a public hearing will be considered by the LTC prior to consideration of third reading.

SHORT TERM VACATION ACCOMODATION:

At the May 3, 2013 business meeting, the Local Trust Committee passed the following resolution:

*It was **MOVED** and **SECONDED** that the Executive Committee acting as a Local Trust Committee request staff advice on the proposed Ballenas -*

Winchelsea Land Use Bylaw definition for short-term vacation accommodation as to whether changes are necessary.

The definition “short-term vacation accommodation” is the following:

“means the use or provision for non-commercial gain of temporary accommodation for persons or households who maintain a permanent residence elsewhere, for periods of less than 30 days at a time.”

The definition is intended to provide support for such a use that is allowed in the Conservation (CN) zone in recognition of the existing non-commercial visitor accommodation use of a cabin. Staff confirm that no changes to the definition are necessary.

However, staff suggest that the use of “short-term vacation accommodation” in Section 3.7 Home Occupations (1), where it is prohibited, creates uncertainty about whether it is permitted for commercial gain as opposed to “non-commercial gain,” given the definition. Staff suggest to delete “short-term vacation accommodation” in Section 3.7 and replace with “short-term vacation rental.” The phrase “short term vacation rental” is also used in the definition of “residence” where “short term vacation rental” is explicitly excluded from the definition of “residence”. Staff also suggest to add the phrase “short term vacation rental” to the definition section with the following definition to help distinguish this use as commercial:

“means the use or provision for commercial gain of temporary accommodation for persons or households who maintain a permanent residence elsewhere, for periods of less than 30 days at a time.”

SUMMARY OF MINOR REVISIONS TO OCP:

The following is a summary of the minor revisions based on the referral responses:

- To Sec. 5.1.1 Shoreline Development Permit Area Exemptions no. 10, replace “arborist” with ““International Society of Arboriculture (ISA)” certified arborist”.
- To Sec. 5.1.1 Development Permit Area General Guideline no. 21, replace “2 years” with “3 years”.
- To Section 3.10 Cultural and Heritage Policies, add the following policy:
“3.10.2 The LTC recognizes that portions of the planning area may be subject to unextinguished aboriginal rights or title that are protected under the *Constitution Act*, 1982.”

Staff have also made the follow minor revisions to the OCP of an administrative nature:

- Minor corrections to text: typos, punctuation, formatting, etc.
- Updates to names/titles of government agencies, statutes, regulations, etc.
- Schedules B & C: improved readability, clarified area of application, corrected LTA labels.
- Updated Section 1.2 with current information with respect to the First Nations territories within the Ballenas-Winchelsea Islands planning area.

SUMMARY OF MINOR REVISIONS TO LUB:

The following is a summary of the minor revisions based on the referral responses:

- To the Definition section, add the following:
“mooring buoy – means a fixed buoy to which a boat is moored and that meets the Private Buoy Regulations of the *Canada Shipping Act*”
- At the end of Sec. 3.1, add the following:
“Information Note: Water supply facilities must comply with the *Water Act*, Groundwater Protection Regulation, *Public Health Act*, Drinking Water Protection Regulation, and Health Hazard Regulation.”

The following is a summary of the minor revisions in respect of the review of “short term vacation accommodation”:

- In Section 3.7, delete “short-term vacation accommodation” and replace with “short-term vacation rental.”
- To the Definition section, add:
“short term vacation rental - means the use or provision for commercial gain of temporary accommodation for persons or households who maintain a permanent residence elsewhere, for periods of less than 30 days at a time.”

Staff have made the following minor revisions of an administrative nature:

- Minor corrections to text: typos, punctuation, formatting, etc.
- Updates to names/titles of government agencies, statutes, regulations, etc.
- Deleted Schedule B1, Schedule “B” changed to “Bylaw Area Map”
- Schedule “C”: changed to “Zoning Map”
- Schedules “B” & “C”: improved readability, clarified area of application, corrected LTA labels.

NEXT STEPS:

The following schedule and project timeline is proposed to advance the proposed bylaws:

October 9, 2013 – Consideration of revisions based on referral responses and suggested administrative revisions, and second readings of OCP and LUB.

November 21, 2013 – Community information meeting (CIM) and public hearing in a venue in the Nanoose area.

Winter/Spring 2014 – Third readings and bylaw forwarded to Islands Trust Executive Committee for approval.

Spring 2014 - Final consideration and adoption.

Section 892(3) of the *Local Government Act* requires that notice of a public hearing be published in at least 2 consecutive issues of a newspaper, prior to a hearing. Section 94(2) of the *Community Charter* directs that the notices must be in a newspaper that is distributed at least weekly in the area affected by the subject matter of the notice. Section 94 of the *Community Charter* further instructs that if the newspaper publication is not practicable, as is the case for these bylaws since there are no newspapers circulating on the islands themselves, that alternative means may be used such as individual distribution.

Staff recommend a mail out to property owners within the proposed bylaw area and a newspaper notice that will stipulate the date, time and location of the CIM and public hearing as well as all other statutory notification requirements related to proposed Bylaws No. 27 & 28. Staff advise that placing notification in a newspaper will be effective at reaching those members of the public who live nearby, likely recreate or have interest in the Ballenas – Winchelsea Islands. Notice would be published in the Parksville - Qualicum Beach News.

RECOMMENDATIONS:

THAT the Executive Committee acting as a Local Trust Committee:

- 1) Give second reading to the proposed Bylaw No. 27 cited as the “Ballenas-Winchelsea Islands Official Community Plan Bylaw, 2013” as amended;
- 2) Give second reading to the proposed Bylaw No. 28 cited as the “Ballenas-Winchelsea Islands Land Use Bylaw, 2013” as amended;
- 3) Considers the consultation for the Ballenas-Winchelsea Official Community Plan and Land Use Bylaw project pursuant to s. 879 of the *Local Government Act* to

be sufficient and that staff be requested to schedule a community information meeting and public hearing for November 21, 2013, publish notification in the appropriate newspaper, and notify property owners within the plan area by mail out;

- 4) Direct staff to explore ways in which Nanoose First Nation's requests for the following can be facilitated and report back:
- siting in as a member of the LTC, and
 - have an annual meeting with EC as and LTC and/or staff.

Respectfully Prepared and Submitted by:
Marnie Eggen, MCIP, RPP
A/ Planner 2
September 30, 2013

Concurred in by:
Courtney Simpson, MCIP, RPP
Regional Planning Manager
September 30, 2013

Attachments:

1. Agency and First Nations Referral Responses
2. Proposed Ballenas – Winchelsea Islands Official Community Plan No. 27
3. Proposed Ballenas – Winchelsea Islands Land Use Bylaw No. 28

Attachment No.1

From: [Erickson, Sharon ENV:EX](#)
To: [Marnie Eggen](#)
Cc: [Burfield, Peggy J ENV:EX](#)
Subject: Agency Referral for the Ballenas-Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw
Date: July-24-13 8:01:44 PM

Dear Marnie Eggen,

Further to our telephone conversation, I am sending this email to confirm that the mapping within the bylaws is correct. Gerald Island Provincial Park currently contains the land mass of the Island and does not extend into the marine waters.

As discussed, it is BC Parks intention to evaluate an extension to Gerald Island Provincial Park to include marine waters surrounding the Island and explore the feasibility of a larger provincial marine park in the vicinity of the Ballenas and Winchelsea Islands in the future.

It does not appear that the proposed zoning or land use provisions within the proposed Official Community Plan and Land Use Bylaw would conflict with this evaluation for any future expanded marine park presence in the area.

Thank you for providing BC Parks with this information and the opportunity to comment on the Bylaws by way of the referral provided to us.

I will be away from the office until August 19, 2013.

Should you have any questions regarding this response, please contact Peggy Burfield, Planner (copied above) at: (250) 751-3206, in Nanaimo.

Sharon Erickson

Planning Section Head

Phone: 250 751-3256 Fax: 250 751-3103

sharon.erickson@gov.bc.ca

BC Parks, West Coast Region

Ministry of Environment

2080 A Labieux Road, Nanaimo BC V9T 6J9



Marnie Eggen

From: Lisa Webster-Gibson
Sent: June-25-13 12:50 PM
To: Marnie Eggen
Subject: FW: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws no. 27 OCP and no. 28 Land Use Bylaw

FYI.

From: Cooper, Diana FLNR:EX [mailto:Diana.Cooper@gov.bc.ca]
Sent: June-25-13 12:25 PM
To: Lisa Webster-Gibson
Subject: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws no. 27 OCP and no. 28 Land Use Bylaw

Lisa Webster-Gibson
Planning Clerk
Islands Trust, Northern Islands

Hello Lisa,

Beth Weathers forwarded your referral for the proposed Bylaws no. 27 (OCP) and 28 (Land Use). Beth is going to be leaving the Branch in mid-July, and so has asked me to take over the referrals. It is likely that come October, 2013, Hayley Bond will be back in the Branch and she would usually be the one to respond to referrals. I will forward them to her if that is the case, but in the meantime, you can send any you have to me. ☺

I have reviewed the documents related to the OCP and Land Use Bylaw proposed for the Windchelsea – Ballenas Islnads.

When properties contain a recorded archaeological site which may be disturbed by any proposed construction or landscaping activities, a site alteration permit pursuant to Section 12 of the *Heritage Conservation Act* must be issued prior to any land-altering activities (e.g. addition to home, property redevelopment, extensive landscaping, service installation). A qualified consulting archaeologist (able to hold heritage inspection permits through the Archaeology Branch) needs to be engaged to determine the steps in managing impacts to the archaeological site. If the archaeologist determines that development activities will not impact any archaeological deposits, then a site alteration permit is not required. Occupying an existing dwelling or building without any land alterations does not require archaeological study

or permitting. If a permit is required, proponents should be advised that the permit application and issuance process takes approximately six weeks, and plan their development scheduling accordingly.

For parcels that have potential to contain unknown archaeological sites, a qualified consulting archaeologist (able to hold heritage inspection permits through the Archaeology Branch) should be engaged prior to any land-altering activities to determine if development activities are likely to impact unknown archaeological sites. If the archaeologist determines that development activities will not impact any archaeological deposits, then a site alteration permit is not required. I am informing you of this archaeological potential so proponents are aware of the potential risk for encountering a site if they choose to conduct any land-altering activities on the property. Proponents should contact an archaeologist prior to development to conduct an in-field assessment of the property.

Archaeologists may be contacted through the BC Association of Professional Archaeologists (www.bcapa.ca/) or through local yellow pages and online directories.

If you or your clients have questions please visit the FAQ page at <http://www.for.gov.bc.ca/archaeology/faq.htm> and the Property Owners and Developers web page at http://www.for.gov.bc.ca/archaeology/property_owners_and_developers/index.htm.

Should an archaeological site be encountered on any property, whether privately owned or Provincially managed, all potentially site-disturbing activities MUST be halted immediately and the Archaeology Branch contacted at 250-953-3334 for direction.

Please feel free to contact me if you have any questions regarding my response above.

Kind regards,

Diana

Diana Cooper | Archaeologist/Archaeological Site Inventory Information and Data Administrator

Archaeology Branch | Ministry Forests, Lands and Natural Resource Operations
Unit 3 - 1250 Quadra St, Victoria BC V8W 2K7 | PO Box 9816 Stn Prov Govt, Victoria BC V8W 9W3
Phone: 250-953-3343 | Fax: 250-953-3340 | Website: <http://www.for.gov.bc.ca/archaeology/>

From: [Meredith Seeton](#)
To: [Lisa Webster-Gibson](#); [Marnie Eggen](#)
Cc: [Twyla Graff](#)
Subject: Ballenas - Winchelsea Islands OCP & Zoning Referral
Date: June-20-13 9:45:53 AM
Attachments: [2013 06 20 IT Ballenas-Winchelsea OCP Zoning.pdf](#)

Good morning,

Thank you for referring the proposed OCP and zoning bylaw for the Ballenas-Winchelsea Islands for comment. I have reviewed the documents and appreciate the strong preservation mandate of the plan and regulations. We look out at the Winchelseas and appreciate them from across the water!

I have attached the referral forms.

Thanks again,

Meredith

Meredith Seeton
Community Planner
District of Lantzville
(250) 390-4006 ext. 109

Please note – I am in the office Mondays to Wednesdays from 8am until 4pm

From: [Linda Prowse](#)
To: [Marnie Eggen](#)
Subject: Ballenas-Winchelsea Bylaw referral
Date: July-12-13 3:06:57 PM

Hi Marnie,

The Lasqueti Island Local Trust Committee considered the above bylaw referral for the new LUB/OCP for Ballenas-Winchelsea, and made the following resolution:

THAT in regards to the bylaw referral request for the Ballenas-Winchelsea Islands, the Lasqueti Islands Local Trust Committee area is only affected in a very positive way and thanks the Executive Committee Local Trust Committee for its work.

I also put this on the follow up action list for you.

Cheers ... Linda

Linda Prowse
Planner 2
Islands Trust Northern Office
Ph) 250-247-2200
E-Mail) lprowse@islandstrust.bc.ca
Website) www.islandstrust.bc.ca

BYLAW REFERRAL FORM RESPONSE SUMMARY

☒

Approval Recommended for Reasons Outlined Below

☐

Approval Recommended Subject to Conditions Outlined Below

☐

Interests Unaffected by Bylaw

☐

Approval Not Recommended Due to Reason Outlined Below

Strong agreement with proposed bylaw especially with Advocacy Policies 3.7.8 and 3.7.9.
Highly recommend the LTC petition the Federal and Provincial crown to make the island into
national/provincial parks to be protected from further development in perpetuity.

Executive Committee Local Trust Area

(Island)

H. Guff
(Signature)

June 21, 2013
(Date)

Bylaw No. 27 – Ballenas-Winchelsea Islands Official Community
Plan

(Bylaw Number)

Environmental Health Officer
(Title)

Vancouver Island Health Authority
(Agency)

From: Magnan, Alain [<mailto:Alain.Magnan@dfo-mpo.gc.ca>]

Sent: June-10-13 9:17 AM

To: Lisa Webster-Gibson

Subject: RE: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw

Hi Lisa,

Further to my phone message, the following provides Fisheries and Oceans Canada (DFO) response to your query regarding review of the Ballenas - Winchelsea Islands Proposed Bylaw amendment.

The role of the DFO's Fisheries Protection Program (FPP), is to protect and conserve fish and fish habitat in support of Canada's coastal and inland fisheries resources, and to make regulatory decisions under the habitat provisions of the *Fisheries Act*. The FPP is specifically responsible for reviewing projects for which a s. 32 or s.35(2) Fisheries Act Authorization is required.

DFO does not have a regulatory role related to the development/review of the proposed Ballenas - Winchelsea Islands Bylaw amendment because it does not directly involve works, undertakings or activities that will result in the killing of fish or the harmful alteration or disruption, or the destruction, of fish habitat. Nonetheless, DFO supports the efforts of land managers to develop and implement policies, strategies, programs and plans that ensure responsible development around water for the protection of fisheries resources. DFO has developed, or partnered in the development of, various guidelines and planning tools to support such efforts. These resources are available to you on DFO's [Working Near Water in BC and Yukon website](http://www.pac.dfo-mpo.gc.ca/habitat/index-eng.htm) (see <http://www.pac.dfo-mpo.gc.ca/habitat/index-eng.htm>). Please consult these guidelines and tools to support your planning and land use decisions.

Please note that the transition from the Habitat Management Program to the FPP is in the early stages having just occurred in early April 2013. As the FPP continues to grow and evolve there will be a dedicated group within the program working on standards and guidelines. Consequently, in the future, the FPP may develop more standard guidelines which would provide guidance on OCP amendments which currently does not exist.

If you feel that your plan may facilitate works, undertakings or activities that will result in harm to fish or fish habitat, or you are unsure of how to protect fish or fish habitat through your planning initiative, then DFO recommends that the Islands Trust retain the services of a Qualified Environmental Professional (QEP) with relevant experience and expertise. DFO's Working Near Water in BC and Yukon website also provides detailed guidance on the preparation and submission of individual project referrals to the FPP.

Should you have any questions, please feel free to contact me.

Yours truly,

Alain (Al) Magnan, R.P.Bio., CPESC
Team Leader - Partnerships, Standards and Guidelines
Fisheries Protection Program
Fisheries and Oceans Canada
3225 Stephenson Pt. Road
Nanaimo, BC V9T 1K3
Alain.Magnan@dfo-mpo.gc.ca
Tel: (250) 756-7021

Fisheries Protection Program Website - Working Near Water:
<http://www.pac.dfo-mpo.gc.ca/habitat/index-eng.htm>

From: XPAC Referrals Pacific [<mailto:ReferralsPacific@dfo-mpo.gc.ca>]

Sent: June-27-13 4:22 PM

To: Lisa Webster-Gibson

Subject: RE: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw

Dear Ms. Webster-Gibson:

Subject: Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan (OCP) and No. 28 Land Use Bylaw

Fisheries and Oceans Canada (DFO) - Fisheries Protection Program (FPP) staff have received your OCP and Land Use Bylaw, sent 29 May 2013.

The role of the DFO's FPP is to protect and conserve fish and fish habitat in support of Canada's coastal and inland fisheries resources, and to make regulatory decisions under the habitat provisions of the *Fisheries Act**. The FPP is specifically responsible for reviewing projects for which a s. 32 or s.35(2) *Fisheries Act* Authorization is required.

DFO does not have a regulatory role related to the development/review of your OCP or Land Use Bylaw because they do not directly involve works, undertakings or activities that will result in the killing of fish or the harmful alteration or disruption, or the destruction, of fish habitat. Nonetheless, DFO supports the efforts of land managers to develop and implement policies, strategies, programs and plans that ensure responsible development around water for the protection of fisheries resources. DFO has developed, or partnered in the development of, various [guidelines and planning tools](#) to support such efforts. These resources are available to you on DFO's [Working Near Water in BC and Yukon website](#). Please consult these guidelines and tools to support your planning and land use decisions.

If you feel that your OCP or Land Use Bylaw may facilitate works, undertakings or activities that will result in harm to fish or fish habitat, or you are unsure of how to protect fish or fish habitat through your planning initiative, then DFO recommends that you retain the services of a Qualified Environmental Professional (QEP) with relevant experience and expertise. DFO's Working Near Water in BC and Yukon

website also provides detailed guidance on the preparation and submission of individual project referrals to the FPP.

If you have any further questions about DFO's regulatory process or need general information, contact DFO Headquarters toll free: 1-866-845-6776 or email EnquiriesPacific@dfo-mpo.gc.ca.

Yours sincerely,

Stephanie Major

Fisheries Protection Biologist | Biologiste, Protection des pêches

Fisheries Protection Program | Programme de protection des pêches

200 - 401 Burrard Street, Vancouver BC V6C 3S4

Fisheries and Oceans Canada | Pêches et Océans Canada

Government of Canada | Gouvernement du Canada

Pacific Region "Working Near Water in BC & Yukon" Website:

<http://www.pac.dfo-mpo.gc.ca/habitat/index-eng.htm>

Please consider the environment before printing this email.

From: [Henigman, Margaret FLNR:EX](#)
To: [Marnie Eggen](#)
Subject: Executive Islands OCP and Land Use Bylaw
Date: June-12-13 2:33:00 PM

Hi Marnie; I've taken a look at your draft Land Use Bylaw 28, 2013. First, imagine my surprise, not knowing there even were Executive Islands! I knew the islands of course, but hadn't realised that they were a specific land use area. I only have a few thoughts to share on this one.

Land Use Bylaw

It's good to see they are taking the unique ecology of these sites seriously as the habitats present here are very fragile and, in addition to the significant percentage of shoreline, there are also many rare occurrences associated with the islands.

I was pleased to see that you are suggesting a 30m shoreline DP.

I did note a minor conflict between 3.3 (4) and 3.4 (1) for building height. If new construction is prohibited within 30m of the shoreline then I'm not following the exemption in 3.4 (1).

Technically, I suppose the RAR could apply here, although I doubt there are any fish bearing streams in this area. Your 30m setback for buildings from all watercourses could, in theory, address riparian protection assuming you can also protect the vegetation with this.

OCP

I was wondering about the control of invasive species, especially in terms of any restrictions you could place on landscaping. It would be very great to require landowners to use only native (and drought tolerant) species.

We have recently been learning about the importance of undisturbed intertidal shorelines for the production of forage fish species such as Sand Lance, Surf Smelt and Capelin. Hardening and shoreline modifications can very quickly remove critical breeding and rearing habitats for these species. Many of the historic breeding beaches in this area have been destroyed due to a variety of activities such as shoreline protection, boat launch construction and placement of geo-thermal loops. Anything you can do to reduce machine activity or permanent construction at, or below the natural boundary would be greatly appreciated.

Shoreline Development Permit Area

Exemptions: Generally - The placement of benches, tables and garden ornaments infers gardening and landscape activities that are not consistent with avoidance of invasive species and protection of shoreline native vegetation. (If it's easy to grow on a tiny gulf island then you can assume it's going to be invasive.)

Part 10 – Should read “International Society of Arboriculture (ISA)” certified arborist. There's no shortage of so called arborists, including utility arborists who may not be familiar with the species, disease vectors or other threats affecting trees in the CDFmm. A ISA Certified or Board Certified Arborist should be able to weigh the significance of tree species with the perceived or actual threat it poses to life or property. Fyi When applying the RAR to new development we don't recognise the

threat to property but only to actual buildings and to life and limb.

General Guidelines

I recommend that you steer folks towards the “Greenhores” solutions for shoreline protection, in order to avoid construction of seawalls.

Erosion Control

#15. Have any freshwater streams been identified on these islands?

I recommend that Islands Trust create Barge Landing GL to prevent impacts to forage fish natal areas, intertidal drift and/or loss of intertidal vegetation. Perhaps this is something that DFO could help with? You could try Lisa Christensen at: 250-756-7269 or Christensenl@pac.dfo-mpo.gc.ca . another person with lots of experience in this area is Ramona de Graff a local Marine Biologist. She can be reached at: Foragefish.BC@gmail.com or www.emeraldseabiological.com .

#20. As stated above, I strongly recommend pushing for native species only for revegetation plans. E.g. Golden Sedum is a nursery cultivar that is widely used on dry sites and this plant is extremely invasive.

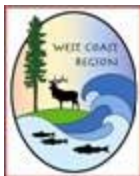
#21 I recommend that you require monitoring and replacement for 3 growing seasons.

#22 See above re: boat launches but, in general you might want to look for natural bedrock areas to avoid conflicts with forage fish spp.

Development Approval Information

I recommend that you direct landowners to the Develop with Care, Terms of Reference for a Bio-Inventory. We have had considerable input from several inventory specialists and we are confident that our final ToR would provide a consistent, repeatable and scientifically defensible inventory of the biological and physical elements present on the Executive Islands properties.

Maggie Henigman, MA
Ecosystems Biologist
Ministry of Forests, Lands and Natural Resource Operations
West Coast Region
250-751-3214
margaret.henigman@gov.bc.ca
Fax: 250-751-3208



From: [Lisa Webster-Gibson](#)
To: [Marnie Eggen](#)
Subject: FW: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw
Date: May-30-13 2:45:48 PM

FYI.

From: O'Brien, Debbie TRAN:EX [mailto:Debbie.O'Brien@gov.bc.ca]
Sent: May-30-13 2:45 PM
To: Lisa Webster-Gibson
Subject: RE: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw

Hi, Lisa:

This e-mail is the Ministry of Transportation & Infrastructure's response to the referral for the Ballenas – Winchelsea Islands Proposed Bylaws: No. 27 Official Community Plan and No. 28 Land Use Bylaw.

Please be advised that the Ministry of Transportation & Infrastructure has no objections or comments with regard to these two proposed bylaws.

If you have any questions, please do not hesitate to contact me at (250) 751-3268.

Regards,
Debbie O'Brien
Senior District Development Technician
Vancouver Island District
Ministry of Transportation & Infrastructure
3rd Floor – 2100 Labieux Road
Nanaimo, BC V9T 6E9
Phone: (250) 751-3268
E-mail: Debbie.O'Brien@gov.bc.ca

From: Lisa Webster-Gibson [mailto:lwebstergibson@islandstrust.bc.ca]
Sent: Tuesday, May 28, 2013 4:48 PM
To: O'Brien, Debbie TRAN:EX
Subject: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw

Attention: Debbie O'Brien, Ministry of Transportation and Infrastructure

Please find attached a bylaw referral package from the Executive Committee acting as a Local Trust Committee of the Islands Trust for proposed Bylaw No. 27 and Bylaw No. 28.

Proposed Bylaw No. 27 is a new official community plan (OCP) and proposed Bylaw No. 28 is a new

land use bylaw for the islands, islets and water areas in the Ballenas-Winchelsea Islands Area within the Executive Committee Local Trust Area adjacent to the Regional District of Nanaimo, as shown on the enclosed map.

The Ballenas-Winchelsea Islands do not currently have an OCP or zoning in place.

The LTC's should review the proposed policies and regulations and indicate how their interests in the proposed land and water use policies and regulations are affected.

A referral response form is included for convenience and I would appreciate any comments by June 28, 2013.

For more information on the proposed Bylaws, please contact Marnie Eggen, A/Planner 2, Islands Trust, meggen@islandstrust.bc.ca or 250-247-2210.

Yours

Lisa

Lisa Webster-Gibson, BES, Hons.
Planning Clerk
Islands Trust – Northern Office
700 North Road, Gabriola Island, B.C. V0R 1X3
Ph: 250.247.2204 or toll free [1.800.663.7867](tel:18006637867)
Fx: [250.247.7514](tel:2502477514)
www.islandstrust.bc.ca

Preserving **Island** communities, culture and environment



Please consider the environment before printing this email

BYLAW REFERRAL FORM RESPONSE SUMMARY

☐

Approval Recommended for Reasons Outlined Below

☐

Approval Recommended Subject to Conditions Outlined Below

☒

Interests Unaffected by Bylaw

☐

Approval Not Recommended Due to Reason Outlined Below

Executive Committee Local Trust Area

(Island)

P. Smyth

(Signature)

June 27 / 13

(Date)

Bylaw No. 27 – Ballenas-Winchelsea Islands Official Community
Plan

(Bylaw Number)

Regional Planning Manager

(Title)

Gabriola Local Trust Committee

(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

- ☐ Approval Recommended for Reasons Outlined Below
- ☐ Approval Recommended Subject to Conditions Outlined Below
- ☒ Interests Unaffected by Bylaw
- ☐ Approval Not Recommended Due to Reason Outlined Below

Executive Committee Local Trust Area

(Island)

C. Smith

(Signature)

June 26/13

(Date)

Bylaw No. 28 – Ballenas-Winchelsea Islands Land Use Bylaw

(Bylaw Number)

Regional Planning Manager

(Title)

Gabriola Local Trust Committee

(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

- ☒ Approval Recommended for Reasons Outlined Below
- ☐ Approval Recommended Subject to Conditions Outlined Below
- ☐ Interests Unaffected by Bylaw
- ☐ Approval Not Recommended Due to Reason Outlined Below

Proposed zoning is consistent with TFB's covenant on South Winchelsea (TLC property), though our covenant further restricts use of land.

Executive Committee Local Trust Area

(Island)

[Signature]
(Signature)

June 5/13
(Date)

Bylaw No. 27 – Ballenas-Winchelsea Islands Official Community Plan

(Bylaw Number)

Manager
(Title)

Islands Trust Fund
(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

☒

Approval Recommended for Reasons Outlined Below

☐

Approval Recommended Subject to Conditions Outlined Below

☐

Interests Unaffected by Bylaw

☐

Approval Not Recommended Due to Reason Outlined Below

see comments re: Bylaw # 27.

Executive Committee Local Trust Area

(Island)

[Signature]

(Signature)

June 5/13

(Date)

Bylaw No. 28 – Ballenas-Winchelsea Islands Land Use Bylaw

(Bylaw Number)

Manager, ITF

(Title)

Islands Trust Fund.

(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

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- ☐ Approval Not Recommended Due to Reason Outlined Below

This proposed OCP establishes a strong preservation ethic for the islands. The plan will ensure that the ecological attributes of the islands are protected.

Executive Committee Local Trust Area

(Island)



(Signature)

June 20, 2013

(Date)

Bylaw No. 27 – Ballenas-Winchelsea Islands Official Community Plan

(Bylaw Number)

Community Planner

(Title)

District of Lantzville

(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

- ☐ Approval Recommended for Reasons Outlined Below
- ☐ Approval Recommended Subject to Conditions Outlined Below
- ☒ Interests Unaffected by Bylaw
- ☐ Approval Not Recommended Due to Reason Outlined Below

Executive Committee Local Trust Area

(Island)



(Signature)

June 20 2013

(Date)

Bylaw No. 28 – Ballenas-Winchelsea Islands Land Use Bylaw

(Bylaw Number)

Community Planner

(Title)

District of Lantzville.

(Agency)

Marnie Eggen

From: Brent Edwards <nfnbandmanager@nanoose.org>
Sent: June-05-13 12:37 PM
To: Marnie Eggen
Subject: Re: Bylaw zoning islands trust

As with most documents and initiatives of this nature that come across my desk: we have had no input until your document is "complete". There are a number of issues that come to mind. First of all we have continued uses on all of the 300m buffer and on the terra firma of the provincial islands that you call Winchelsea and Ballenas. We have historic uses, continued uses, harvest rights, future aquaculture interests and occupation that this document attempts to unilaterally alter.

Brent Edwards
Director Of Operations
Nanoose First Nation

On 2013-06-05, at 12:24 PM, Marnie Eggen <meggen@islandstrust.bc.ca> wrote:

> Hello Brent,
>
> I just wanted to check in with you regarding the area that the Ballenas-Winchelsea Islands Official Community Plan (OCP) and Land Use Bylaw (LUB) apply to, as I am coming to understand that the map that was attached to the cover letter dated to you May 30th may be unclear. I have attached the letter and map again for your reference.
>
> The map shows two main features:
>
> 1. "Executive Islands Local Trust Committee Area," which is the area that the Local Trust Committee has authority over as given by the Province of BC as per the Islands Trust Act.
>
> 2. "Boundary of Area of Bylaw Application," which covers only the Ballenas-Winchelsea Islands and 300 m out to sea from each island(s). You will see that the map shows the islands and a circle encompassing each island(s) (i.e. the 300 m mark). The two proposed bylaws (OCP and LUB) only apply to the Ballenas-Winchelsea islands and 300 m out to sea as shown with the circles around each island(s). That means that these proposed two bylaws do not apply to the area outside of those circled areas. For example, the bylaws do not apply to Nanoose Bay and do not apply to the vast majority of marine area on the map.
>
> Please let me know if this changes your response/comments or need for a meeting?
>
> Kind regards,
> Marnie
>
> Marnie Eggen, MSc
> A/ Planner 2
> Islands Trust, Northern Office
> 700 North Road
> Gabriola Island, BC, V0R 1X3
> Ph:(250) 247-2210
> Fx: (250) 247-7514
>

> Toll free via Enquiry BC
> In Vancouver 604.660.2421
> Elsewhere in BC 1.800.663.7867
>
> www.islandstrust.bc.ca
>
> Preserving island communities, culture and environment
>
>
>
>
>
> -----Original Message-----
> From: Brent Edwards [<mailto:nfnbandmanager@nanoose.org>]
> Sent: June-05-13 11:38 AM
> To: Marnie Eggen
> Subject: Re: Bylaw zoning islands trust
>
> Please communicate via email
>
> Brent Edwards
> Director Of Operations
> Nanoose First Nation
>
> On 2013-06-05, at 11:29 AM, Marnie Eggen <meggen@islandstrust.bc.ca> wrote:
>
>> Hello Brent,
>>
>> Lisa forwarded me your email. Thank you for your reply. I am the planner assigned to the Ballenas-Winchelsea Islands Official Community Plan and Land Use Bylaw project. I would like to speak with you briefly before moving forward with organizing a meeting.
>>
>> Kind regards,
>> Marnie
>>
>> Marnie Eggen, MSc
>> A/ Planner 2
>> Islands Trust, Northern Office
>> 700 North Road
>> Gabriola Island, BC, V0R 1X3
>> Ph:(250) 247-2210
>> Fx: (250) 247-7514
>>
>> Toll free via Enquiry BC
>> In Vancouver 604.660.2421
>> Elsewhere in BC 1.800.663.7867
>>
>> www.islandstrust.bc.ca
>>
>> Preserving island communities, culture and environment
>>

>>
>> -----Original Message-----
>> From: Brent Edwards [<mailto:nfnbandmanager@nanoose.org>]
>> Sent: June-04-13 10:51 AM
>> To: Lisa Webster-Gibson; Marnie Eggen
>> Cc: david.bob@nanoose.org
>> Subject: Bylaw zoning islands trust
>>
>> Thank you
>>
>> We have serious issues with this referral. The information contained within warrant a meeting before June 28th to talk about how our issues will be addressed. We have contacted our legal counsel and request you forward the name of the Firm/individual that represents your organization. We have drafted an initial draft response and look forward to receiving a couple of available dates for the middle of June in order to confirm a mutually agreeable date,
>>
>> Warm regards,
>>
>>
>> Brent Edwards
>> Director Of Operations
>> Nanoose First Nation
> <EC BL 27 and 28 FN Referral letter Snawnawas.pdf>

BYLAW REFERRAL FORM RESPONSE SUMMARY

- ☐ Approval Recommended for Reasons Outlined Below
- ☐ Approval Recommended Subject to Conditions Outlined Below
- ☒ Interests Unaffected by Bylaw
- ☐ Approval Not Recommended Due to Reason Outlined Below

Executive Committee Local Trust Area

(Island)

[Signature]
(Signature)

June 10, 2013
(Date)

Bylaw No. 27 – Ballenas-Winchelsea Islands Official Community
Plan

(Bylaw Number)

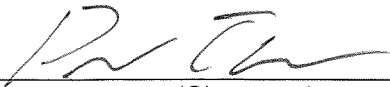
Manager of Long Range Planning
(Title)

Regional District of Nanaimo
(Agency)

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- ☒ Interests Unaffected by Bylaw
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Executive Committee Local Trust Area
(Island)


(Signature)

June 10, 2013
(Date)

Bylaw No. 28 – Ballenas-Winchelsea Islands Land Use Bylaw
(Bylaw Number)

Manager of Long Range Planning
(Title)

Regional District of Nanaimo
(Agency)

From: [Lapcevic, Pat FLNR:EX](#)
To: [Lisa Webster-Gibson](#)
Cc: [Marnie Eggen](#); [Barroso, Sylvia L FLNR:EX](#)
Subject: RE: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw
Date: July-08-13 2:07:17 PM

Marnie & Lisa,

Sorry I am so late responding to this! Sylvia Barroso reviewed the proposal for FLNRO focussing on protection of groundwater supplies and offers the following comments:

The location being an archipelago of small islands east of the Nanoose Peninsula, I was considering the policy, in particular, from the perspective of the seawater intrusion risk.

a) The Official Community Plan contains some general policy statements with respect to groundwater and water supply that FLNRO could recognize and support, specifically:

3.12 Groundwater policies (p.15) – protection of groundwater supplies through land use designations, zoning, subdivision regulations, and other planning tools, sustainability of groundwater (quantity and quality) and application of the precautionary principle;

3.15 Services and infrastructure policies (p.16) – encouraging landowners to install rainwater catchment systems with new construction; and

4.4.4 (p.19) – encouraging water self-sufficiency on the islands rather than reliance on imports of bulk water.

Approval Recommended for Reasons Outlined Below:

The Ministry of Forests, Lands and Natural Resources Operations Water Protection Section (West Coast Region) has no concerns with respect to the proposed Bylaw 27. Sustainable management and protection of surface and groundwater resources within communities of the Islands Trust is essential, given the importance of these resources for residential, commercial and conservation needs; FLNRO support policies including 3.12, 3.15, and 4.4.4 which contribute towards this goal.

b) Land Use Bylaw 28 – Some points to consider:

Well density: On the islands designated as residential, one single family dwelling is allowed per 4.047 ha (10 acre) lot. On islands with designated conservation use, water supply would be needed for permitted ecotourism, short-term vacation accommodation and custodial residential use; only one dwelling is permitted per lot, which should have minimum 65 hectare (160 acres) area as far as I understand from the document. Assuming one to two wells per lot in both residential and conservation land use areas, this density will not result overly dense well network, and as such is not likely to contribute to overuse of the aquifer and exacerbation of seawater intrusion risk (notwithstanding well siting concerns discussed below).

Well siting: The Islands Trust does not have jurisdiction over well siting, specifically setback

of a well from the sea shore. However, some sections of the bylaw make reference to siting or setbacks of water supply infrastructure, such as pump houses, from shorelines (3.3 (3), p.13) and the natural boundary of a water course or wetland (3.3 (4), p.14). Under permitted uses (3.1. (11), p.12) the bylaw makes reference to provincial regulations that should be made with respect to sewage disposal facilities. FLNRO could recommend that a similar clause be inserted within 3.1 (1)) to make reference to the *Water Act*, Ground Water Protection Regulation, *Drinking Water Protection Act*, *Public Health Act* (Health Hazard Regulation). This would help to ensure that those who refer to the bylaw document are made aware of other potentially applicable regulations, in particular related to well siting, which although currently only addressed in the *Public Health Act*, Health Hazard Regulation, may be included within future revisions of the *Water Act*.

Approval Recommended Subject to Conditions Outlined Below:

Upon review of proposed Bylaw 28, the Ministry of Forests, Lands and Natural Resources Operations Water Protection Section (West Coast Region) recommends inclusion of a clause(s) that refers to provincial statutes related to well construction and permitting and operation of water supply systems, that should be referred to and adhered to, under permitted uses related to water supply (section 3.1 (2)). These statutes include, but are not limited to: the *Water Act*, Groundwater Protection Regulation, *Public Health Act*, Drinking Water Protection Regulation, and Health Hazard Regulation.

Sincerely,

Pat

Pat Lapcevic, MSc., P.Geo.

Section Head, Water Protection (Hydrogeologist)

BC Ministry of Forests, Lands and Natural Resource Operations
2080A Labieux Rd, Nanaimo V9T 6J9

Tel: 250 751-3149 Fax: 250 751-3103
Email: Pat.Lapcevic@gov.bc.ca

From: Lisa Webster-Gibson [mailto:lwebstergibson@islandstrust.bc.ca]

Sent: Tuesday, May 28, 2013 4:38 PM

To: Lapcevic, Pat FLNR:EX

Subject: Agency Referral for the Ballenas - Winchelsea Islands Proposed Bylaws No. 27. Official Community Plan and No. 28 Land Use Bylaw

Attention: Pat Lapcevic, Section Head, Water Stewardship Division; Ministry of Forests, Lands and Natural Resources Operations

Please find attached a bylaw referral package from the Executive Committee acting as a Local Trust Committee of the Islands Trust for proposed Bylaw No. 27 and Bylaw No. 28.

Proposed Bylaw No. 27 is a new official community plan (OCP) and proposed Bylaw No. 28 is a new land use bylaw for the islands, islets and water areas in the Ballenas-Winchelsea Islands Area within the Executive Committee Local Trust Area adjacent to the Regional District of Nanaimo, as shown on the enclosed map.

The Ballenas-Winchelsea Islands do not currently have an OCP or zoning in place.

The LTC's should review the proposed policies and regulations and indicate how their interests in the proposed land and water use policies and regulations are affected.

A referral response form is included for convenience and I would appreciate any comments by June 28, 2013.

For more information on the proposed Bylaws, please contact Marnie Eggen, A/Planner 2, Islands Trust, meggen@islandstrust.bc.ca or 250-247-2210.

Yours

Lisa

Lisa Webster-Gibson, BES, Hons.
Planning Clerk
Islands Trust – Northern Office
700 North Road, Gabriola Island, B.C. V0R 1X3
Ph: 250.247.2204 or toll free [1.800.663.7867](tel:18006637867)
Fx: [250.247.7514](tel:2502477514)
www.islandstrust.bc.ca

Preserving Island communities, culture and environment



Please consider the environment before printing this email

BYLAW REFERRAL FORM RESPONSE SUMMARY

- ☐ Approval Recommended for Reasons Outlined Below
- ☐ Approval Recommended Subject to Conditions Outlined Below
- ☒ Interests Unaffected by Bylaw
- ☐ Approval Not Recommended Due to Reason Outlined Below

BOB GOWE

Bob Gowe

TRANSPORT CANADA

NAVIGABLE WATERS PROTECTION PROGRAM (NWPP)

Executive Committee Local Trust Area

Bylaw No. 27 – Ballenas-Winchelsea Islands Official Community
Plan

(Island)

(Bylaw Number)

Bob Gowe
(Signature)

MANAGER NWPP
(Title)

MAY 30, 2013
(Date)

TRANSPORT CANADA
(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

- ☐ Approval Recommended for Reasons Outlined Below
- ☒ Approval Recommended Subject to Conditions Outlined Below
- ☐ Interests Unaffected by Bylaw
- ☐ Approval Not Recommended Due to Reason Outlined Below

MOORING BUOYS MUST CONFORM TO Private Bury Regulations
OF THE Canada Shipping Act 2001

Executive Committee Local Trust Area

(Island)

[Signature]

(Signature)

MAY 30, 2013

(Date)

Bylaw No. 28 – Ballenas-Winchelsea Islands Land Use Bylaw

(Bylaw Number)

MANAGER - NWPP

(Title)

TRANSPORT CANADA

(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

☐

Approval Recommended for Reasons Outlined Below

☐

Approval Recommended Subject to Conditions Outlined Below

☒

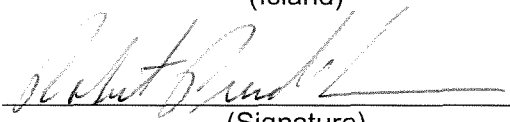
Interests Unaffected by Bylaw

☐

Approval Not Recommended Due to Reason Outlined Below

Executive Committee Local Trust Area

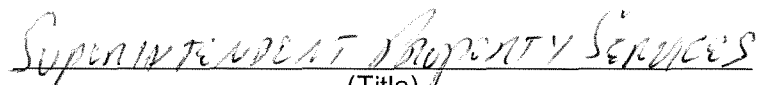
(Island)

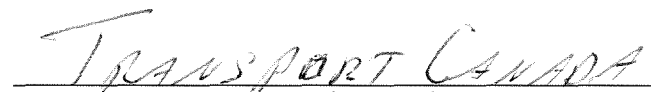

(Signature)


(Date)

Bylaw No. 28 – Ballenas-Winchelsea Islands Land Use Bylaw

(Bylaw Number)


(Title)


(Agency)

BYLAW REFERRAL FORM RESPONSE SUMMARY

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Executive Committee Local Trust Area

(Island)

(Signature)

(Date)

Bylaw No. 27 – Ballenas-Winchelsea Islands Official Community
Plan

(Bylaw Number)

(Title)

(Agency)

**WE WAI KAI NATION
CAPE MUDGE BAND
Lands and Natural Resources
690 Headstart Cres
Campbell River, BC V9H 1V8**



VIA EMAIL ONLY: meggen@islandstruct.bc.ca

July 3rd, 2013

Islands Trust
700 North Road
Gabriola Island, BC V0R 1X3

ATTN: Marine Eggen

**RE: Proposed Bylaws No 27 & 28 - New OCP and Land Use Bylaw fir Ballenas-
Winchelsea Islands.**

The Chief and Council of the We Wai Kai Nation/Cape Mudge Band are in receipt of the above mentioned referral.

In keeping with Crowns obligation of duty to consult, to date, the Chief and Council of the We Wai Kai Nation currently have no concerns regarding this application.

In the event this application is altered in any way the We Wai Kai Nation will require readdress on any and all amendments of the existing plans. The We Wai Kai Nation also reserves the right to raise objections if any cultural use or archaeological sites are identified when this project is being carried out.

Finally, in the event of any environmental issues occurring on/or near this project, an environmental report must be submitted to the Nation.

If you require anything further, please do not hesitate to contact me at the numbers listed below or via email at: lisc@wewaikai.com

With respect,

Lise Steele
Director of Lands and Natural Resources
We Wai Kai Nation/Cape Mudge Band

Telephone: (250) 914-1890 x111 Fax: (250) 914-1891



Islands Trust

**BALLENAS-WINCHELSEA ISLANDS
OFFICIAL COMMUNITY PLAN
BYLAW No. 27, 2013**

Consolidation as of: _____, 20__

PROPOSED

ISLANDS TRUST EXECUTIVE COMMITTEE ACTING AS A LOCAL TRUST COMMITTEE BYLAW NO. 27

A BYLAW TO ADOPT AN OFFICIAL COMMUNITY PLAN FOR THE BALLENAS-WINCHELSEA ISLANDS

WHEREAS Section 29 of the *Islands Trust Act* gives the Islands Trust Executive Committee acting as a Local Trust Committee the same power and authority of a Regional District under Part 26 except sections 932 to 937 and 939 of the *Local Government Act*;

AND WHEREAS the Islands Trust Executive Committee acting as a Local Trust Committee wishes to adopt an Official Community Plan;

AND WHEREAS the Islands Trust Executive Committee acting as a Local Trust Committee has held a Public Hearing;

NOW THEREFORE the Islands Trust Executive Committee acting as a Local Trust Committee enacts as follows:

1. TITLE

Bylaw 27 may be cited for all purposes as the "Ballenas-Winchelsea Islands Official Community Plan Bylaw, 2013".

2. APPLICATION

The Plan applies to the land, the water on the land, the bed of the sea, the water column, and surface of the sea adjacent to the land in the Ballenas-Winchelsea Islands as shown on Schedule "B" of this Bylaw.

3. SCHEDULES

The following schedules attached to and forming part of this Bylaw, are adopted as "Ballenas-Winchelsea Islands Official Community Plan Bylaw 2013":

SCHEDULE "A" – Official Community Plan Policy Document

SCHEDULE "B" – Bylaw Area Map

SCHEDULE "C" – Land Use Designations

READ A FIRST TIME this	3rd	day of	May	, 2013
PUBLIC HEARING HELD this		day of		, 201x
READ A SECOND TIME this		day of		, 201x
READ A THIRD TIME this		day of		, 201x
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST this		day of		, 201x
APPROVED BY THE MINISTER OF COMMUNITY, SPORT AND CULTURAL DEVELOPMENT this		day of		, 201x
ADOPTED this		day of		, 201x

SECRETARY

CHAIRPERSON

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1. BACKGROUND

1.1 THE OBJECT OF THE ISLANDS TRUST

The Islands Trust has responsibility for conservation through land use planning and regulation and for leadership in stewardship – that is, voluntary, cooperative actions that nurture and take responsibility for the long-term integrity of the environment and amenities of the Trust Area. The Islands Trust seeks to integrate ecosystem preservation and protection, sustainable communities and stewardship of resources.

The *Islands Trust Act* provides the following definition of the purpose of the Islands Trust, which is referred to in legislation as its “object”:

“The object of the Trust is to preserve and protect the Trust Area and its unique amenities and environment for the benefit of the residents of the Trust Area and of British Columbia generally, in cooperation with municipalities, regional districts, improvement districts, other persons and organizations and the Government of British Columbia.”



1.2 THE BALLENAS-WINCHELSEA ISLANDS PLANNING AREA

The Ballenas-Winchelsea Islands encompass over 19 islands and numerous other islets and rocks that make up the Ballenas-Winchelsea archipelago located in the waters of the Salish Sea adjacent to the Nanose Peninsula on Vancouver Island. This unique area was first settled by the Coast Salish people, and remains largely undisturbed today. Several islands in the Plan Area are nationally recognized for significant biological diversity, important habitat

and rare plant species. All of the islands are jurisdictionally part of the Executive Committee Local Trust Area of the Islands Trust. Additionally, all of the islands fall within Electoral Area E of the Regional District of Nanaimo.

The majority of the islands in Ballenas-Winchelsea Group are owned by the Crown. The northern group of the Winchelsea Islands is Crown land leased to the Department of National Defence, which also owns and manages East Ballenas Island. The northern tip of West Ballenas is owned by the Federal Government for the operation of the Ballenas Island light station. In addition, Gerald Island is a Provincial Park, and south Winchelsea Island has been acquired by The Land Conservancy.

The area covered by the Plan is shown on “Schedule B - Bylaw Area Map”, and includes the following land and water areas:

- Ada Islands (East)
- Ada Islands (North)
- Ada Islands (West)
- Amelia Island
- Ballenas Island (West)
- Ballenas Island (South)
- Douglas Island
- Gerald Island
- Maude Island
- Mistaken Island
- Ruth Island
- Southey Island
- Wallis Island
- Winchelsea Island
- Winchelsea Islands A,B,C and D
- Yeo Island (West)
- Yeo Island (East)

These islands and surrounding waters are within the First Nations traditional territories of the Nanoose, Cowichan, Halalt, Lake Cowichan, Lyackson, Penelakut, Qualicum, Chemainus, We Wai Kai and K'omoks.

Much of the land in the planning area is held by the federal or provincial Crown. The use and development of this land will generally not be subject to the land use designations and policies in this Plan, unless the Crown licenses, leases or transfers the land to private individuals or organizations.

Where the terms “Ballenas-Winchelsea Group”, “Ballenas-Winchelsea Planning Area”, “planning area”, or “Plan area” are used in this Plan, these terms shall be interpreted to mean the area covered by this Plan. Where a specific geographical reference is made (e.g. Gerald Island), that reference shall be interpreted to mean the specific geographic area.

1.3 OFFICIAL COMMUNITY PLAN

The purpose of the Ballenas-Winchelsea Islands Official Community Plan (hereafter referred to as the “Plan”) is to provide direction for decisions of government, non-profit organizations and individuals, regarding management of the Ballenas-Winchelsea Islands. The Plan is a statement of objectives and policies to guide decisions on planning and land use management and should provide direction for development and consideration within the island communities.

The Plan is a document prepared and adopted, in accordance with the *Local Government Act* and the *Islands Trust Act*, by the Executive Committee acting as a Local Trust Committee (LTC) being the land use authority for the Ballenas-Winchelsea Islands.

Once the Plan has been adopted, all bylaws enacted or works undertaken by the LTC must be consistent with it. The Plan can be amended on the initiative of the LTC or on application by an outside party subject to LTC approval. All amendments require consultation with persons, organizations and authorities that the LTC considers will be affected.

The Plan must include statements and map designations related to the following topics:

- The location, type and density of residential development;
- Restrictions on the use of land that is subject to hazardous conditions or that is environmentally sensitive to development;
- Agricultural, recreational, commercial, industrial, institutional, and public utility uses;
- Affordable, special needs and rental housing;
- The location and phasing of roads, sewer and water systems;
- Targets for the reduction of greenhouse gas emissions and policies and actions of the local government proposed with respect to achieving those targets;
- The location of public facilities, including schools, parks and waste treatment sites; and
- Sand and gravel deposits suitable for extraction.

The Plan may include policies related to social needs, social well-being and social development, the maintenance and enhancement of farming and the regulation of the preservation, protection, restoration and enhancement of the natural environment, its ecosystems and biological diversity.



1.4 NATURAL FEATURES

The islands are part of the coastal Douglas-fir biogeoclimatic or ecological zone, which results from a rainshadow effect of the Vancouver Island and Olympic mountains. This zone is characterized by coniferous forests and open meadows and woodlands that are adapted to conditions that are drier than most other coastal regions of British Columbia. The climate of this area is considered temperate with mild wet winters and relatively cool but dry summers.

The islands have seen minimal disturbance, and display little evidence of invasion by exotic species, making them a rarity on the east coast of Vancouver Island. Douglas-fir is common throughout the region with the red-listed Garry Oak-Arbutus community also well represented. An undisturbed ecosystem type known as the Shore Pine – Cladina – Kinnikinnick plant community also exists here, and the very rare Water-plantain buttercup has been identified on East Ballenas Island. Rocky outcrops and coastal bluff habitat are also predominant on the islands in this region.

The islands of the Ballenas-Winchelsea Archipelago are known to have high biodiversity value. This is demonstrated through the area's significant role as a nursery for marine life and as a breeding and nesting ground for many species of birds. As well, the islands support several occurrences of endangered species and ecosystems. Human presence is generally minimal, even though the area is of significance for sport and recreational fishing. The islands are part of the Nanaimo Lowland physiographic region, which is bounded by the Georgia Depression to the east and the Vancouver Island Mountains to the west. Soils tend to be gravelly and sandy and are very shallow with significant amounts of exposed bedrock.

1.5 ACCESS AND SERVICES

The islands, with the exception of Mistaken Island, are not served by power, water or telephone land-lines. There are no stores or commercial visitor accommodation facilities in the area, and no garbage pickup or publicly-funded fire protection services on these islands.

Landowners are required to provide water and sewage disposal on-site. To date, the use of the islands has been largely seasonal and recreational. There are no ferries, no paved roads, and limited year-round moorage. Access to the islands is by private boat, water taxi or float plane.

1.6 POPULATION AND SETTLEMENT PATTERNS

Few if any of the islands have permanent residents. Census population data from Statistics Canada are not adequate to determine the permanent populations as data have been aggregated with data from other locations. Only three of the islands are under private ownership, with the remainder being held either by the provincial or federal Crown, and this has a curtailing effect on the overall population of the area.

1.7 DEVELOPMENT POTENTIAL

The previous subdivision regulations established a minimum lot size of 4 hectares (10 acres) on most islands. As of 2011, none of the islands had been subdivided, with the exception of West Ballenas which contains a federal Crown lot for the lighthouse on the northern end in addition to the privately held southern portion. The number of lots in the Ballenas-Winchelsea Islands Area therefore nearly corresponds with the number of islands and islets. Apart from structures associated with the Department of National Defence, residential buildings exist on inhabited Mistaken Island, and there is a cabin on South Winchelsea, owned by the Land Conservancy of British Columbia.

2. PLAN GOALS

- 2.1 To preserve and protect the ecosystems, habitat, and natural resources of the Ballenas-Winchelsea Islands Planning Area.
- 2.2 To ensure that human activities and the scale, rate and type of development contribute to the preservation of the ecological attributes and character of the Ballenas-Winchelsea Islands Planning Area.
- 2.3 To work cooperatively with other local governments, the federal and provincial governments and their agencies and First Nations to advance the mandate of the Islands Trust and the Goals and Objectives of this Plan.

3. OBJECTIVES AND POLICIES

3.1 LAND USE OBJECTIVES

- 3.1.1 To limit growth and development in order to protect sensitive ecosystems, encourage sustainability, and minimize the potential effects of climate change.
- 3.1.2 To accommodate a limited number of residents and visitors in order to preserve ecosystem integrity and the unique scenic character of the area.
- 3.1.3 To manage any development in a manner that minimizes hazards and avoids impacts to the environment.
- 3.1.4 To guide and regulate growth and development in a manner that puts protection of the natural environment first and that builds on existing physical and social infrastructure where possible.

3.2 RESIDENTIAL LAND USE POLICIES

- 3.2.1 The traditional land use in the plan area has been minimal and the LTC bylaw provisions should preserve the character of the area.
- 3.2.2 The LTC should continue to permit single family residential uses as the principal use on privately held lands.
- 3.2.3 The LTC may consider implementing siting and use permits for all new construction or use on privately held lands.
- 3.2.4 LTC bylaw provisions should ensure that uses customarily considered accessory to residential uses are permitted and regulated.
- 3.2.5 Commercial vacation rentals should not be permitted.
- 3.2.6 Density should be limited to one dwelling per 4 hectares (10 acres).
- 3.2.7 Subdivision regulations should not permit subdivision without rezoning.
- 3.2.8 The LTC should establish zoning regulations that limit the number, size and height of accessory buildings on residential properties.
- 3.2.9 Affordable and special needs housing is considered inappropriate for this area due to the remote nature of the islands.
- 3.2.10 Rental housing other than single family housing is considered inappropriate for this area due to the remote nature of the islands.

Advocacy Policies

- 3.2.11 The Regional District of Nanaimo and Island Health are encouraged to implement sustainable building standard initiatives as appropriate for the low density rural nature of development in the Plan area.

3.3 COMMERCIAL AND INDUSTRIAL LAND USE POLICIES

- 3.3.1 There are currently no locations in which commercial and industrial uses are a permitted principal use. Given the remoteness, small size and pristine nature of the islands, and the mandate of Islands Trust to preserve and protect the unique amenities and environment of the area, commercial and industrial uses are not considered appropriate in the Plan area.
- 3.3.2 Home occupations should be permitted as a use accessory to residential uses and should be regulated to minimize impacts.

3.4 AGRICULTURAL POLICIES

- 3.4.1 There is currently no land identified as having agricultural potential on the islands.

3.5 FOREST LAND USE POLICIES

- 3.5.1 The LTC should identify significant unfragmented forest ecosystems within the planning area and consider establishing zoning to limit inappropriate development in these areas and to cluster development elsewhere.

Advocacy Policies

- 3.5.2 The LTC encourages other agencies and levels of government to designate, acquire, or establish forest ecosystem reserves where no extraction will take place to ensure the preservation of native biological diversity.
- 3.5.3 The LTC encourages landowners to protect sensitive forest ecosystems through donation, conservation covenants, the use of incentives such as the Natural Area Protection Tax Exemption Program (NAPTEP), or careful management.



3.6 COMMUNITY AND PUBLIC SERVICE USE POLICIES

- 3.6.1 The LTC may establish zoning within this designation, or within the residential designation, to permit and regulate local community services such as meeting halls, infrastructure, and emergency service facilities.
- 3.6.2 Zoning should recognize existing public uses, such as light stations.
- 3.6.3 Given the limited development on the islands in the Plan area, there is no demand for school facilities. A need to designate land for future school use is not anticipated.

Advocacy Policies

- 3.6.4 Residents in the Plan area are encouraged to be self-sufficient with regard to disposal of waste.
- 3.6.5 The RCMP, Canadian Coast Guard, fire protection, regional districts, search and rescue organizations, and the Emergency Management BC are requested to be responsive to the planning area needs and to assist residents in setting up adequate safety, protection and communication mechanisms.



3.7 POLICIES FOR PARKS, RECREATION, AND CONSERVATION AREAS

- 3.7.1 The LTC should support the preservation of ecologically sensitive areas through land use regulation, conservation covenants, park land dedication, or voluntary conveyance to conservation agencies.
- 3.7.2 The LTC is encouraged to require dedication of land, rather than cash-in-lieu, where parkland dedication is required at the time of subdivision, as authorized by the *Local Government Act*.
- 3.7.3 The LTC may undertake or support initiatives to identify locations that are a priority for the creation of safe public access to beaches, areas of recreational significance, linear parks and trails, and public anchorages, in cooperation with other agencies and groups.
- 3.7.4 The LTC should, in cooperation with conservation groups and other agencies, undertake planning for the establishment and maintenance of a network of protected areas.
- 3.7.5 The LTC should permit through zoning, the use of one cabin for short term accommodation or custodial residential uses on South Winchelsea Island.
- 3.7.6 Most Crown islands and islets are included in this land use designation and should be zoned for Nature Protection.
- 3.7.7 Rezoning of any Crown islands that are transferred to private ownership for residential uses may be considered through application.

Advocacy Policies

- 3.7.8 The LTC should strongly encourage the Federal and Provincial Crown to only consider disposition of land for ecological conservation purposes, and to consult with the LTC to ensure that any dispositions are in accordance with this Plan.
- 3.7.9 The LTC should strongly encourage the Regional District, the Islands Trust Fund and other conservation organizations to investigate the acquisition, purchase and secured protection of any future lands disposed of by the Crown or privately sold.
- 3.7.10 The LTC should encourage the regional district and provincial and federal governments to identify and designate areas for low impact recreational activities that reflect the undisturbed nature of the area and discourage facilities and opportunities for high impact recreational activities in the planning area.



3.8 POLICIES FOR MARINE AND SHORELINE USES

- 3.8.1 The LTC should identify and consider protecting ecologically sensitive marine areas.
- 3.8.2 Zoning should permit shellfish aquaculture within existing tenures.
- 3.8.3 The LTC may consider rezoning applications for new leases for aquaculture, other than finfish farms.

- 3.8.4 The LTC should recognize and support the marine dependent nature of land uses in the Ballenas-Winchelsea Islands Area.
- 3.8.5 The LTC should permit one (1) dock adjacent to each private island in order to limit the need for multiple private dock development along the shoreline.
- 3.8.6 The LTC should only consider individual private docks accessory to residential uses where necessary for access. These docks should be regulated by zoning.
- 3.8.7 The LTC should not permit commercial marinas.
- 3.8.8 The LTC should use bylaw provisions to protect public access to, from and along the marine shoreline.
- 3.8.9 The LTC should use bylaw provisions to limit structures within the setback from the sea to those related to permitted marine uses and those necessary for access to the foreshore.
- 3.8.10 The LTC should, through zoning, the use of setbacks, and the use of development permit areas:
 - (a) protect the integrity of the foreshore, shoreline, and natural coastal and intertidal processes;
 - (b) discourage uses that disrupt natural features and processes;
 - (c) allow for natural erosion and accretion processes;
 - (d) encourage owners of shoreline properties to retain natural vegetation and natural features on areas adjacent to the foreshore; and
 - (e) discourage filling, deposit, excavation, or removal of foreshore and seabed materials.
- 3.8.11 The LTC should not permit the hardening of the shoreline.
- 3.8.12 The LTC should not support ocean disposal applications within the Plan area.
- 3.8.13 The LTC should not support the creation of artificial reefs within the Plan area.

Advocacy Policies

- 3.8.14 The LTC should support the protection of the planning area as part of any provincial or federal marine protection/ conservation initiative.
- 3.8.15 The LTC should support and encourage new and existing Rockfish Conservation areas in the Plan area.
- 3.8.16 The LTC should encourage the responsible government agencies to refer applications for commercial seaweed harvesting within the plan area to the LTC.

3.9 TRANSPORTATION POLICIES

- 3.9.1 Zoning may provide for facilities for emergency helicopter access in appropriate locations.

Advocacy Policies

- 3.9.2 The LTC should support efforts by residents, local governments and agencies to ensure that reasonable access including safe passage and moorage is provided to the plan area from adjacent regional districts and municipalities.

3.10 CULTURE AND HERITAGE POLICIES

- 3.10.1 The LTC recognizes First Nations past and current interests relating to land and resources in the Ballenas-Winchelsea Islands.
- 3.10.2 The LTC recognizes that portions of the planning area may be subject to unextinguishable aboriginal rights or title that are protected under the *Constitution Act*, 1982.
- 3.10.3 The LTC will work to establish government-to-government relationships with First Nations that have an interest in the Ballenas-Winchelsea Islands Area, in order to identify and assist in protecting significant archaeological or cultural sites in the planning area.
- 3.10.4 The LTC should support initiatives to identify lands and structures of natural, historic, archaeological, cultural, aesthetic, educational or scientific heritage value or character.
- 3.10.5 The LTC may amend this plan to designate any real property as a designated heritage site or heritage conservation area under Part 27 of *Local Government Act*.
- 3.10.6 All development applications received by Islands Trust will be reviewed by planning staff for the presence of known and recorded archaeological sites. Applicants will be notified if the site includes a known, protected archaeological site. Notification may include direction to engage a professional consulting archaeologist to determine if an archaeological impact assessment is necessary to manage development related impacts. In cases where no application is required for development, the landowner is responsible for ensuring that archaeological sites are not disturbed.
- 3.10.7 Applicants should modify or revise proposed development plans to avoid archaeological site impacts as the best means of preserving archaeological resources. Alteration of a protected archaeological site requires a Provincial Heritage Alteration Permit prior to land altering activities. Landowners are encouraged to contact and work with First Nations to protect archaeological and cultural sites.

Advocacy Policies

- 3.10.8 The LTC may advocate for the designation and protection of eligible heritage sites under the *Heritage Conservation Act*.



3.11 SENSITIVE ECOSYSTEM POLICIES

- 3.11.1 The LTC should support and undertake initiatives to identify environmentally sensitive areas and significant natural sites, features and landforms in the planning area.
- 3.11.2 The LTC should support and undertake initiatives to plan, establish, and maintain a network of protected areas that preserves the representative ecosystems of the area and maintains its ecological integrity.
- 3.11.3 The LTC should protect environmentally sensitive areas, significant natural sites, features, views, scenic areas and landforms in the planning area through:
- (a) zoning regulations that encourage the siting and clustering of new development away from sensitive areas for the islands with development potential;
 - (b) the implementation of development permit areas ;
 - (c) acquisition of land by the Islands Trust Fund, other conservancies, regional districts, and government agencies;
 - (d) park dedication at the time of subdivision; and

- (e) encouragement of voluntary stewardship including the use of tools such as conservation covenants and the use of incentives such as the Natural Area Protection Tax Exemption Program.

3.11.4 The LTC should, in its bylaw provisions and applications, consider the cumulative effects of any proposed development on sensitive ecosystems and groundwater supplies.

Advocacy Policies

3.11.5 Despite there being no identified Riparian Areas Regulation (RAR) watersheds in the Plan Area, the LTC should support the protection of freshwater and riparian habitat.

3.12 GROUNDWATER POLICIES

3.12.1 Land use designations, zoning, subdivision regulations and other planning tools should be used to ensure that neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater.

3.12.2 The LTC, in its bylaw provisions and in considering applications, should ensure that water quality is maintained, that existing, anticipated and seasonal demands for water are considered and addressed, and that new uses do not affect water availability to the detriment of existing uses.

3.12.3 The precautionary principle should be applied with respect to the planning, utilization and protection of potable water supplies, so that property owners, developers and government agencies act with a conservative approach regarding the impacts of land use on island water supplies.

3.13 SOILS AND AGGREGATES POLICIES

3.13.1 The LTC should use zoning and other applicable planning tools to protect identified areas of productive soil.

3.13.2 There are no known deposits of aggregates suitable for extraction in the Plan area. Mineral extraction is regulated under provincial acts and statutes and is not affected by policies contained within the OCP.

3.14 NATURAL HAZARDS POLICIES

3.14.1 The LTC should undertake initiatives to identify areas that are hazardous to development, including areas subject to flooding, erosion or slope instability.

3.14.2 The LTC should use appropriate tools, including setbacks and development permit area designations, to restrict and manage development in areas known to be subject to hazardous conditions.

3.15 SERVICES AND INFRASTRUCTURE POLICIES

- 3.15.1 No water line or power connections to the mainland should be permitted other than those in place and in use at the time of adoption of this Plan.
- 3.15.2 The construction of new power lines should be discouraged.
- 3.15.3 As islands in the plan area are mostly self sufficient with respect to power, water and septic disposal, the LTC should recognize the challenges associated with providing services on the islands, and LTC bylaw provisions should support the provision of power through renewable small-scale, passive means such as solar collectors and wind generation
- 3.15.4 LTC bylaw provisions should permit small-scale, geo-exchange heating for individual dwellings.
- 3.15.5 The use of alternative technology to the traditional septic field, and the safe recycling of grey water, is supported by the LTC if methods can provide effective non-polluting and energy efficient means to treat and dispose of effluent and are in compliance with all other government regulations.

Advocacy Policies

- 3.15.6 Landowners undertaking new construction are encouraged to install rainwater catchment systems.

4. CLIMATE CHANGE ADAPTATION AND MITIGATION

Background:

Climate change is the result of increasing concentration of heat-trapping greenhouse gases (GHGs) in the atmosphere as the result of human activities; primarily the burning of fossil fuels and large-scale deforestation made possible through advances in technology and industrialization. The amount of GHGs in the atmosphere has increased in the last 200 years, and has caused a rise in average temperature of air and ocean water. Around the world, people interested in reducing GHG emissions are finding ways to reduce their carbon footprint and decrease or reverse the rate of temperature rise.

The Province of British Columbia, in response to public interest in reducing GHG emissions, adopted Bill 27, the *Local Government (Green Communities) Statutes Amendment Act*. The intent of the Act is to reduce GHGs, conserve energy, and create more sustainable communities. Most significantly, Bill 27 amended the *Local Government Act*, requiring that all local governments include GHG emission reduction targets, and policies and actions to achieve those targets, in their Official Community Plans.

The Ballenas-Winchelsea Islands Area is unique in that, given the challenges found in living and recreating on the Islands, residents and seasonal visitors typically attempt to live lightly on the landscape. Homeowners may already use solar or other alternative energy sources, and seasonal occupancy of most homes and cottages means no emissions are produced for significant portions of the year. Reducing GHG emissions in this Plan Area takes on a different meaning when the fact that emissions are considerably lower than would be found in highly developed communities with readily accessible services is taken into consideration.

The following target, objectives, policies and actions are the first step to ensuring that the reduction of GHG emissions specifically and the impact of climate change in general become part of the evaluation process for land use planning in the Ballenas-Winchelsea Islands Plan Area.

4.1 TARGET

- 4.1.1 This plan commits to achieve by 2020 and 2050 resident per capita emission levels of 50% or less than the Canadian per capita average for 2020 and 2050, respectively. Within the planning area, this reduction will be achieved by actions resulting from individual and community initiatives, the actions of other levels of government, technological changes, and changes to land use policies and regulations.

4.2 OBJECTIVES

- 4.2.1 To consider the impacts of climate change as a central factor in land use decision-making.
- 4.2.2 To support actions to minimize greenhouse gas emissions.
- 4.2.3 To recognize the importance of forested lands and unfragmented natural ecosystems in removing carbon dioxide from the atmosphere.

4.3 POLICIES

- 4.3.1 The LTC should, in its bylaw provisions and review of development applications, consider the potential impacts on global climate change and GHG reduction targets.
- 4.3.2 The LTC should investigate new methods of measuring GHG emissions that are relevant to the plan area.
- 4.3.3 The LTC should work with other government agencies, stakeholders and the residents of the Ballenas-Winchelsea Islands to achieve energy conservation and emissions reduction goals.
- 4.3.4 The LTC should identify significant unfragmented forest and non-forest ecosystems within the planning area and ensure that these areas are noted on mapping for both their environmental and carbon sequestration value.
- 4.3.5 When considering transportation options by air, water or land, both residents and agencies with jurisdiction over services and infrastructure are encouraged to:
 - (a) Reduce fuel requirements;
 - (b) Reduce the extent of infrastructure (for example, through the development of common docks or road/trail construction that minimizes the right of way); and
 - (c) Limit the impact on the natural environment.

4.4 ACTIONS

- 4.4.1 The LTC should work with the Islands Trust Fund and other conservation organizations to promote the conservation of forested land as a cost effective and important climate change mitigation strategy.
- 4.4.2 Residents are encouraged to:
 - (a) Incorporate high energy efficiency into building design and construction and use carbon-efficient materials in new construction;
 - (b) Limit the use of fossil-fuel burning engines or generators and use alternative energy sources where possible; and
 - (c) Limit the burning of refuse.
- 4.4.3 Government agencies, when considering establishment of new infrastructure or changes to existing infrastructure on the Islands , are strongly encouraged to mitigate impacts on the natural environment for any proposals for park, trail, road, ferry, dock, or infrastructure development.

- 4.4.4 The importation of bulk water adds to GHG emissions through the transportation of water by boat or barge. The LTC encourages alternative methods of increasing water self-sufficiency on the Islands.

5. DEVELOPMENT PERMIT AREAS, TEMPORARY USE PERMITS AND DEVELOPMENT APPROVAL INFORMATION

5.1 DEVELOPMENT PERMIT AREAS

Background

Pursuant to Section 919.1 of the *Local Government Act* a community plan may designate development permit areas for one or more of the following:

- a. protection of the natural environment, its ecosystems and biological diversity;
- b. protection of development from hazardous conditions;
- c. protection of farming;
- d. revitalization of an area in which a commercial use is permitted;
- e. establishment of objectives for the form and character of intensive residential development;
- f. establishment of objectives and the provision of guidelines for the form and character of commercial, industrial or multi-family residential development;
- g. in relation to an area in a resort region, establishment of objectives for the form and character of development in the resort region.
- h. establishment of objectives to promote energy conservation;
- i. establishment of objectives to promote water conservation; and
- j. establishment of objectives to promote the reduction of greenhouse gas emissions.

5.1.1 SHORELINE DEVELOPMENT PERMIT AREA

Designation:

The Shoreline Development Permit Area includes all land 30 m upland of the natural boundary of the sea.

Authority:

The Shoreline Development Permit Area is designated a development permit area pursuant to Section 919.1(1)(a) of the *Local Government Act* for the protection of the natural environment, its ecosystems and biological diversity, and Section 919.1(1)(b) for the protection of development from hazardous conditions.

Special Conditions and Objectives That Justify the Designation:

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

It is Provincial legislation in Section 877(1)(d) of the *Local Government Act* that an official community plan must include statements and map designations for the area covered by the Plan respecting restrictions on the use of land that is subject to hazardous conditions, or that is environmentally sensitive to development.

It is policy of the Islands Trust Council that protection must be given to the natural processes, habitats and species of the Trust Area, including those of open coastal grasslands, the vegetation of dry rocky areas, estuaries, tidal flats, salt water marshes, drift sectors, lagoons, kelp and eel grass beds and that development, activity, buildings or structures should not result in a loss of significant marine or coastal habitat, or interfere with natural coastal processes.

It is also policy of the Islands Trust Council that local trust committees shall in their Official Community Plans and regulatory bylaws, address:

- the protection of sensitive coastal areas;
- the planning for and regulation of development in coastal regions to protect natural coastal processes;

Shorelines within the Ballenas-Winchelsea Islands Area have high ecological values. Due to their physical and biological characteristics and relatively undeveloped state, they need to be carefully managed to avoid potential negative impacts of development. Development and associated shoreline improvements or protection measures can threaten the ecological and physical integrity of the foreshore and upland. In addition, sea level rise, storm surges, increased storm intensity and other anticipated effects of climate change as well as steep slope hazard areas may exert negative effects on potential development.

The Objectives of the development permit area are:

1. To plan and regulate new development in a manner that preserves and protects the long-term physical integrity and ecological values of shorelines and associated foreshore and upland areas.
2. To balance development opportunities with the ecological conservation of the shoreline environment.
3. To minimize the disruption of natural features and processes and to retain, wherever possible, natural vegetation and natural features.
4. To adapt to the anticipated effects of climate change.
5. To protect development from hazardous conditions.

Development Approval Information:

The area is also designated an area for which development approval information (DAI) may be required according to Section 920.01(1)(c) of the *Local Government Act*. The designation of these areas as DAI is based on the special conditions or objectives supporting the designation of the DPA. Development approval information means information on the anticipated impacts of the proposed activity or development.

Applicability:

This Development Permit Area applies to all construction and land alteration proposed within the Shoreline DPA. A development permit is required for construction of, addition to, alteration of a building or structure, and land alteration, including vegetation removal except where such activities are specifically exempt.

Exemptions:

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

1. For certainty, construction occurring outside of the Development Permit Area.
2. The placement of impermanent structures such as benches, tables and garden ornaments.
3. Development on land where a conservation covenant under section 219 of the Land Title Act registered against title is granted to the Local Trust Committee or a recognized conservancy and includes provisions which protect shoreline ecosystems in a manner consistent with the applicable DPA guidelines.
4. Repair, maintenance, alteration or reconstruction of existing legal buildings, structures or utilities, including those that are legal non-conforming.
5. The removal of invasive non-native plants.

6. Farm operations as defined in the *Farm Practices Protection (Right to Farm) Act* and farm uses as defined in Section 2(2), (3), (4) and (5) of the Agricultural Land Reserve Use, Subdivision, and Procedure Regulation.
7. Construction of a fence so long as no native trees are removed and the disturbance of native vegetation is restricted to 0.5 metres on either side of the fence.
8. Gardening and yard maintenance activities within an existing landscaped area, such as lawn mowing, tree and shrub pruning, vegetation planting and minor soil disturbance that do not alter the general contours of the land.
9. The pruning or limbing of trees provided it cannot reasonably be expected to result in the death or removal of the tree.
10. The removal of trees that have been examined by an International Society of Arboriculture (ISA) certified arborist and certified to pose an immediate threat to life or property.
11. The construction of a small accessory building such as a pump house, gazebo, garden shed or play house if all the following apply;
 - The building is located a minimum of 15 metres from the natural boundary of sea
 - No native trees are removed; and
 - The total area of the accessory building is less than 10 m².
12. Emergency actions required to prevent, control or reduce an immediate threat to human life, the natural environment or public or private property including:
 - Forest fire, flood and erosion protection works;
 - Protection, repair or replacement of public facilities;
 - Clearing of an obstruction from a bridge, culvert, dock wharf or stream; or
 - Bridge repairs.

Guidelines:

General Guidelines:

1. In general, development of the shoreline area should be limited and minimize impacts on the ecological health of the immediate area.
2. New upland shoreline structures, additions or land alteration should be located and designed to avoid the need for shore protection works.
3. Sea level rise, storm surges, increased storm intensity and other anticipated effects of climate change should be addressed in all applications.

4. The LTC may consider variances to subdivision or building and structure siting or size regulations to meet the objectives of the development permit area.
5. New development on steep slopes or bluffs shall be set back sufficiently from the top of the bluff to ensure that shore protection measures will not be necessary during the life of the structure, as demonstrated by a geotechnical analysis for the site.
6. Alteration of natural drainage systems that disrupt the natural hydrological cycle shall not be permitted.
7. Soil removal and deposit, as well as areas cleared and disturbed for development should be minimized.
8. Shore protection measures that will cause erosion or other physical damage to adjacent or down-current areas shall not be supported.
9. Shore protection measures should not be allowed for the purpose of providing a sufficient setback to meet zoning requirements.
10. New septic systems should not be located in the development permit area. If such a location cannot be avoided, the encroachment into the development permit area must be minimized, and the design and construction of the septic system be supervised by a qualified professional to ensure that the objectives and guidelines of the development permit area are met as conditions of the permit.
11. Where this development permit area includes native plant species or plant communities dependent on a marine shoreline habitat that are identified locally, provincially, or federally as sensitive, rare, threatened or endangered, or have been identified by a qualified professional as worthy of particular protection, their habitat areas should be left undisturbed. If disturbance cannot be entirely avoided, development and mitigation / compensation measures shall be undertaken only under the supervision of a qualified professional with advice from applicable senior environmental agencies.
12. Shore protection measures should not be allowed for the purpose of providing space for additions to existing structures or new outbuildings.

Guidelines for Specific Shoreline Types:

13. New development on steep slopes or bluffs shall be set back sufficiently from the top of the bank to ensure that the effects of wind shear are minimized.
14. Removal of trees or other vegetation from steep slopes or bluffs should only be allowed where necessary and where replacement vegetation / erosion control measures are established. If possible, stumps should be left in place to provide some soil stabilizing influence until replacement vegetation is

established. Plans delineating extent of vegetation / tree removal (location, species and diameter of trees) and location of proposed construction, excavation and / or blasting, may be required.

Guidelines for Construction Practices:

Erosion Control

15. All development within this development permit area should be undertaken and completed in such a manner as to prevent the release of sediment to the shore or to any watercourse that flows to the marine shore. An erosion and sediment control plan, including actions to be taken prior to land clearing and site preparation and the proposed timing of development activities to reduce the risk of erosion, may be required as part of the development permit application.

Monitoring

16. A development permit may require monitoring of the implementation of required environmental mitigation, restoration or enhancement planting or measures approved under a development permit by a qualified professional until all such measures have been completed and the professional has provided a report confirming completion to a standard acceptable to the Local Trust Committee.

Guidelines for Vegetation Management, Restoration and Enhancement:

17. Existing, native vegetation should be retained wherever possible to minimize disruption to habitat and to protect against erosion and slope failure.
18. Existing trees and shrubs to be retained should be clearly marked prior to development, and temporary fencing installed at the drip line to protect them during clearing, grading and other development activities.
19. If the area has been previously cleared of native vegetation, or is cleared during the process of development, replanting should be required in accordance with these guidelines or requirements specified in the development permit. Areas of undisturbed bedrock exposed to the surface of natural sparsely vegetated areas should not require planting.
20. Vegetation species used in replanting, restoration or enhancement should be selected to suit the soil, light and groundwater conditions of the site, should preferably be native to the area, and be selected for erosion control and/or fish and wildlife habitat values as needed. Suitably adapted, non-invasive, non-native vegetation may also be considered acceptable.
21. All replanting should be maintained by the property owner for a minimum of 3 years from the date of completion of the planting. This may require removal of invasive, non-native weeds (e.g., Himalayan blackberry, Scotch

broom, English ivy) and irrigation. Unhealthy, dying or dead stock should be replaced at the owner's expense within that time in the next regular planting season.

Guidelines for the Construction and Replacement of Boat Launch Facilities:

22. Boat launch ramps are the least desirable of all water access structures and will be considered only if they can be located on stable, non-erosional banks where a minimum amount of substrate disturbance or stabilization is necessary. Ramps should be kept flush with the slope of the foreshore to minimize interruption of natural geo-hydraulic processes.
23. Construction of a private ramp on an individual residential lot or parcel is discouraged. Owners are urged to seek alternatives.

Guidelines for the Installation of Ocean-loop Geoexchange Systems

24. Ocean-loop geoexchange systems will only be considered if they are closed-loop systems using only water as the circulating heat transfer fluid; if they meet or exceed the Canadian CSA design standards CAN/CSA-448-02; and if they are designed and installed by a Registered System Designer.

5.2 TEMPORARY USE PERMITS

An Official Community Plan may designate areas where temporary uses may be allowed. A temporary use permit may, notwithstanding a zoning bylaw, allow a use, permit the construction or use of buildings or structures to accommodate persons who work at the temporary enterprise for which the permit is issued and specify conditions under which a temporary use may be carried on. A permit may be issued for a period of up to three years and may be renewed only once. The issuance of a temporary use permit should be conditional on compliance with the following guidelines:

- 5.2.1 Temporary Use Permits may be issued for any area covered by this plan, except for areas designated Parks, Recreation or Conservation on Schedule "C".
- 5.2.2 Temporary Use Permits should only be issued for activities that are of short and fixed duration.
- 5.2.3 An application for a Temporary Use Permit should only be considered if the proposal can be demonstrated to have minimal negative impact on the environment of the Ballenas-Winchelsea Islands Area.
- 5.2.4 In issuing a Temporary Use Permit, the LTC should specify conditions under which the use may be carried on that would mitigate any impacts of the use, including restoration of land upon completion of the permit.
- 5.2.5 In issuing a Temporary Use Permit, the LTC may consider requiring a security deposit for works required to mitigate any impacts of the use, including restoration of land upon completion of the permit.

5.3 DEVELOPMENT APPROVAL INFORMATION

- 5.3.1 The area subject to this bylaw is designated as an area under which development approval information may be required for the purpose of obtaining consistent and comprehensive information on the impacts of proposed development.
- 5.3.2 Trust Council may consider adoption of a development approval information bylaw pursuant to s. 920.1 of the *Local Government Act*.

6. ADMINISTRATION AND INTERPRETATION

6.1 PURPOSE

The purpose of this official community plan bylaw is to further the object of the Islands Trust Act through long-range land use policy for the Ballenas-Winchelsea Islands. This bylaw provides a statement of local government goals, objectives and policies. It is intended to provide policy guidance for the Executive Committee acting as a Local Trust Committee, government agencies, organizations and the public regarding the existing and proposed land use and development in the Ballenas-Winchelsea Islands Area.

6.2 ISLANDS TRUST AUTHORITY

The *Islands Trust Act* gives the Islands Trust, through its Local Trust Committees, the same land use planning authority as a regional district board under the *Local Government Act*. Bylaws must be approved by the Islands Trust Executive Committee and, in the case of Official Community Plans, also by the Minister of Community, Sport and Cultural Development before adoption by the Local Trust Committee.

The Executive Committee acting as a Local Trust Committee has the responsibility for land use planning and regulations within the Ballenas-Winchelsea Islands Area. This committee has four members who are elected in other Local Trust Areas and who have been elected by Trust Council as chairperson and vice chairpersons of the Islands Trust Council.

The purpose of the Trust Council, Executive Committee, and Local Trust Committees is to carry out the object of the Islands Trust, which is:

To preserve and protect the trust area and its unique amenities and environment for the benefit of the residents of the trust area and of the Province generally, in cooperation with municipalities, regional districts, improvement districts, other persons and organizations and the government of the province.

The legislated object defines the purpose of providing authority to the Islands Trust for land use regulation. Local trust committees employ the available planning powers of the *Local Government Act* to preserve, protect, and effectively maintain the rural nature, health, natural environment and vitality of the Trust Area.

6.3 AREA OF JURISDICTION

The provisions of this Bylaw apply to the Ballenas-Winchelsea Islands Planning Area as shown on Schedule "B", which forms part of this bylaw.

6.4 ADVOCACY POLICIES

Community goals and objectives included in this bylaw that address matters that are outside the jurisdiction of the Executive Committee acting as a Local Trust Committee are considered "advocacy policies". These advocacy policies encourage others to take actions that the local trust committee believes would contribute to the goals and objectives of the plan. This bylaw cannot and does not represent a commitment from other agencies or persons to act according to community goals, objectives or policies.

6.5 PUBLIC FACILITIES

Any designation or policy for proposed public facilities on private lands shall be deemed to be a broad community goal of this bylaw and is not a commitment of the LTC and does not have a regulatory effect on private properties. These facilities may include, but are not limited to, roads, parks, trails, and public and community facilities that are not available for acquisition through dedication, grants, or as an amenity through a zoning regulation, and which are not subject to committed funds either through a capital expenditure plan or other budgeting process of the public agency responsible for the proposed facility.

6.6 IMPLEMENTATION

Section 884 of the *Local Government Act* specifies that:

"An official community plan does not commit or authorize a municipality, regional district (includes a local trust committee pursuant to Section 27 of the *Islands Trust Act*) or improvement district to proceed with any project that is specified in the plan."

and

"All bylaws enacted or works undertaken by a council, board or greater board (includes a local trust committee pursuant to Section 27 of the *Islands Trust Act*), or by the trustees of an improvement district, after the adoption of an official community plan must be consistent with the relevant plan."

6.7 INTERPRETATION

- 6.7.1 In the system used for referencing provisions, the single digit number indicates parts, the two digit number sections, the three digit numbers policies and the lower case letters articles:

Part:	1
Section:	1.1
Policy:	1.1.1
Subsection:	(a)

- 6.7.2 The final interpretation as to the precise location of boundaries on any map schedule shall be defined by:
- (a) Where boundaries coincide with lot lines, the boundaries are the lot lines.
 - (b) Where a boundary is shown as following any highway, right of way or stream, the centre line of such highway, right of way, or stream the centreline of that feature is the boundary
 - (c) Where land based and water based boundaries coincide, the common boundary shall be the surveyed lot line as shown on a plan registered in the Land Title Office, and where there is no such plan the natural boundary is the common boundary.
 - (d) Where a boundary does not follow a legally defined line and no dimensions are shown by which the boundary could otherwise be

located, the location of the boundary must be determined by scaling from the map schedule and in that case the boundary is the midpoint of the line delineating the boundary on the schedule.

6.7.3 In interpreting the objectives and policies of the Plan, the term "shall" or "will" denotes that the indicated measure must be taken or applied. The term "should" or "may" indicates that the suggestion is intended as a guideline.

6.7.4 Throughout this Plan, the words listed below shall be defined as follows:

Conservation – actions, legislation or institutional arrangements that lead to the protection or preservation of a given species, group of species, habitat, natural area, or property or area of human heritage value or character.

Ecosystem – a complete system of living organisms interacting with the soil, land, water, and nutrients that make up their environment. An ecosystem is the home of living things, including humans. An ecosystem can be any size—a log, pond, field, forest, or the earth's biosphere—but it always functions as a whole unit. Ecosystems are commonly described according to the major type of vegetation—for example, old-growth forest or grassland ecosystem.

Environmentally Sensitive Area - places that have special environmental attributes worthy of retention or special care. These areas are critical to the maintenance of productive and diverse plant and wildlife populations. Examples include rare ecosystems, habitats for species at risk and areas that are easily disturbed by human activities. Some of these environmentally sensitive areas are home to species which are nationally or provincially significant, others are important in a more local context. They range in size from small patches to extensive landscape features, and can include rare and common habitats, plants and animals.

Foreshore - the area between the high and low water mark of tidal water.

Local Trust Committee (LTC) - The Executive Committee acting as a Local Trust Committee.

Natural Boundary - means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself;

Official Community Plan (OCP) - A community plan adopted pursuant to Part 26, Division (2), Section 876 of the *Local Government Act*.

Park - Park land acquired through dedication of land at time of subdivision, donation or by purchase through a community parks function of a regional district unless otherwise specified in this Bylaw.

Plan - An Official Community Plan adopted by the Executive Committee acting as a Local Trust Committee.

Precautionary Principle – the recognition that when an activity raises threats of harm to the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.

Preserve – to maintain a given condition. Preservation often requires maintaining the processes that generate the desired condition.

Protect – to maintain over the long-term by managing, or if necessary limiting, the type and intensity of development or activity to ensure that valued attributes are not compromised or destroyed.

Sensitive Ecosystem – ecosystems which are fragile and/or rare, or those ecosystems which are ecologically important because of the diversity of species they support.

Stewardship – voluntary, cooperative actions that nurture and take responsibility for the long-term integrity of the environment and amenities of the Trust Area.

Sustainable – capable of meeting the environmental, economic and social needs of current generations without compromising the ability of future generations to meet their needs.

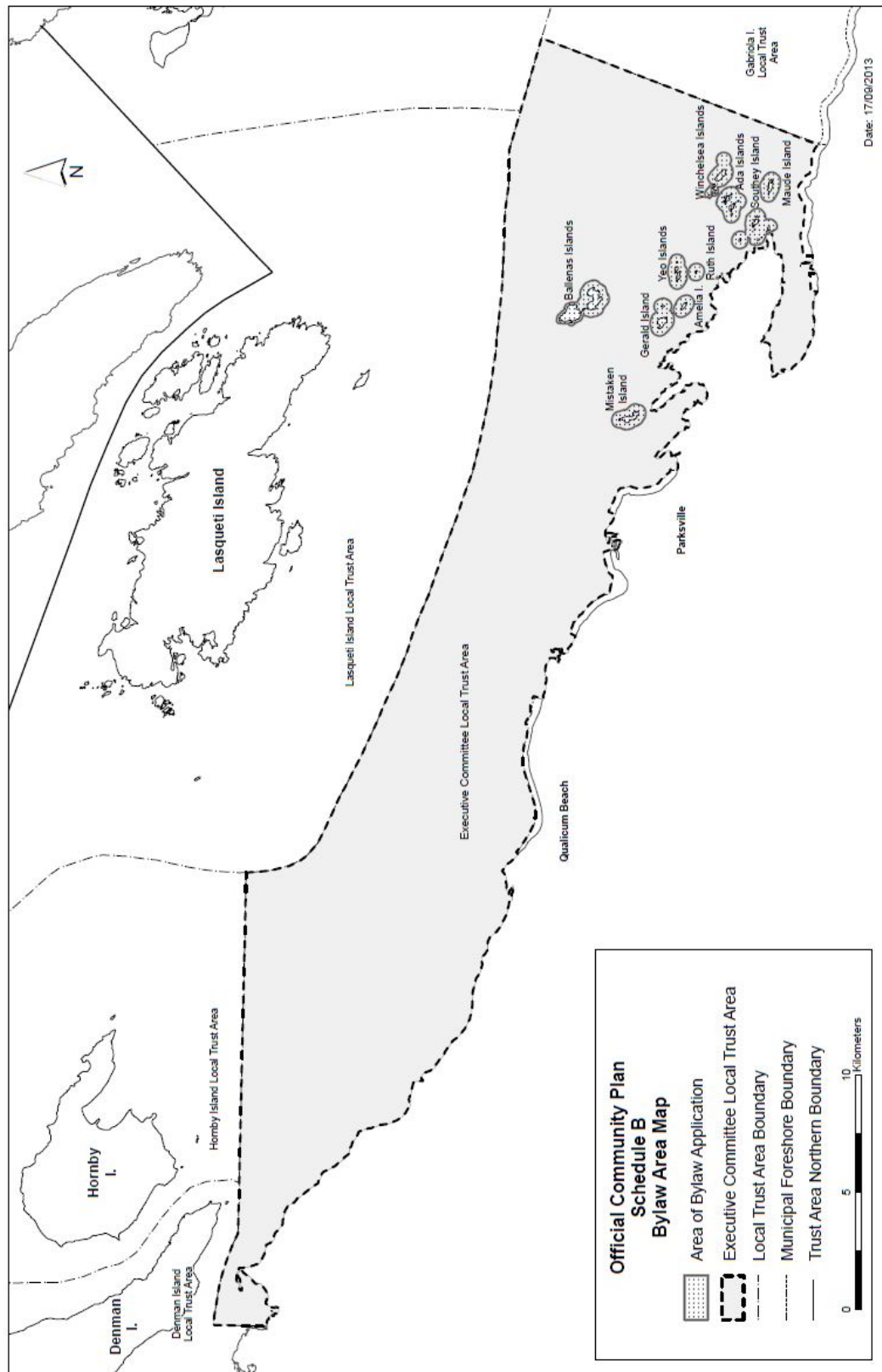
6.8 AMENDMENT PROCEDURE

This Bylaw may be amended by the Executive Committee acting as a Local Trust Committee, at its initiative or in response to an application. Individuals seeking amendment shall submit applications in the form provided for in the bylaws of the Local Trust Committee that address fees and procedures.

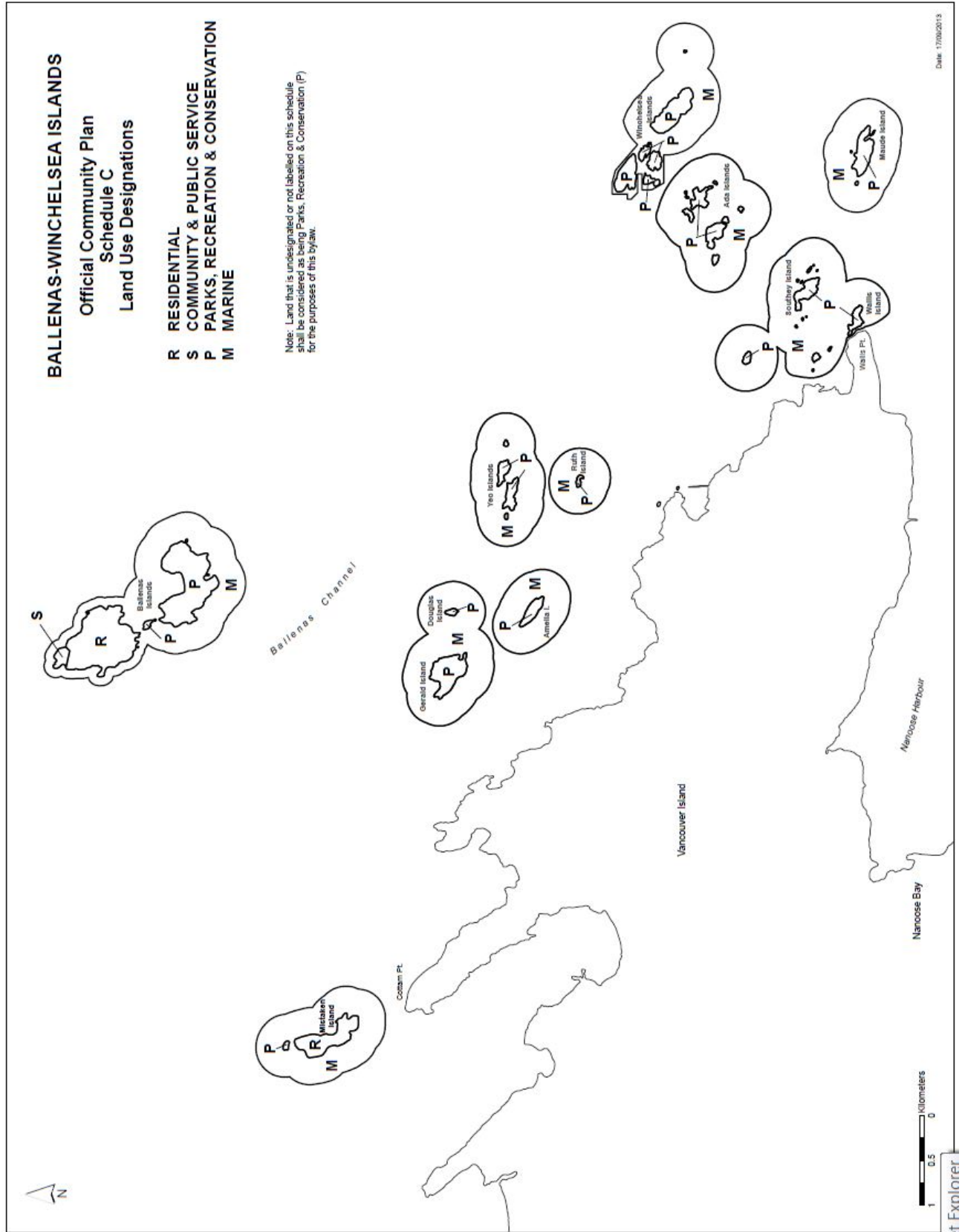
6.9 SEVERABILITY

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

SCHEDULE B – Bylaw Area Map



SCHEDULE C – Land Use Designations





BALLENAS-WINCHELSEA ISLANDS LAND USE BYLAW No. 28, 2013

Consolidation as of: _____, 20__

Back of front cover

Table of Amendments

Bylaw No.	Date of Adoption	Date of Bylaw Consolidation

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PROPOSED

ISLANDS TRUST EXECUTIVE COMMITTEE ACTING AS A LOCAL TRUST COMMITTEE BALLENAS-WINCHELSEA ISLANDS LAND USE BYLAW No. 28, 2013

A Bylaw to establish regulations and requirements respecting the use of land, including the surface of water, the use, siting and size of buildings and structures, landscaping and the subdivision of land within the Ballenas-Winchelsea Islands Area.

WHEREAS the Islands Trust Executive Committee acting as a Local Trust Committee is the Local Trust Committee having jurisdiction on and in respect of the Ballenas-Winchelsea Islands Area, pursuant to the *Islands Trust Act*;

AND WHEREAS the Islands Trust Executive Committee acting as a Local Trust Committee wishes to adopt a Land Use bylaw and other development regulations and to show by map the boundaries of the zones;

AND WHEREAS the Islands Trust Executive Committee acting as a Local Trust Committee has held a Public Hearing;

NOW THEREFORE the Islands Trust Executive Committee acting as a Local Trust Committee enacts in open meeting assembled as follows:

1. Bylaw No. 28 may be cited for all purposes as the "Ballenas-Winchelsea Islands Land Use Bylaw No. 28, 2013."
2. The following schedules attached hereto are hereby made part of this Bylaw and adopted as the Land Use Bylaw for that part of the Ballenas-Winchelsea Islands Area as shown on Schedule "B":

SCHEDULE "A" - Land Use Bylaw Regulations
SCHEDULE "B" - Bylaw Area Map
SCHEDULE "C" - Zoning Map

READ A FIRST TIME this	3rd	day of	May	, 2013
PUBLIC HEARING HELD this		day of		, 20
READ A SECOND TIME this		day of		, 20
READ A THIRD TIME this		day of		, 20
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST this		day of		, 20
ADOPTED this		day of		, 20

SECRETARY

CHAIRPERSON

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SCHEDULE A - Land Use Bylaw Regulations

PART 1 INTERPRETATION

1.1 Definitions

"accessory" in relation to a use, building or structure means incidental, secondary and exclusively devoted to a principal use, building or structure expressly permitted by this Bylaw on the same lot or, if the accessory use, building or structure is located on the common property in a bare land strata plan, on a strata lot in that strata plan.

"agriculture" means the use of land for the growing, rearing, harvesting, or production of plants, crops, livestock and other farm animals but does not include aquaculture, intensive livestock operations, fur farming or mushroom farming.

"aquaculture" means the growing and cultivation of aquatic plants or animals for commercial purposes, in any water environment, or in human-made containers of water, and includes the growing and cultivation of shellfish on, in or under the foreshore or in the water column.

"building" means a roofed structure, including a mobile home, used or intended to be used for supporting or sheltering any use or occupancy.

"custodial residential" means the residential use of a dwelling for a full or part-time on site custodian of land and amenities.

"dock" means a structure or set of structures, accessory to the residential or agricultural use of an upland lot, typically consisting of a pier, ramp, and float, constructed on or over the water that is connected to the shore and that is used as a landing or mooring place for private marine transport or for private recreational purposes.

"dwelling, single family" means a building used as a residence by a single household, containing sleeping and living areas and a single set of facilities for food preparation and eating, and includes a mobile home and a park model recreational vehicle.

"ecological reserve" means an area of land or water established as an ecological reserve under the *Ecological Reserves Act*.

"ecotourism" means low impact, nature-based tourism that involves education and interpretation of the natural environment, or that provides direct financial benefits to conservation through the raising of funds for environmental protection, research and education, and that is managed to be ecologically sustainable.

"Ballenas-Winchelsea Islands Area" means that portion of the Islands Trust Area shown on Schedule "B" of this Bylaw.

"fence" means a structure used as a barrier to separate, prevent escape or intrusion or mark a boundary and may include a gate, screen or freestanding wall.

"float" means a floating non-roofed structure that is used as a landing or moorage place for marine transport or for recreational purposes and which is free to rise and fall with sea level change and, for all conditions of tidal change, does not rest on the sea bed.

"floor area" means the sum of the horizontal areas of all storeys in a building, measured to the outer surface of the exterior walls, exclusive of any floor area occupied by a cistern used for the collection of rainwater for domestic use or fire protection, and exclusive of any space where a floor and the ceiling above it are less than 1.5 metres (5 feet) apart.

"height" means the vertical distance between the highest point of a building or structure and the average natural grade, being the average undisturbed elevation of the ground at the perimeter of the building or structure calculated by averaging the elevations at the midpoints of all the exterior walls. In the case of buildings and structures on the surface of water, average natural grade shall be the natural boundary for a building or structure fixed to the bed of the water and the watermark of any floating building or structure. In the case of a fence, height means the vertical distance between the top of the fence and the grade at any point along the fence.

"highway" includes a street, road, lane, bridge, viaduct and any other way open to the use of the public, but does not include a private right-of-way on private property.

"home occupation" means a commercial use that is accessory to a permitted principal residential use on the same lot.

"horticulture" means the use of land for the rearing of plants.

"island" means land surrounded by water, and includes islets and rocks exposed in any tidal conditions.

"Local Trust Committee (LTC)" means the Executive Committee acting as a Local Trust Committee.

"lot" means any parcel, block or other area in which land is held or into which it is subdivided whether under the *Land Title Act* or the *Strata Property Act*.

"lot coverage" means the total area of those portions of a lot that are covered by buildings and structures, divided by the area of the lot, and for this purpose the area of a lot that is covered by a building or structure is measured to the drip line of the roof and the common property of a bare land strata plan is deemed to be a lot for the application of the lot coverage regulations in Part 5 if the common property is used for accessory buildings or structures.

"lot line" means the boundary of a lot as shown on a plan of survey registered with the BC Land Titles Office, and

"front lot line" means the lot line that is common to the lot and an abutting highway or access route in a bare land strata plan, and where there are two or more such lot lines the shortest (other than corner cuts) is deemed the front lot line;

"rear lot line" means the lot line that is opposite the front lot line in the case of a lot having four sides, and where the rear portion of a lot is bounded by intersecting side lot lines the point of intersection is deemed the rear lot line;

"exterior side lot line" means a lot line that is not a front or rear lot line and that is common to the lot and an abutting highway or access route in a bare land strata plan; and

"interior side lot line" means a lot line that is not a front, rear or exterior side lot line.

"marina" means the commercial use of a water area for the temporary moorage or storage of boats, and includes any floats, piers, wharves, breakwaters, ramps and walkways associated with such use.

"mobile home" means a dwelling designed, constructed or manufactured to be moved from one place to another by being towed or carried and meets a minimum CSA-Z240 standard.

"moorage" means the tying or securing of a vessel to a fixed structure or mooring buoy.

"mooring buoy" means a fixed buoy to which a boat is moored and that meets the Private Buoy Regulations of the *Canada Shipping Act*.

"natural boundary" means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself.

"natural watercourse" means a naturally formed depression or similar landscape feature that perennially or periodically contains surface water, including a lake, river, creek, spring, ravine, swamp, salt water marsh, and bog, but does not include a constructed ditch or surface drain.

"Ocean-loop geoexchange" means a renewable geothermal heat exchange system that utilizes the naturally occurring temperature of the ocean for heating and cooling that:

- a. is a closed-loop system using only water as the circulating heat transfer fluid,
- b. meets or exceeds the Canadian CSA design standards CAN/CSA-448-02, as amended from time to time, and
- c. is designed and installed by a Registered System Designer accredited by the Canadian Geoexchange Coalition, or the International Ground Source Heat Pump Association.

Information Note: Installation of marine geoexchange systems are also required to obtain the necessary permits or approvals from provincial and federal agencies.

"park" means a publicly owned lot which is used or intended to be used for conservation or the recreation and enjoyment of the public and which may be developed with recreational facilities.

"personal watercraft" means a vessel typically less than 5 metres (16 feet) in length that is propelled by machinery, commonly a jet pump, and designed to be operated by a person standing, kneeling or sitting on the vessel rather than standing or sitting inside the vessel.

"pier" means a fixed structure constructed over the foreshore and the water and that abuts the shoreline, is generally perpendicular to the shoreline, and is used to provide access to a float or as a landing or moorage place for marine transport or for recreational purposes.

"principal" in relation to a use, building or structure means the main or primary use, building or structure, as the case may be, conducted or constructed on a lot.

"pump/utility house" means an accessory building containing only equipment for pumping and processing of water or sewage, or electrical equipment and communication service equipment.

"recreational uses" means leisure activities, performed either individually or collectively, through forms of play, amusement, or relaxation, and may include structures such as picnic benches, shelters, storage buildings, and washroom facilities.

"residence" means a dwelling unit used for the domicile or home life of a person or persons, or the occasional or seasonal occupancy of a dwelling unit by an owner, or by a tenant under a residential tenancy agreement, who has a permanent domicile elsewhere or by non-paying guests of such an owner; and for certainty, residential use does not include short term vacation rental, bed and breakfast use, the keeping of boarders or lodgers, or any occupancy of a dwelling unit by persons entitled to such an occupancy under a time share plan as defined in the *Real Estate Development Marketing Act* or successor legislation.

"setback" means the horizontal distance that a building or structure must be sited from a specified lot line, building or feature.

"sign" means any device or medium including its supporting structure, visible from the sea, any highway or lot other than the one on which it is located, and which is used to attract attention for advertising, information or identification purposes.

"short-term vacation accommodation" means the use or provision for non-commercial gain of temporary accommodation for persons or households who maintain a permanent residence elsewhere, for periods of less than 30 days at a time.

"short-term vacation rental" means the use of provision for commercial gain of temporary accommodation for persons or households who maintain a permanent residence elsewhere, for periods of less than 30 days at a time.

"structure" means a construction or portion thereof of any kind that is fixed to, supported by or sunk into land or water, but excludes landscaping, septic tanks and fields, and related appurtenances below ground, concrete and asphalt paving or similar surfacing of the land, and retaining structures less than 1.2 metres (4 feet) in height.

"third party sign" means a sign conveying information not pertaining to the lot on which it is located.

"use" means the purpose or activity for which land or buildings are designed, arranged or intended, or for which land or buildings are occupied or maintained.

"utility" means broadcast transmission, electrical, telecommunications, sewer or water services and facilities established or licensed by a government, or government agency, excluding private radio or television antennae, and includes navigational aids.

"wetland" means land that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions supports, vegetation typically adapted for life in saturated soil conditions, including marshes, swamps and bogs.

"zone" means a zone established by Part 5 of this Bylaw.

1.2 Referencing

- (1) In the system used for referencing provisions, the single digit number indicates parts, the two digit number sections, the parenthetical numbers subsections, the lower case letters articles and the roman numerals clauses:

Part:	1
Section:	1.1
Subsection:	1.1(1)
Article:	1.1(1)(a)
Clause	1.1(1)(a)(i)

1.3 Units of Measure

- (1) Metric dimensions are used in this Bylaw. Imperial equivalents, where shown in parentheses, are approximate, are provided for convenience only, and do not form part of this Bylaw.

1.4 Information Notes

- (1) Where a paragraph or sentence in this Bylaw is preceded by the words "Information Note", the contents of the paragraph or sentence are provided only to assist in understanding of the bylaw and do not form a part of it.

PART 2 ADMINISTRATION

2.1 Application

- (1) This Bylaw shall apply to the Ballenas-Winchelsea Islands, being that part of the Islands Trust Area as shown on Schedule "B". Encompassed in this area of application are the entire land area of all islands, islets, reefs, rocks, the surface and bed of the sea and the water column, and all air space above all such land and water areas.

2.2 Conformity

- (1) No person may use or occupy or permit any land, water, building or structure to be used or occupied, or subdivide any land, except as permitted by this Bylaw.
- (2) No person may construct, reconstruct, place, alter, extend or maintain any building, structure or sign except as permitted by this Bylaw.
- (3) Nothing contained in this Bylaw relieves any person from the responsibility to comply with other legislation applicable to their use of land, buildings or structures.
- (4) Any existing lot that is less than the minimum lot area specified in the applicable zone for the creation of new lots by subdivision may be used for any use permitted in that zone unless otherwise specified in this Bylaw.
- (5) No lot or area may be subdivided, no building, structure or land may be used, and no building or structure may be sited in a manner which renders any existing use, building or structure illegal or non-conforming.

2.3 Inspection

- (1) Pursuant to Section 268 of the *Local Government Act*, the Islands Trust Bylaw Enforcement Officer or any other person designated by the Local Trust Committee to administer this Bylaw is authorized to enter, at any reasonable time upon any property that is subject to regulation under this Bylaw, for the purpose of determining whether the regulations are being observed.

2.4 Violation

- (1) Any person who does any act or thing or permits any act or thing to be done in contravention of the provisions of this Bylaw, or who neglects to do or refrains from doing any act or thing which is required to be done by any of the provisions of this Bylaw is deemed to have committed an offence under this Bylaw.

2.5 Penalty

- (1) Any person who commits an offence against this Bylaw is liable, upon summary conviction, to a fine and penalty, pursuant to the *Offence Act*. Each day during which an offence against this Bylaw is continued is deemed to constitute a new and separate offence.

2.6 Covenants

- (1) Where under this Bylaw an owner of land is required or authorized to grant a covenant restricting subdivision or development, the covenant must be granted to the Local Trust Committee pursuant to Section 219 of the *Land Title Act* in priority to all financial charges and delivered in registerable form satisfactory to the Local Trust Committee prior to the granting of the approval or authorization in respect of which the covenant is required. The covenant must indemnify the Local Trust Committee in respect of any fees or expenses it may incur as a result of a breach of the covenant by the covenanter.

2.7 Owner's Cost

- (1) If any provision of this Bylaw requires a report, study, covenant, plan or similar item to be prepared, unless otherwise stated, the owner shall pay all costs.

2.8 Enforcement of Siting Regulations

- (1) Every applicant for a development permit or a development variance permit must provide a plan signed by a B.C. Land Surveyor showing the location on the lot of all existing and proposed buildings, structures and sewage absorption fields in relation to lot and zone boundaries, watercourses, wells and the sea, and in relation to other buildings on the lot, unless the Local Trust Committee determines that the provision of such a plan is not reasonably necessary to establish whether the proposed buildings, structures or sewage absorption fields comply with the siting requirements of this or any other Bylaw.

PART 3 GENERAL REGULATIONS

3.1 Permitted in All Zones

The following uses, buildings and structures are permitted in any zone, except where specified, and all buildings and structures are subject to siting and size regulations established elsewhere in this bylaw:

- (1) Conservation areas, including ecological reserves and other habitat reserves, and parks, but excluding playgrounds and playing fields.
- (2) Water supply facilities, for an individual lot or as a community service, in any land zone for the purposes of supplying potable water on an individual island, including reservoirs, pipes, treatment facilities, storage facilities and pumping and intake structures, but not including desalination facilities.
- (3) Buried or submerged electricity lines for the distribution of electrical power on private residential zoned property, and buried or above-ground lines in any other land use zone.
- (4) Electrical substations for the purposes of supplying electrical power on an individual island.
- (5) Solar collectors in any land zone for the purposes of supplying electrical power to the island on which the structure is located.
- (6) Wind generators in any land zone for the purposes of supplying electrical power to the island on which the structure is located.
- (7) Fences in any land zone, subject to regulations established in Section 3.5.
- (8) Hiking and bicycle trails.
- (9) Signs, subject to regulations established in Part 6.
- (10) Pump/utility houses.
- (11) Sewage disposal facilities for which all required filings have been made in accordance with the Sewerage System Regulation under the *Public Health Act*.
- (12) Horticulture.
- (13) Buildings or structures used for an office or shelter for construction or maintenance crews, or for storage of materials to be used for the erection, construction or maintenance of any building, structure or public utility installation for which a valid building permit has been obtained, provided that such a temporary structure or building is removed within 30 days of completion of the public utility, building or structure.

Information Notes:

All buildings and structures must comply with the BC Building Code.

Water supply facilities must comply with the Water Act, Groundwater Protection Regulation, Public Health Act, Drinking Water Protection Regulation, and Health Hazard Regulation.

3.2 Prohibited in All Zones

Only the uses, buildings and structures expressly permitted in Section 3.1 and Part 5 of this Bylaw are permitted in the relevant zones. Without limiting the generality of the foregoing and for purposes of clarity, the following uses, buildings and structures are prohibited in all zones:

- (1) Junkyards, auto-wrecking and the storage of derelict vehicles outside of a permitted and enclosed structure.
- (2) The disposal and storage of hazardous or toxic waste.
- (3) The rental, sale and commercial storage of personal watercraft.
- (4) The use of a vessel anchored, moored, or secured as a permanent residence.
- (5) Fin fish aquaculture in any water zone.
- (6) Bridges, causeways and tunnels connecting any one island to another island or the mainland.
- (7) Water utility lines connecting any island to another island or the mainland.
- (8) Marinas.
- (9) Wind generators in any water zone and wind generators intended to provide power to an island other than the island on which the structures are located.
- (10) Dog breeding and boarding kennels.
- (11) Storage of unusable, stripped, non-functional or abandoned vehicles, vessels, trailers or campers.
- (12) Commercial uses except home occupations where permitted by the regulations in Part 5 of this Bylaw.
- (13) Industrial Uses.

3.3 Siting and Setback Regulations

- (1) All siting measurements must be made on a horizontal plane from the natural boundary, lot line or other feature specified in this Bylaw to the nearest portion of the building or structure in question.
- (2) Buildings or structures, except a fence, utility line, navigational aid, driveway or path, or pump/utility house, shall not be sited within the setback areas established in the regulations in Part 5 of this Bylaw.
- (3) Buildings or structures, including a fence, or a pump/utility house, shall not be sited within 15 metres (50 feet) of the natural boundary of the sea. Septic fields, septic tanks, absorption fields and related appurtenances below ground, concrete and asphalt paving or similar surfacing of the land, and retaining structures are considered structures for the purposes of this subsection. Ocean loop geo-

exchange systems are not considered a structure for the purposes of this subsection.

Information Note: All construction within 30 metres (100 feet) of the natural boundary of the sea requires a Development Permit under the Shoreline Development Permit Area in the Ballenas-Winchelsea Islands Official Community Plan.

- (4) Buildings or structures, except a fence or pump/utility house, shall not be sited within 30 metres (100 feet) of the natural boundary of any natural watercourse or wetland. Septic fields, septic tanks, absorption fields and related appurtenances below ground, concrete and asphalt paving or similar surfacing of the land, and retaining structures are considered structures for the purposes of this subsection.
- (5) Steps, eaves, gutters, cornices, sills, chimneys, balconies, decks and sunshades and similar features attached to buildings, and retaining walls, may project into a required setback area, except a setback from the natural boundary of the sea, a natural watercourse or a wetland, provided they do not project more than 1.0 metre (3 feet) into the required setback area.

3.4 Height Regulations

Except as otherwise provided for in this Part, or Part 5, the following regulations apply:

- (1) No single family dwelling may exceed 9.0 metres (29 feet) in height, except for single family dwellings within 30 meters of the natural boundary of the sea which may not exceed 8.0 metres (26 feet) in height.
- (2) No accessory building or structure may exceed 5.0 metres (16 feet) in height.
- (3) The height regulations for buildings and structures specified in Subsection 3.4(1) and (2) and elsewhere in this Bylaw do not apply to radio, telecommunications and television antennas and towers, light stations, chimneys, flag poles, lightning poles, fire and hose towers, utility poles, attic vents, solar collectors, wind generators and water storage tanks.
- (4) All height measurements to determine compliance with this bylaw shall be taken from the average of the natural grade levels at the midpoints of all walls (or sides) of the building or structure in question, to the highest point of the building or structure.

3.5 Fences

- (1) The height of fences shall not exceed 3 metres (10 feet).

3.6 Accessory Uses, Buildings and Structures

- (1) A building or structure accessory to a dwelling may not be used for human habitation except as permitted by Subsection 3.6(4).

- (2) Accessory buildings are limited to two per lot and the total floor area of all accessory buildings may not exceed 80 square metres (860 square feet).
- (3) One non-residential building may be constructed or placed on a lot prior to the construction of a dwelling or the commencement of a residential use on the same lot.
- (4) An accessory building may be constructed or placed on a lot prior to the construction of a single family dwelling on the same lot and occupied as a temporary dwelling prior to the construction of a permitted single family dwelling on the same lot, subject to:
 - (a) the provision of sewage disposal facilities for which all required filings have been made in accordance with the Sewerage System Regulation under the *Public Health Act* ;
 - (b) the provision of a domestic water supply;
 - (c) compliance with the use, density and siting requirements of this Bylaw for accessory buildings; and
 - (d) cessation of the residential occupancy of the accessory building prior to the occupancy of the principal dwelling on the property and removal from the accessory building of all facilities for food preparation and eating.
- (5) Unless a building or structure, excluding an attached deck and patio, is structurally attached to a principal building by a structure having walls, a roof, and a floor, it is for the purposes of this Bylaw, deemed not to be part of the principal building, but is deemed to be an accessory building or structure.

3.7 Home Occupations

- (1) Permitted accessory home occupations include any home craft, repairing of goods, professional practice, service to a client, or creation of a product, but do not include the rental of visitor accommodation (including, but not limited to, bed and breakfasts, short-term vacation rental and commercial campgrounds), vessel or aircraft rentals or charters, food service or the retail or wholesale sale of goods or products unless the goods or products are produced, processed or repaired as part of the home business.
- (2) Home occupations must be conducted entirely within a dwelling or a permitted accessory building on a lot where there is a permitted principal residential use.
- (3) The combined floor area used in all home occupations on a lot must not exceed 65 square metres (700 square feet).
- (4) The operator or at least one of the employees of a home occupation must reside on the property.
- (5) Not more than one person per property may be employed in any home occupation in addition to any residents of the premises in which such business is carried on.

- (6) No storage of materials, commodities or finished products is permitted in connection with the operation of a home occupation other than within a permitted building.
- (7) One sign, consistent with the regulations established in Part 6, is permitted in conjunction with all home occupations on each lot.
- (8) No noise resulting from any home occupation may be produced so as to be heard at a lot line or at the natural boundary of the sea.

PART 4 ESTABLISHMENT OF ZONES

4.1 Division into Zones

- (1) The Ballenas-Winchelsea Islands Area is divided into the following zones, the geographic boundaries of which are as shown on the Zoning Map designated as Schedule "C" that forms part of this Bylaw:

<u>Zone Name</u>	<u>Zone Abbreviation</u>
Residential	R
Community Services	S
Conservation	CN
Park	P
Nature Protection	NP
Marine General	W1
Marine Protection	W2

4.2 Zone Boundaries

- (1) Where zone boundaries on Schedule "C" coincide with lot lines, the zone boundaries are the lot lines.
- (2) Where a zone boundary is shown on Schedule "C" as following any highway, right-of-way or stream, the centre line of such highway, right-of-way, or stream is the zone boundary.
- (3) Where land based and water based zone boundaries shown on Schedule "C" coincide, the common boundary shall be the surveyed lot line as shown on a plan registered in the Land Title Office, and where there is no such plan the natural boundary of the sea is the common boundary.
- (4) Where a zone boundary shown on Schedule "C" does not follow a legally defined line and no dimensions are shown by which the boundary could otherwise be located, the location of the boundary must be determined by scaling from Schedule "C" and in that case the zone boundary is the midpoint of the line delineating the zone boundary.

PART 5 ZONE REGULATIONS

5.1 Residential (R)

Permitted Uses

- (1) The following uses, buildings and structures are permitted, subject to the regulations set out in this section and the general regulations, and all other uses are prohibited:
- (a) Single family dwelling;
 - (b) Agriculture;
 - (c) Home occupations, subject to Section 3.7;
 - (d) Accessory uses, buildings and structures.

Density

- (2) One (1) single family dwelling is permitted per 4.047 hectares (10 acres) of lot area.
- (3) The lot coverage of all buildings, structures and paving shall not exceed 10 percent.

Siting and Size

- (4) The total floor area of a single family dwelling may not exceed 300 square metres (3200 square feet).
- (5) The minimum setback for any building or structure shall be 6 metres (20 feet) from any lot line.
- (6) Despite Subsection 5.1(5), the minimum setback for any building, structure or enclosure housing farm animals shall be 7.6 metres (25 feet) from any lot line.

Subdivision Lot Size Requirements

- (7) No subdivision plan shall be approved in the R zone unless the lots created by the subdivision have a lot area of at least 20.2 hectares (49.9 acres), except where, pursuant to subsection 7.2(1)(b), the lot being created is for a public park, a conservation area, an ecological reserve or dedication to the Crown.

5.2 Community Service (S)

Permitted Uses

- (1) The following uses are permitted, subject to the regulations set out in this section and the general regulations, and all other uses are prohibited:
- (a) Community recreational uses;
 - (b) Light stations.

Density

- (2) The combined lot coverage of all buildings, structures and paving shall not exceed 25 percent.

Siting and Size

- (3) The minimum setback for any building or structure shall be 10 metres (33 feet) from any lot line.

Subdivision

- (4) No subdivision plan shall be approved in the S zone unless the lots created by the subdivision have a lot area of at least 65 hectares (160 acres), except where, pursuant to subsection 7.2(1)(b), the lot being created is for a public park, a conservation area, an ecological reserve or dedication to the Crown.

5.3 Conservation (CN)

Permitted Uses

- (1) The following uses, buildings and structures are permitted and all other uses, buildings and structures are prohibited:
- (a) Ecotourism;
 - (b) Short term vacation accommodation;
 - (c) Custodial residential;
 - (d) Informational signs and interpretive structures.

Density

- (2) One (1) dwelling for ecotourism, short term vacation accommodation, or custodial residential uses is permitted per lot.
- (3) The lot coverage of all buildings, structures and paving shall not exceed 10 percent.

Subdivision

- (4) No subdivision plan shall be approved in the CN zone unless the lots created by the subdivision have a lot area of at least 65 hectares (160 acres), except where, pursuant to subsection 7.2(1)(b), the lot being created is for a public park, a conservation area, an ecological reserve or dedication to the Crown.

5.4 Park (P)

Permitted Uses

- (1) The following uses, buildings and structures are permitted and all other uses, buildings and structures are prohibited:
- (a) Trails, stairs and walkways;
 - (b) Informational signs and interpretive structures;
 - (c) Wilderness camping;
 - (d) Accessory uses, buildings and structures.

Subdivision

- (2) No subdivision plan shall be approved in the P zone unless the lots created by the subdivision have a lot area of at least 65 hectares (160 acres), except where, pursuant to subsection 7.2(1)(b), the lot being created is for a public park, a conservation area, an ecological reserve or dedication to the Crown.

5.5 Nature Protection (NP)

Permitted Uses

- (1) The following uses, buildings and structures are permitted and all other uses, buildings and structures are prohibited:
- (a) Ecological reserves, nature conservancies and parks;
 - (b) Research and educational activities;
 - (c) Trails, stairs and walkways;
 - (d) Wilderness camping;
 - (e) Informational signs and interpretive structures.

Subdivision

- (2) No subdivision plan shall be approved in the NP zone unless the lots created by the subdivision have an average a lot area of at least 65 hectares (160 acres), except where, pursuant to subsection 7.2(1)(b), the lot being created is for a public park, a conservation area, an ecological reserve or dedication to the Crown.

5.6 Marine General (W1)

Permitted Uses

- (1) The following uses and structures are permitted, subject to the regulations set out in this section and the general regulations, and all other uses are prohibited:
- (a) Marine navigational aids;
 - (b) Mooring buoys for the mooring of a private vessel accessory to a residential or agricultural use of an upland lot;
 - (c) Docks, accessory to a residential or agricultural use of an upland lot or lots and providing access for the residents of the upland lot or lots;
 - (d) Barge ramps and marine railways;
 - (e) Ramps, walkways, footings and pilings necessary for the establishment and maintenance of the uses permitted in article 5.6(1)(c) and (d).
 - (f) Ocean-loop geoexchange systems

Density

- (2) Docks permitted by article 5.6(1)(c) shall be limited to one (1) per island.

Siting and Size

- (3) No structure shall be located within 3 metres (10 feet) of the seaward projection of any side lot line of an abutting upland lot.
- (4) All mooring buoys permitted by 5.6(1)(b) shall be located within 100 metres (328 feet) of the upland lot to which they are accessory.
- (5) Ramps, piers and walkways accessing a dock shall not exceed 3 metres (10 feet) in width.
- (6) The maximum area of all floats and piers, excluding ramps and walkways, adjacent to any one island may not exceed 40 square metres (430.6 square feet).
- (7) Storage structures constructed on any part of a dock shall have a maximum height of 1 metre (3 feet) and a maximum total area of 10 square metres (107 square feet).

Conditions of Use

- (8) No building or structure shall be sited, placed or erected on any float, dock, pier or breakwater in the W1 zone except:
- (a) storage structures;
 - (b) railings;
 - (c) lights.

- (9) No dock shall be constructed with foam flotation devices that are not completely encapsulated.
- (10) Barge ramps and marine railways permitted by article 5.6(1)(d) shall be accessory to the residential use of an abutting upland lot, or adjacent upland lots, and shall provide access to that lot or lots for the resident(s) of an upland lot on the island.

5.7 Marine Protection (W2)

Permitted Uses

- (1) The following uses are permitted, subject to the regulations set out in this section and the general regulations, and all other uses are prohibited:
- (a) Marine navigational aids;
 - (b) Mooring buoys for the mooring of a private vessel accessory to the residential use of an upland lot.

PART 6 SIGN REGULATIONS

6.1 Exempt Signs

The following signs and no others are exempt from the regulations in this part:

- (a) Directional, traffic control, safety, interpretive, address and navigational signs.
- (b) Signs of candidates for public office, who are recognized as candidates by the government in which they seek office, provided they are removed within 14 days of the date of election.
- (c) Signs pertaining to the lease, sale, name of owner or property, or the use or status of a lot or building, provided no sign exceeds a total area of 0.3 square metres (3 square feet).
- (d) Signs erected and maintained by a public agency.
- (e) Interpretive signs associated with permitted uses in Conservation (CN), Nature Protection (NP) and Parks (P) zones.

6.2 Prohibited Signs

- (1) The following signs are prohibited:
 - (a) Any sign that is internally illuminated;
 - (b) Any sign with moving parts;
 - (c) Any sign hung from, or in any way affixed to, any other sign;
 - (d) Any noise-making sign;
 - (e) Third party signs.

6.3 Height

- (1) The maximum height for any sign is 3 metres (10 feet).

6.4 Obsolete Signs

- (1) Any sign which has become obsolete because of the discontinuance of the business, service or activity which it advertises must be removed from the premises within thirty days after the sign becomes obsolete.

6.5 Sign Number and Area

Table 6.1: Sign Number and Area		
Zone/Use	Number of Signs Permitted for each Lot, Premise or Use	Maximum Total Sign Area Permitted for Each Lot, Premise or Use
All zones	1 per lot	0.3 square metres (3 square feet) in area

PART 7 SUBDIVISION REGULATIONS

7.1 Exemptions from Minimum Lot Area Requirements

- (1) The minimum lot sizes specified in Part 5 do not apply if:
 - (a) the lot being created is to be used solely for unattended equipment necessary for the operation of facilities referred to in Section 3.1, a community sewer or water system, electrical and telecommunication utilities, telephone receiving antenna, radio or television broadcasting antenna, a telecommunication relay, an automatic telephone exchange, an air or marine navigational aid, or an electrical substation, and the owner grants to the Local Trust Committee a Section 219 covenant under the *Land Title Act* restricting the use of the lot to one of these uses;
 - (b) the lot being created is for a public park, a conservation area, an ecological reserve or dedication to the Crown;
 - (c) the lot being created results from the consolidation of two or more lots, provided the area of the consolidated lot could not be subdivided into more lots than would be permitted under this bylaw without the consolidation; or
 - (d) to the adjustment of boundaries between lots, provided the area of any lot would not be increased to an extent that it could be subdivided into more lots than would be permitted under this bylaw without the boundary adjustment.
- (2) If the approval of a bare land strata plan would create common property in the same zone as the strata lots, and this bylaw would permit the construction of a dwelling on the common property if it were a lot, the applicant shall grant a Section 219 covenant complying with Section 2.6 in respect of the common property prohibiting the further subdivision of the common property, the construction of any residential dwelling unit on the common property, and the disposition of the common property separately from the strata lots.

7.2 Boundary Adjustment Subdivisions

- (1) A boundary adjustment subdivision that would result in the increase of the area of any lot to the point where the new lots created could be subdivided into more lots than would be permitted under this bylaw without the boundary adjustment is prohibited.
- (2) A boundary adjustment subdivision resulting in an additional lot lying in two or more zones is prohibited.

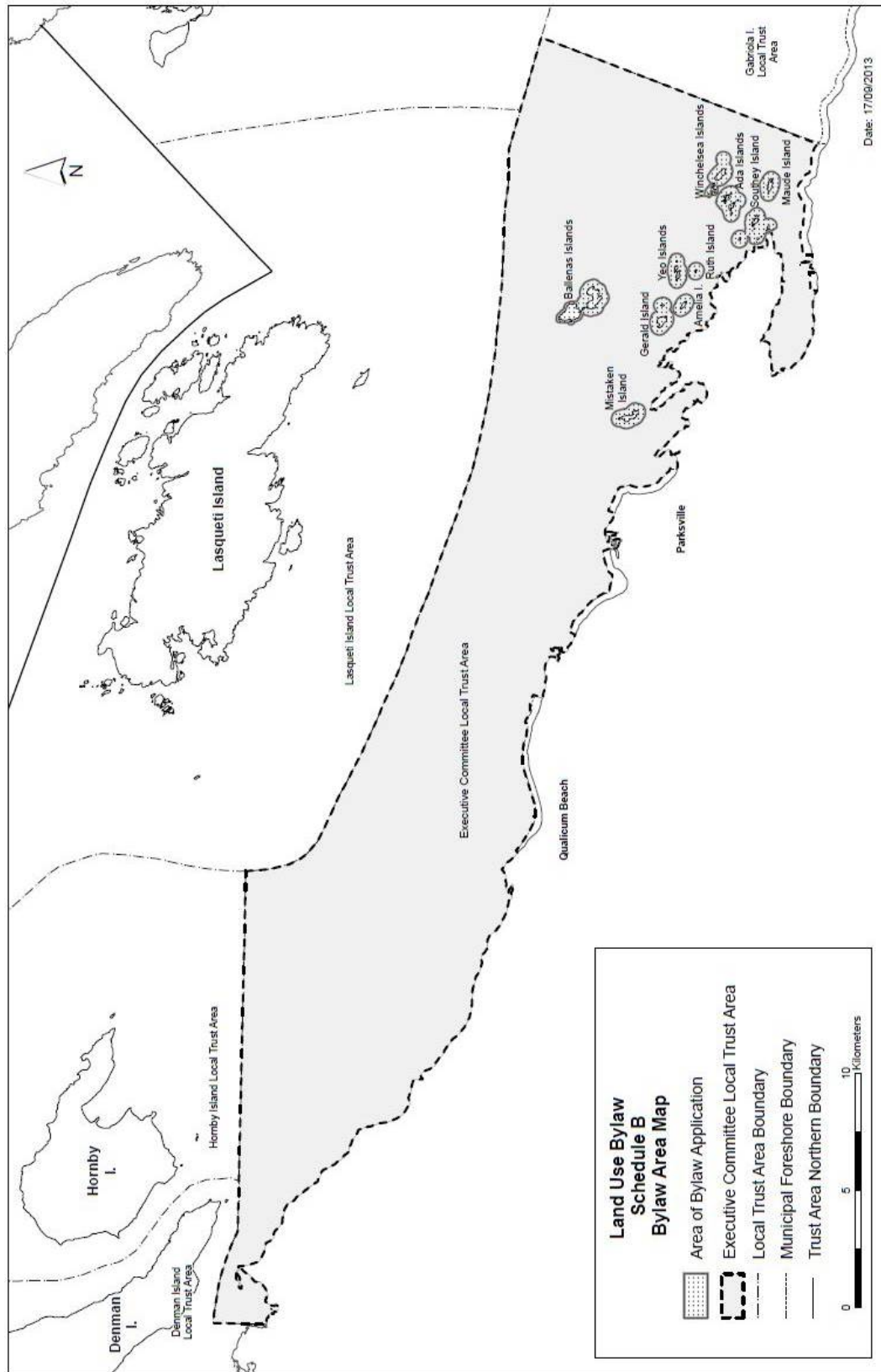
7.3 Section 946 subdivisions (Residence for a Relative)

- (1) No lot having an area less than 60 hectares (148.3 acres) may be subdivided under Section 946 of the *Local Government Act* to provide a residence for a relative of the owner unless the lot is entirely within the Agricultural Land Reserve.

7.4 Highway Standards

Information Note: For information on road standards see the Letter of Agreement between the Islands Trust and the Ministry of Transportation and Highways, dated October 20, 1992 and amended July 18, 1996, and as may be subsequently amended.

SCHEDULE B - Bylaw Area Map



PROPOSED



EXECUTIVE COMMITTEE
ACTING AS A
LOCAL TRUST COMMITTEE
Executive Islands Area
(Ballenas-Winchelsea Group)

BUSINESS MEETING SCHEDULE – 2014

MONDAY, FEBRUARY 24, 2014	10:00 AM
FRIDAY, MAY 2, 2014	10:00 AM
WEDNESDAY, OCTOBER 8, 2014	10:00 AM

ISLANDS TRUST
NORTHERN OFFICE - BOARDROOM
700 NORTH ROAD, GABRIOLA ISLAND, BC

THESE ARE REGULAR BUSINESS MEETINGS OF THE LOCAL TRUST COMMITTEE,
 WHERE ITEMS SUCH AS
 CORRESPONDENCE, APPLICATIONS AND BYLAWS WILL BE CONSIDERED.

DATES AND LOCATIONS ARE SUBJECT TO CHANGE

ALL MEETINGS ARE OPEN TO THE PUBLIC

Visit Our Website: www.islandstrust.bc.ca
 Contact Us: northinfo@islandstrust.bc.ca

700 North Road Gabriola Island BC V0R 1X3

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Date August 1, 2013 File Number 6500-01

To Denman Island Local Trust Committee
Hornby Island Local Trust Committee
Lasqueti Island Local Trust Committee
Executive Committee Acting as a Local Trust Committee
Gabriola Island Local Trust Committee
Gambier Island Local Trust Committee
Thetis Island Local Trust Committee

From Courtney Simpson
Regional Planning Manager, Local Planning Services

Re 2014-15 Budget Submissions

Local trust committees have been requested to submit budget requests for the next fiscal year (2014-15).

Local Trust Committee Expense Budgets:

A budget for Local Expense Account has been developed based on the historical spending. Local trust committees may make changes to this allocation; however, consideration should be given to the historical spending and a rationale provided for making the change.

The Special Projects line item in the Local Trust Committee Expense Account is intended to support local planning initiatives at the discretion of the local trust committee (a local trust committee resolution is required to use these funds). Generally, these funds would be for small projects of up to \$2,000, or could be used to supplement project budgets. This budget item was introduced in the 2013-14 budget.

LTC Projects Budgets:

Local trust committees should make a funding request to support project work, including OCP and LUB work that cannot be undertaken with the money available in the Expense Account Special Projects line.

Riparian Areas Regulation:

Local trust committees should discuss their requirements for RAR funding next fiscal to assist the Regional Planning Manager and Director in developing a budget for RAR. A briefing to Financial Planning Committee from their November 14, 2012 meeting is attached for reference to the five year plan recommended by the Director at that time.

Special Consideration:

When considering new work items for the 2014/15 fiscal year, Regional Planning Managers and LTCs have been requested to consider the following:

- 2014 is an election year, so no major new projects should start; rather funding should focus on completing on-going projects.

- Any new projects begun in the beginning of the fiscal year should be completed by September in advance of the election.
- Some funding could be provided to allow the new LTC to begin preliminary work prior to the end of the fiscal; however, this should be minimal as after orientation, there would not be much time left.
- Projects planned for the current fiscal (2013/14) which are not completed should be considered as a new project for the 2014/15 fiscal year with resources allocated to support that work.

Budget Request Timeline:

August 2013 Regional Planning Managers develop budget estimates for consideration by LTCs

Aug to Sept Local trust committees review and approve budget requests at LTC meeting

Aug 21, 2013 FPC reviews budget principles

Sept 27, 2013 Budget requests submitted to Director of Local Planning Services

Oct 4, 2013 Budget requests forwarded to Director of Administrative Services

Oct 30, 2013 FPC reviews first draft of budget

Nov 13, 2013 FPC approves the draft budget

Dec 4, 2013 Trust Council reviews draft budget

LTC Budget Requests

I have attached a table with all draft project submissions for information. LTCs should review the attached worksheet of its specific requests. The preliminary project requests have been drafted based on all Top Priority work program items which are currently anticipated to commence in, or to carry, into the next fiscal year. I have also included items from the Projects List which the planners anticipate commencing in the coming year. The LTC should identify any other projects it is currently considering and add them to the budget request (and the work program if necessary) and identify any additional expenses associated with the identified projects.

Resolution Wording

1. THAT the ____ Island Local Trust Committee approve and forward the draft 2014-145 LTC Project Budget submission to Financial Planning Committee as presented; or
2. THAT the ____ Island Local Trust Committee revise the draft 2013-14 LTC Project Budget submission and forward to Financial Planning Committee as revised.

Attachments:

1. Summary table of Northern LTC project budget requests
2. Table of Local Trust Committee Expense Budgets
3. Briefing to Financial Planning Committee regarding RAR funding dated November 8, 2012

pc Island Planners

Draft Northern LTC Program Budget Requests 2014/15 Fiscal				
LTC	Project Request	Cost (\$)	Description	Notes
Denman	Housing Review	\$ 2,500.00	Public consultation and bylaw commenced in 2013-14	1 public hearing (\$2000) stand-alone, communications material (\$500)
	RAR (completion)	\$ 2,500.00	Mapping to be completed in 2013-14, bylaw commenced in 2012-13	1 public hearing (\$2000) stand-alone, communications material (\$500)
Hornby	OCP and LUB Review (completion)	\$ 2,500.00	Major review, commenced approx. 2008	1 public hearing (\$2000) stand-alone, communications material (\$500)
Lasqueti	RAR (continuation)	\$ 6,500.00	QEP to investigate 8 unverified watersheds for RAR applicability	Contract with QEP (\$4,000), public hearing (2,000) and communication (\$500)
	False Bay Master Plan (continuation)	\$ 2,500.00	Review of parking and zoning in False Bay area, commenced 2012	1 public hearing (\$2000) stand-alone, communications material (\$500)
Executive	None	\$ -	Administrative bylaws to be developed but no budget required	
Gabriola	OCP/LUB Review (completion)	\$ 5,000.00	LUB and OCP amendments for 11 topics, continuation from 2013-14	Communications, CIM and public hearing
	RAR (continuation)	\$ 20,000.00	Further mapping to reduce the area of RAR DPA	Contract with QEP
Gambier	RAR	\$ 30,000.00	QEP to investigate 90+ unverified watersheds	Contract with QEP and communications
	Foreshore protection (continuation)	\$ 3,000.00	Public consultation and outreach commenced in 2013-14	Communications
Thetis	Associated Islands OCP and LUB (completion)	\$ 1,500.00	Major OCP and LUB creation, commenced in 2011-12 fiscal	1 public hearing (\$1500) stand-alone
	Foreshore protection (continuation)	\$ 3,000.00	Public consultation and outreach, commenced in 2011-12 including draft bylaw	Communications
TOTAL		\$ 79,000.00		

Attachment 2: Local Trust Committee Expense Budgets including Special Projects Allocations

2014/15 LTC EXPENSE BUDGET															Total 2014/15
	615-Denman	620-Gabriola	625-Galiano	630-Gambier	635-Hornby	640-Lasqueti	645-Mayne	650-N.Pender	655-Salt Spring	660-Saturna	665-S.Pender	670-Thetis	EC as LTC	LPC	
population	1095	4050	1258	313	1074	359	1112	1996	9780	359	236	372			22004
	5%	18%	6%	1%	5%	2%	5%	9%	44%	2%	1%	2%			
LTC EXPENSES **															
LTC Meeting Expenses	3,000	5,000	3,000	3,000	3,000	500	2,000	4,000	8,000	1,500	2,000	1,500			36,500
APC Meeting Expenses	1,000	1,000	500	1,000	1,000	500	1,000	1,000	2,000	500	500	500			10,500
Communications	500	1,000	500	500	500	500	500	500	1,500	500	500	500			7,500
Special Projects	2,000	3,500	2,000	2,000	2,000	2,000	2,000	2,000	10,000	2,000	2,000	2,000	2,000		35,500
Miscellaneous															0
SUB-TOTAL EXPENSES	6,500	10,500	6,000	6,500	6,500	3,500	5,500	7,500	21,500	4,500	5,000	4,500	2,000		90,000
Program	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6,500	10,500	6,000	6,500	6,500	3,500	5,500	7,500	21,500	4,500	5,000	4,500	2,000	0	90,000
	5%	8%	5%	5%	5%	3%	4%	6%	17%	3%	4%	3%			
** Budget allocated based on historical information (see tab "Historical")															
** Does not include LTC Trustee Expenses (Account 65000)															



BRIEFING

To: Financial Planning Committee

For the Meeting of: November 14, 2012

From: David Marlor, DLPS

Date Prepared: November 8, 2012

pc: Cindy Shelest

File No:

**SUBJECT: RIPARIAN AREAS REGULATION – FUNDING TO MAP ALL STREAMS
SUBJECT TO THE RIPARIAN AREAS REGULATION (RAR) IN THE
TRUST AREA TO A CONSISTENT STANDARD**

DESCRIPTION OF ISSUE:

The Provincial government requires that local government bylaws comply with the *Riparian Areas Regulation* under Section 12 of the Fish Protection Act by March 31, 2005. Compliance with the *Riparian Areas Regulation* is a goal of Trust Council's Strategic Plan (Section 1.3).

A barrier to the local trust committees meeting this deadline has been the lack of accurate stream mapping on the islands. The Islands Trust local trust committees remain the last local governments still not compliant with the *Riparian Areas Regulation*. The reserve fund is healthy and taking the \$179,000 from this fund is appropriate to meet the Provincial requirement.

BACKGROUND:

During the preparation of the budget for the 2012/13 fiscal year, Staff provided a November 17, 2011 briefing note to the Financial Planning Committee and Trust Council that outlined how \$71,000 could be used for local trust committees to become compliant with the *Riparian Areas Regulation*. The briefing contained a table that illustrated how funds could be distributed over the next four years to complete the mapping of all RAR streams in each local trust area.

Generally, the following was recommended:

Fiscal Year	Amount	Comments
2012/13	\$71,000	Undertake public process to become compliant with RAR using existing mapping; mapping for Salt Spring
2013/14	\$58,000	Continue mapping on Salt Spring and one other island (Denman)
2014/15	\$63,000	Continue mapping on Salt Spring and one other island (Gambier)
2015/16	\$63,000	Continue mapping on Salt Spring and one other island (Lasqueti)
2016/17	\$58,000	Continue mapping on Salt Spring and two other islands (Gambier and Lasqueti)
Total	\$313,000	

As of October 23, 2012 the Denman, Gabriola, Gambier, Lasqueti and Thetis local trust committees have not used the funds allocated to bring their bylaws into compliance with the *Riparian Areas Regulation*. While Salt Spring Island Local Trust Committee has completed some RAR mapping using other budget funds, it has not used the \$45,000 allocated for RAR mapping, and will make a decision on whether or not to do further mapping using these funds later this month. Over the next couple of months, Denman, Gabriola, Gambier, Lasqueti and Thetis local trust committees will decide on whether to use the funds this fiscal year or to request that these funds be returned to surplus and budgeted for the 2013/14 fiscal year.

For the 2013/14 fiscal year, local trust committees have made the following requests for Riparian Areas Regulation funding:

LTC	Amount	Comments
Denman	\$42,000	Mapping for 4 remaining watersheds at \$10,000 per watershed, plus \$2000 for public process (DPA bylaw amendments based on the mapping).
Gambier	\$30,000	Initial review and assessment of all Gambier watersheds – additional funding likely required in following fiscal year to complete the mapping of RAR watersheds and bring bylaws into compliance with the RAR.
Hornby	\$22,000	Mapping of watersheds and development of development permit area bylaw amendments to bring bylaws into compliance with RAR.
Lasqueti	\$30,000	Initial review and assessment of all Lasqueti watersheds – additional funding likely required in following fiscal year to complete the mapping of RAR watersheds and bring bylaws into compliance with the RAR.
Mayne	\$4,000	Complete mapping and bylaw amendments to bring bylaw into compliance with RAR.

Salt Spring	\$51,000	Continue mapping of streams in RAR identified watersheds. Additional funding required in subsequent years to bring Salt Spring bylaws into compliance with the RAR.
Total	\$179,000	

The above requests do not follow the planned multi-year budget process proposed in the November 17, 2011 briefing to Trust Council.

To follow the multi-year plan, only Salt Spring and Denman would receive funding in 2013/14; Salt Spring to map 3 to 5 watersheds and Denman to complete the mapping (based on an estimate at the time of \$5,000 per watershed). This was estimated last year at \$50,000 (\$25,000 for Salt Spring and \$25,000 for Denman); however, based on the requests above, it would actually require \$93,000. Experience with mapping on Salt Spring and in the northern islands indicates that \$7,000 to \$10,000 per watershed is a more realistic figure.

Compliance with the Riparian Areas Regulation

Compliance with the *Riparian Areas Regulation* is a requirement for all local trust committee bylaws. While Provincial legislation requires that local trust committee bylaws be compliant with the *Riparian Areas Regulation*, this does not mean that local trust committees must undertake detailed mapping projects. There are other ways to bring the bylaws into compliance, such as establishing development permit areas for entire watersheds, or using existing mapping.

For most development applications, the lack of detailed mapping could result in landowners being required to engage professionals to determine compliance with the *Riparian Areas Regulation*, or to show that the *Riparian Areas Regulation* does not apply. The detailed mapping funded by the \$179,000 budget request would provide certainty on which streams are subject to the *Riparian Areas Regulation* and could reduce the number of development applications that would be required to engage a professional to determine compliance with the *Riparian Areas Regulation*.

Options to Gain Compliance

Given the above, the main obstacle to bringing the bylaws into compliance is a lack of accurate mapping of streams on the islands. To facilitate the local trust committees in bringing their bylaws into compliance sooner than later,

Option 1: Fund the entire \$179,000 in the 2013/14 Fiscal Year

There are advantages to funding the entire \$179,000 request for the next fiscal year. The first is that we may be able to use a single contract and save some money in doing so; undertake a significant portion of the mapping within the next year; bring bylaws into compliance with the *Riparian Areas Regulation* sooner than later; and continue the momentum of the local trust committees to bring their bylaws into compliance within this term.

Option 1A would involve using surplus to cover the \$179,000 budget.

Option 1B would involve increasing taxes to cover the \$179,000 budget.

Option 2: Fund \$71,000 in the 2013/14 Fiscal Year

When preparing the 2012/13 budget, Staff identified that \$71,000 would be required to allow Salt Spring to undertake some mapping and other islands to determine the need for stream mapping. As of the date of this briefing, this work has not been completed. In Option 2, staff proposes that the same amount of funding be provided in 2013/14 to allow local trust committees to complete some (but not all) mapping and explore other means of being compliant with the Riparian Areas Regulation.

Under this option, it is likely that not all local trust committees still required to do so will bring their bylaws into compliance by the end of the 2013/14 fiscal year and further funding in future fiscal years would be required.

Option 2A would involve using surplus to cover the \$71,000 budget.

Option 2B would involve increasing taxes to cover the \$71,000 budget.

Option 3: Fund \$50,000 in the 2013/14 Fiscal Year

When preparing the 2012/13 budget, Staff identified a multi-year project in which Salt Spring and one other island would receive funding to undertake stream mapping. This would allow local trust committees to become compliant with the Riparian Areas Regulation over a period of 4 years; many would likely remain non-compliant until mapping is completed as late as 2015/16 fiscal year.

In Option 3 staff proposes to follow the funding plan illustrated during the 2012/13 budget discussions; \$25,000 funding for Salt Spring to undertake mapping and \$25,000 for one other island to undertake mapping.

Under this option, it is likely that not all local trust committees still required to do so will bring their bylaws into compliance by the end of the 2013/14 fiscal year and further funding in future fiscal years would be required.

Option 3A would involve using surplus to cover the \$50,000 budget.

Option 3B would involve increasing taxes to cover the \$50,000 budget.

In order to hold the tax increase to 2 per cent, Staff recommends that the Financial Planning Committee illustrate in the draft 2013/14 budget that is presented to Islands Trust Council in December how the local trust committees' requests of \$179,000 could be accommodated through \$71,000 from tax revenue (Option 2A), with an appropriation from surplus of \$108,000 for the remainder.

ATTACHMENT(S):

November 17, 2011 briefing note to the Financial Planning Committee and Trust Council

AVAILABLE OPTIONS:

As illustrated above

FOLLOW-UP:

Develop a draft budget for December Trust Council.

Date: November 2, 2012

Prepared By: David Marlor, DLPS

Reviewed By: Linda Adams, CAO
Cindy Shelest, DAS