South Pender Island Local Trust Committee
Special Meeting Agenda

Date:	September 6, 2013
Time:	10:00 am
Location:	South Pender Fire Hall 8961 Gowlland Point Road South Pender Island, BC V0N 2M0

Pages

1. Call Meeting to Order — 10:00 AM - 10:05 AM

2. Approval of Agenda

   2.1 Additions/Deletions

   2.2 Questions from public on Agenda Items

3. Community Information Meeting

   none

4. Public Hearing

   none

5. Previous Meetings — 10:05 AM - 10:15 AM

   5.1 Local Trust Committee Minutes - for consideration to Adopt

      5.1.1 Local Trust Committee Meeting Minutes, August 10, 2013 (attached) — 4 - 5

   5.2 Public Hearing Records and Community Information Meeting Notes to Receive

      5.2.1 Local Trust Committee Community Information Notes of August 10, 2013 (attached) — 6 - 7

      5.2.2 Local Trust Committee Public Hearing Record of August 10, 2013 (attached) — 8 - 9

   5.3 Section 26 Resolutions-without-meeting

      5.3.1 RWM Report dated August 26, 2013 (attached) — 10 - 10

   5.4 Advisory Planning Commission Minutes

      none

11.4.1	LTC Pilot Project - Memo Proactively Enforcing Illegal Structures on the Foreshore (attached)		94 - 100
11.5	South Pender LTC Web Page	1:30 PM - 1:45 PM	
	View the South Pender Local Trust Committee home Web page at: www.islandstrust.bc.ca/islands/local-trust-areas/south-pender		
11.6	Chair's Report	1:45 PM - 2:00 PM	
11.7	Trustee Report		
12.	Other Business		
12.1	Upcoming Meetings		
	The next South Pender Local Trust Committee meeting will be held on Tuesday, November 5, 2013, at the South Pender Fire Hall.		
13.	Town Hall Meeting	2:00 PM - 2:30 PM	
14.	Adjournment	2:30 PM - 2:30 PM	

Local Trust Committee
Minutes Subject to Approval By
the Local Trust Committee

DRAFT

**MINUTES OF THE SOUTH PENDER ISLAND
LOCAL TRUST COMMITTEE BUSINESS MEETING
HELD ON SATURDAY, AUGUST 10 2013, AT 1:00 PM
AT THE SOUTH PENDER ISLAND FIRE HALL, 8961 GOWLLAND POINT ROAD,
SOUTH PENDER ISLAND, BC**

PRESENT:	**Ken Hancock**	**Chair**
	Mike Jones	**Local Trustee**
	Liz Montague	**Local Trustee**
	Andrea Pickard	**Island Planner**
	Kathy Gilbert	**Recording Secretary**

There were six (6) members of the public present at the meeting.

1. CALL TO ORDER

Chair Hancock called the meeting to order at 1:05 pm. He acknowledged and expressed appreciation for being able to conduct the meeting in traditional Salish Territory. He introduced Islands Trustees and staff.

2. APPROVAL OF AGENDA

The agenda as presented was approved by consensus.

3. Local Trust Committee Minutes

3.1 South Pender Island Local Trust Committee Special Meeting Minutes June 15, 2013

Resolution-SP-LTC-42-13

It was Moved and Seconded that the South Pender Island Local Trust Committee Special Meeting Minutes of the June 15, 2013, be adopted.

CARRIED

3.2 South Pender Island Local Trust Committee Meeting Minutes June 18, 2013

Trustee Jones requested clarification regarding Item 11.7- Trustee Report. His amended item reads:

"Trustee Jones advised the "Experience the Gulf islands" initiative was positively received at the Trust Council meeting. He also noted that the Local Planning Committee was looking for a Local Trust Committee interested in proactive bylaw enforcement of illegal structures on the foreshore."

Furthermore, the final sentence of 11.7 beginning with "RPM Kojima will investigate…" appears to be an error and should be deleted.

Resolution-SP-LTC-43-13

It was Moved and Seconded that the Minutes of the June 18 2013 South Pender Island Local Trust Committee Special Meeting be adopted as amended.

CARRIED

3.3 South Pender Island Local Trust Committee Community Information Meeting Notes of June 15 2013

Resolution-SP-LTC-44-13

It was Moved and Seconded that the Notes of the June 15 2013 South Pender Island Local Trust Committee Community Information Meeting be Received.

CARRIED

4. COMMUNITY INFORMATION MEETING

4.1 Proposed Bylaw No. 111 (Land Use Bylaw No 92 Amendments)

See separate Community Information Meeting Notes of same date.

5. PUBLIC HEARING

5.1 Proposed Bylaw No. 111 (Land Use Bylaw No 92 Amendments)

See separate Public Hearing Record of same date.

6. ADJOURNMENT

Resolution-SP-LTC-44-13

It was Moved and Seconded that the South Pender Island Local Trust Committee meeting be adjourned at 2:26 p.m.

CARRIED

RECORDER **CHAIR**

Community Information Meeting
Notes Subject to Approval
By the Local Trust Committee

DRAFT

NOTES OF THE SOUTH PENDER ISLAND LOCAL TRUST COMMITTEE COMMUNITY INFORMATION MEETING HELD ON AUGUST 10, 2013 AT 1:00 PM AT THE AT THE FIRE HALL, 8961 GOWLLAND POINT ROAD, SOUTH PENDER ISLAND, BC

PRESENT:	**Ken Hancock**	**Chair**
	Mike Jones	**Local Trustee**
	Liz Montague	**Local Trustee**
	Andrea Pickard	**Island Planner**
	Kathy Gilbert	**Recording Secretary**

There were six (6) members of the public present.

Chair Hancock opened the meeting at 1:05 pm. He acknowledged that the meeting was being held in the traditional territory of the Coast Salish and expressed his appreciation. He introduced Local Trustees and staff.

Chair Hancock stated that the purpose of the Community Information Meeting (CIM) was to have staff present a synopsis of Proposed Bylaw No. 111, a bylaw to amend Land Use Bylaw No. 92 and answer questions of a technical nature from members of the public. He then asked Planner Pickard to present the proposed changes to the Land Use Bylaw.

Planner Pickard identified proposed changes to the definitions and substantive changes to the bylaw. She also noted that changes incorporated into Bylaw No. 111, have been iterative in response to public comment and Trustee requests.

Chair Hancock asked for submissions form the public.

Donna Spalding asked for clarification on the use of the proposed addition of storage buildings as a permitted use vs accessory buildings.

Planner Pickard identified accessory buildings as allowed presently in conjunction with an active building permit application for a dwelling. She also clarified that a habitable area above a garage is permitted presently, constituting a dwelling.

Trustee Montague expressed concern regarding the uses allowed under the definition of “accessory uses.” She noted that uses accessory to an agricultural use are confusing and requested that a list or lists of accessory uses be specifically identified.

Planner Pickard suggested that information on specific allowed accessory uses could be handled in a fact sheet.

Cameron Thorn commented that the changes contemplated in Bylaw No. 111, were finite and had little support from the community. He suggested that the community be further consulted and engaged and recommended that a more fulsome and holistic discussion be undertaken.

Trustees and staff outlined the options available proceeding after the community information meeting (CIM) and public hearing.

It was noted that Trustees could, following further discussion, advance the amending bylaw to Second and Third readings at the September 6, 2013, meeting.

Stuart Scholefield recommended reviewing the Land Use Bylaw in its entirety. He further suggested that community committees be established to undertake the review.

Planner Pickard reviewed the reasons for undertaking the LUB amendments (outcomes from the OCP review and further direction from the Trustees,) and the timeline for the LUB amendments.

Discussion among the public, staff and Trustees included the possibility of further amendments to the LUB. It was noted that additional matters could be identified on the Projects and Top Priorities lists for future consideration.

Planner Pickard clarified provisions related to proposed setback requirements for pump houses, (3.0 metres from property lies,) including legal non-conforming status afforded in the *Local Government Act* (*LGA*,) to protect siting of structures constructed legally within the proposed setbacks, requirements of the BC Building Code, Ministry of Transportation and Infrastructure and discussions with local water well drillers, all of whom request a setback (not currently required in the LUB,) from property lines.

Discussion points regarding the proposed amendment to allow for attached dwellings, where two (2) dwellings are allowed included that the proposed change allows for a more energy-efficient building footprint; but some members of the public expressed concern regarding the allowance for a duplex to be constructed.

Discussion regarding allowing construction of a cottage over a garage noted that some community interest is now being expressed in support, despite previous opposition to allowing such construction.

Hearing no further submissions, Chair Hancock adjourned the meeting at 2:09 pm.

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RECORDER **DATE**

Public Hearing
Record Subject to Approval
By the Local Trust Committee

DRAFT

RECORD OF THE SOUTH PENDER ISLAND
LOCAL TRUST COMMITTEE PUBLIC HEARING
REGARDING BYLAW NO 111
HELD ON SATURDAY, AUGUST 10, 2013, AT 2:09 PM
AT THE FIRE HALL, 8961 GOWLLAND POINT ROAD,
SOUTH PENDER ISLAND, BC

PRESENT:	**Ken Hancock**	**Chair**
	Mike Jones	**Local Trustee**
	Liz Montague	**Local Trustee**
	Andrea Pickard	**Island Planner**
	Kathy Gilbert	**Recording Secretary**

There were six (6) members of the public present at the meeting.

Chair Hancock called the meeting to order at 2:09 pm, advising the public of the purpose of the meeting. He read a formal statement at the outset of the public hearing. He advised those present that written submissions will be included as part of the public hearing record. He noted the binder of all information received related to the proposed bylaw was available for public viewing in the hall; and that all written submissions must be received prior to the close of the hearing.

Chair Hancock further noted that no further submissions may be received following the close of the public hearing.

Chair Hancock asked Planner Pickard to present the process followed and to describe the amendments proposed.

Planner Pickard reviewed the Local Trust Committee meetings and CIMs held; and legal notifications conducted. She identified local, provincial, federal and other agencies referred to and responded by during the bylaw review process. Seven responses were received from the 25 referral agencies all indicating they had no concerns or their interests were unaffected. Responses were received from:
Parks Canada, Ministry of Transportation and Infrastructure, the Agricultural Land Commission, Ministry of Forests, Lands and Natural Resource Operations Ecosystem Protection Branch, Vancouver Island Health Authority, and North Pender Island and Saturna Island Local Trust Committees.

Planner Pickard reviewed the substantive changes proposed under Bylaw No 111:

- floor area calculations are to be made from the inside of walls, rather than the outside of walls;
- storage buildings are to be added as a permitted use in residentially-zoned areas;
- the height of accessory buildings is to be increased to 7.3 metres;
- pump houses and utility buildings are to be set back 3.0 metres from property lines;
- ground level solar structures are to be set back to 3.0 metres from property lines;
- attached dwellings are to be allowed where two (2) dwellings are permitted;
- utility lines are to be exempt from the definition of structures so they are not subject to setbacks.

Buffy Paterson, 9932 Gowlland Point Road, asked for and received clarification on whether further information may be received after the close of the public hearing; Planner Pickard stated that new substantive information necessitates a new public hearing.

Cameron Thorne, 9884 Castle Road, stated that he supports the Advisory Planning Commission (APC) recommendation to not proceed with the amendments and added that he supports a comprehensive review of the bylaw including further engagement of the community; and that the present process is top-down and does not have support of the community.

Stuart Scholefield, 9944 Gowlland Point Road, stated that he agreed with Mr. Thorne's position, and called for a bigger view of the bylaw review process.

Donna Spalding, 9902 East Side Road, asked for more discussion with the community and requested that storage buildings be renamed. She also asked that pump houses be grandfathered with respect to setback requirements. She also disagreed with the proposed amendment allowing for attached dwellings.

Buffy Paterson, 9932 Gowlland Point Road, agreed with comments, requested that overall density requirements be adhered to and suggested an overall review of the LUB be undertaken.

Cameron Thorne, 9884 Castle Road, stated that he opposes the storage building amendment as it is not in keeping with the use of the term outbuilding in the Official Community Plan; and that he also finds the proposed uses for storage buildings too restrictive.

Chair Hancock called three (3) times for further submissions.

There being no further submissions Chair Hancock declared the Public Hearing closed at 2:26 pm.

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

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RECORDER **CHAIR**

RWM From: June 18, 2013 To: August 26, 2013

South Pender Island

Resolution #	Action	Resolution Description	Resolution Date
2013-05	In Favour	THAT South Pender Island Local Trust Committee cancel their September 16, 2013, regular scheduled meeting and schedule a Local Trust Committee Special Meeting on Friday, September 6, 2013.	Jul 16, 2013

Islands Trust

Follow Up Action Report w/ Target Date

South Pender Island
Jun-18-2013

No.	Activity	Responsibility	Target Date	Status
1	Item 8.1 - Correspondence from PCT: Allocate $200 for the purchase of a series of reports from Pender Community Transition on their activities related to community transition and resilience	Nancy Roggers	Sep-16-2013	On Going
2	Item 9.1 - SP-DVP-2013.1(Scott): approve the permit as drafted	Kathy Jones Sharon Lloyd-deRosario	Sep-16-2013	Done
3	Item 10.1 - LUB Amendments: revise the draft bylaw for the definition of floor area and storage buildings, and reflect the revision in clause 14 for the storage building regulations	Andrea Pickard	Sep-16-2013	Done
4	Item 10.1 - LUB Amendments: give First Reading to Draft Bylaw 111 as amended	Sharon Lloyd-deRosario	Sep-16-2013	Done
5	Item 10.1 - LUB Amendments: schedule a Public Hearing and Community Information Meeting for a weekend in Aug for Proposed Bylaw 111	Sharon Lloyd-deRosario Andrea Pickard	Sep-16-2013	Done
6	Item 10.1 - LUB Amendments: refer Proposed Bylaw 111 to the APC	Andrea Pickard	Sep-16-2013	Done
7	Item 10.2 APC Bylaw: defer to Sept agenda	Sharon Lloyd-deRosario	Sep-16-2013	Done
8	10.3 - Geothermal Options: staff to prepare a report with more details to compare supportive OCP policies vs regulation by DPA guidelines	Andrea Pickard	Sep-16-2013	Done
9	Item 11.1.2 - Work Program: Add LUB information notes to the projects lists	Andrea Pickard	Sep-16-2013	Done
10	Item 13 - In-camera: adopt minutes of the Feb 5th meeting as drafted	Sharon Lloyd-deRosario	Sep-16-2013	Done

Aug-10-2013

No.	Activity	Responsibility	Target Date	Status
11	Item 3.1 - SM Minutes of June 15: adopt as drafted	Sharon Lloyd-deRosario	Sep-06-2013	Done
12	Item 3.2 - LTC Minutes of June 18: adopt as amended	Sharon Lloyd-deRosario	Sep-06-2013	Done
13	Item 3.3 - CIM Notes of June 15: receive as drafted	Sharon Lloyd-deRosario	Sep-06-2013	Done

From: Sara & Dick Steil <steils@shaw.ca>
Date: 29 July, 2013 11:54:26 AM PDT
To: Liz Montague <lmontague@islandstrust.bc.ca>, Mike Jones <mjones@islandstrust.bc.ca>, Ken Hancock <khancock@islandstrust.bc.ca>
Cc: Andrea Pickard <apickard@islandstrust.bc.ca>
Subject: PICA's Shoreline Finale - What Nature May be Telling us About Adapting to Changing Climate - September 21

To the South Pender Island Local Trust Committee

Request to assist with notification to the islanders in general to take advantage once again of the valuable information that will be forthcoming at the following event: -

Saturday, September 21, 2013 "What Nature May be Telling us About Adapting to Changing Climate" 1:30 to 4:30 PM Upstairs at the Community Hall
Once again for the benefit of the community, PICA has requested the return Nikki Wright of SeaChange & Leanna Boyer from the Mayne Island Conservancy to provide an amazing opportunity to learn and realize the importance of 'what we can learn from nature' at this critical time in the life of the Earth. Climate Change will affect all of us and the way we live – so take this opportunity to become more aware of: Shoreline Dynamics; Sea Level Rise, Interrelationships with shorelines and possible consequences.

See attached poster

Thank you
Sara Steil
PICA – Marine Rep & Event Co-coordinator

The Pender Islands Conservancy Association (PICA) Uplands and Near-shore Apocalypse Follow-up Series
Co-Sponsored by the Pender Islands Trust Protection Society

"What Nature May be Telling us About Adapting to Changing Climate"

With Nikki Wright of SeaChange & Leanna Boyer of the Mayne Island Conservancy

Pocket Beach photo by Nikki Wright

Saturday, September 21, 2013
An invitation to all islanders & visitors
Join Nikki & Leanna for
"What Nature May be Telling us About Adapting to Changing Climate"
1:30 to 4:30 PM Upstairs at the Community Hall

Providing an important opportunity to learn about adapting to Changing Climate.

Once again for the benefit of the community, PICA has requested the return Nikki Wright of SeaChange & Leanna Boyer from the Mayne Island Conservancy to provide an amazing opportunity to learn and realize the importance of 'what we can learn from nature' at this critical time in the life of the Earth. Climate Change will affect all of us and the way we live – so take this opportunity to become more aware of: Shoreline Dynamics; Sea Level Rise, Interrelationships with shorelines and possible consequences

Let's get together and learn how to preserve, protect and respect what Mother Nature has to offer us and for future generations as we face the impacts of climate change.

Mark your calendars and take advantage of this opportunity

Questions? Contact Sara at 629-6885

The Pender Islands Conservancy Association (PICA) Uplands and Near-shore Apocalypse Follow-up Series
Co-Sponsored by the Pender Islands Trust Protection Society

"What Nature May be Telling us About Adapting to Changing Climate"

With Nikki Wright of SeaChange & Leanna Boyer of the Mayne Island Conservancy

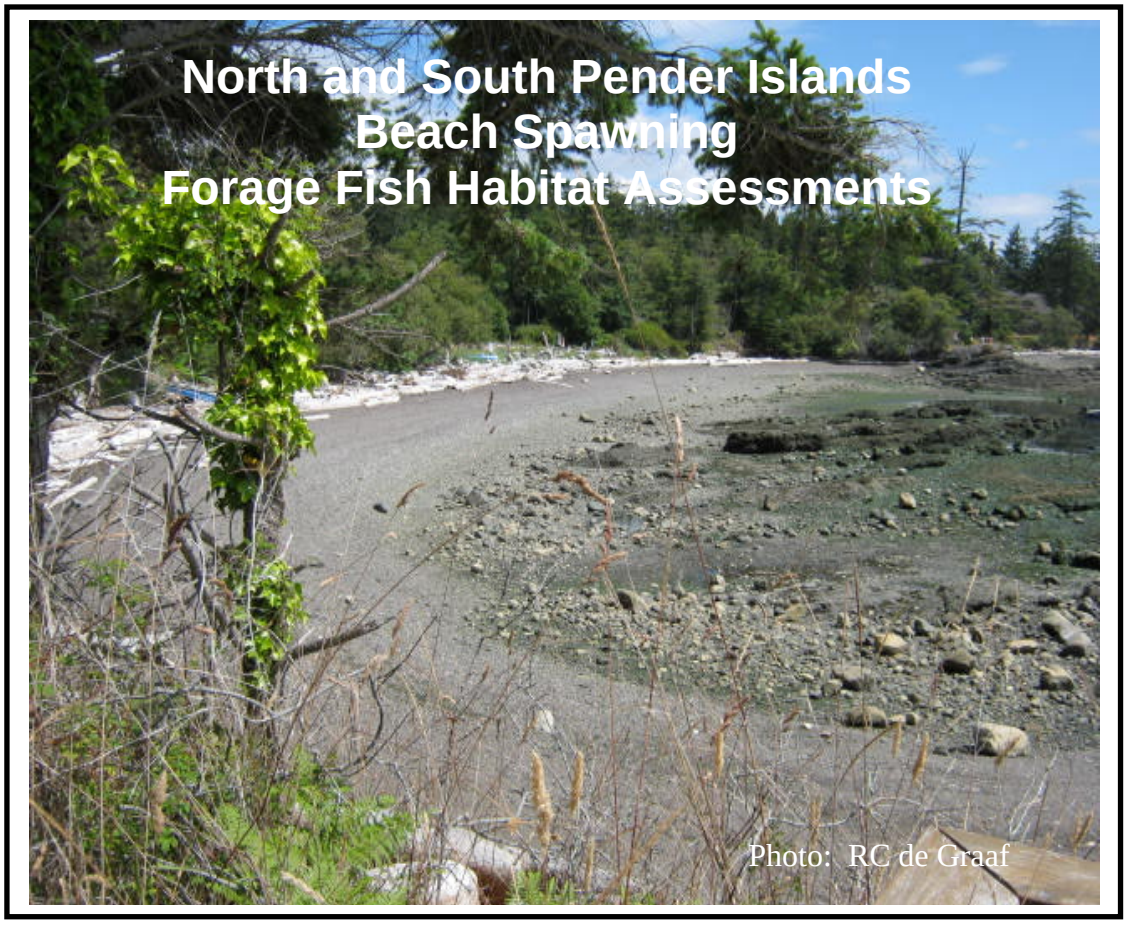
From: Alma Lightbody
To: lizmontague@gmail.com; Mike Jones; Ken Hancock; Andrea Pickard
Subject: boat speed signs
Date: Wednesday, August 28, 2013 2:45:17 PM

To the South Pender Island Trust Committee

When I was a trustee a few terms ago we found the speed signs for boaters traversing the canal were non readable. Through inquiry with the Coast Guard we found the Islands Trust is responsible for these signs. At that time John Henshaw, my husband and myself built new signs to Coast Guard specifications. Some of them are now in need of replacement and I wanted to pass that on to you.

Also I still have concerns about the erosion of the canal and the trees whose roots are undermined causing them to fall into the water. As well as causing submerged dead heads there is also a concern that the bank has eroded over 25 feet and continues to increase each year. This was on the work list for many years but there been no action. I understand it is partly due to tides but there are also speeding boats that cause erosion as well as safety issues for kayakers. A camera on the bridge may be a possible determent. There is a rock wall at Fulford Harbour ferry dock on Saltppring that may be worth looking at.

Look forward to hearing from you,
Alma Lightbody
8805 Ainslie Point Road.



Prepared for the Islands Trust Fund

Prepared by:
Ramona C. de Graaf, BSc., MSc.
Marine Biologist
Forage Fish Specialist

Emerald Sea Biological

April 8, 2013

Beach Spawning Forage Fish Habitat Assessments
North and South Pender July/Aug 2012

CONTENTS

Acknowledgements

For assistance in the field and with local logistics I would like to thank the Pender Islands Conservancy Association and Bonnie Parks. For laboratory assistance and technical overview, I would like to thank Mr. Dan Penttila, Salish Sea Biological, former Forage Fish Expert with the Washington Department of Fish and Wildlife.

1. Introduction

Beach spawning forage fish are a critical prey source for hundreds of marine predators in the Strait of Georgia. 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 1999). Surf smelt are also important prey to marine predators. Surf smelt are managed by Department of Fisheries and Oceans under the Surf Smelt Management Plan for commercial and recreational fishers and their population abundance in the Strait of Georgia is declining (Therriault et al 2002). Surf smelt and Pacific sand lance spawning habitats are protected under Section 35 of the Federal *Fisheries Act*.

1.1 Critical forage for marine ecosystem function

Pacific sand lance and surf smelt are important to the recovery of marine species at risk (from Humpback and Killer whales to Marbled Murrelets); the marine survival of salmon (such as Chinook and Coho); and the survival of provincially listed coastal cutthroat trout. Both Chinook and Coho feed on sand lance both as juveniles and as adults.

Numerous fish, seabird, and marine mammal populations are in precipitous decline in British Columbia; and scientists have started to look at the link between forage fish biomass reduction and these declining populations.

1.2 Connections to other valued ecosystem components

Forage fish depend on nearshore habitat for their survival. Herring spawn on marine vegetation such as eelgrass and seaweeds; and Pacific sand lance and surf smelt spawn high up the beach near the log line. Like numerous fish species, surf smelt and Pacific sand lance also require subtidal areas such as kelp forests for rearing.

2. Beach Spawning Forage Fish Habitat

Beach spawning forage fish of commercial, recreational and ecological value in the Strait of Georgia are the capelin, surf smelt (*Hypomesus pretiosus)* and Pacific sand lance (*Ammodytes hexapterus)*. The Washington Department of Fish and Wildlife has conducted extensive surveys in Puget Sound and produced maps of spawning habitat (Penttila, D. 2007). Approximately 10% of Puget Sound beaches are used by surf smelt for spawning and 10% are used by Pacific sand lance (Penttila 2007). Unfortunately critical spawning habitat of these two forage fishes has not been mapped in British Columbia.

Surf smelt and Pacific sand lance depend on a healthy nearshore and beach habitat, and they are vulnerable to impacts from shoreline development. Beaches with natural erosion processes supplying appropriate sized gravels and extant marine riparian zones are an optimal state for spawning surf smelt and sand lance. Of primary importance for spawning is the mixture of gravels and sand.

Photo: RC de Graaf

3. Spawning Habitat Characteristics

3.1 Intertidal 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 are found in samples taken from +1.5 m to +4.5 m above chart datum and can be found at the highest extent of the maximum high tides Sand lance also spawn on the sand flat edge near the beach slope (Penttila 2001b, Penttila 2007, de Graaf unpublished data). This area of the intertidal has been sparsely sampled.

3.2 Sediment Characteristics

Both surf smelt and sand lance embryos can be found on certain beaches in the same beach 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 with the bulk of the pooled data set having material of 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 2001c).

Surf smelt do not spawn in coarse sand beaches without pebble due to the unique attachment pedestal of the osmerid egg (they are gravel-dependent spawners). Sand lance are reported to spawn in sediments of coarse sand/pebble with the bulk of the pooled data set (67%) having material of a median grain size of 0.2 – 0.4 mm and a portion of the data set (25%) being gravel-coarse sand from 1 – 7mm (Penttila 2001c; 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 are found throughout the range of surf smelt bearing sediments as well as coarse sand. Pacific Sand lance do not spawn on fine silt and cobble (Penttila 2007). In British Columbia, both surf smelt and sand lance embryos can be found throughout a beach drift cell in the erosion, transport and accretion zones (de Graaf, unpublished data, presented at American Fisheries Society Conference Sept 2011). Over 40 years of government sponsored surveys in Puget Sound and carried out by Mr. Penttila has yielded important data on the spawning habitat of these two species. With recent attention to surveys in the Strait of Georgia and the outer coast of Vancouver Island, our understanding of beach spawning habitat types has increased.

3.3 Beach 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 zone. The width of the sand/pebble component (commonly referred to as the B1 component) is variable and can range from 0.5 m to over 10 m in width.

4. Spawning Seasons

Surf smelt are known to spawn year round in Puget Sound and also have distinct winter and summer spawning stocks (Penttila 2007). In British Columbia, summer and year round spawning beaches have been detected (de Graaf unpublished data). Sand lance spawning is from Nov – 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 extraordinary effort of 30+ communities working with the author through the BC Shore Spawners Alliance (BCSSA). In the Islands Trust Area, communities are presently undertaking spawning surveys with the BCSSA as the Gulf Islands Forage Fish Initiative.

5. Threats to Beach Spawning Forage Fish Habitat

Shoreline modifications can negatively impact the nearshore marine food web in numerous ways, but are a primary threat to surf smelt and sand lance spawning beaches (Penttila 2007).

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, seawalls and others. Diversion of sediment-bearing streams through culverts can also starve beaches of spawning sediment. Many of these activities render beaches unusable for spawning. These shoreline modifications can also limit sediment exchange in the shallow subtidal where sand lance are known to burrow.

The presence of overhanging vegetation in marine riparian zones is important for the ecological function of nearshore marine habitats providing insect prey for migrating fish (Levings and Jamieson 2001; Brennan and Culverwell 2004) and having a positive effect on summer surf smelt spawn survival (Penttila 2001a, Penttila 2007, Rice 2006). The loss of shade increases thermal stress and desiccation to incubating eggs as sediment temperatures rise resulting in increased mortality of buried eggs (Penttila 2007, Rice 2006). Vegetation buffers the drying effect of winds, and where beaches have lost riparian zones, eggs can also suffer a higher mortality than normal due to wind-induced desiccation effects.

Other threats to surf smelt and sand lance eggs include contamination from acute oil spill events and chronic oiling can result in 100% mortality of surf smelt eggs. Oiling from vessel operations near beaches can potentially cause mortality of incubating forage fish eggs (herring, sand lance, and surf smelt) (Penttila 2005).

6. Introduction to the North Pender and South Pender islands Beach Spawning Forage Fish Habitat Assessment

6.1 General Introduction

Over July 28 – August 4, 2012, surveys of unconsolidated sediment intertidal areas were conducted along North and South Pender shorelines. Data acquired by the author with the Pender Island Conservancy Association in 2010-2012 has also been incorporated into this report.

A sediment map was produced from the Coastal Resource Information Management System, DataBC (DataBC Catalogue 2013). The data layer used to produce the sediment map was the shoreline biophysical classification by repetitive shore type. All shore-units of unconsolidated sediments were investigated along the entire shoreline length of North and South Pender islands. Unconsolidated sediments include silt, mud, sand, and gravels.

6.2 Area Surveyed

The entire coastline of North and South Pender was surveyed with the exception of areas of consolidated sediment (rocky beaches, rock terraces etc.).

Areas surveyed included areas with drift cell attributes of erosional faces that graded into beach areas. These are areas with unconsolidated sediments of gravel/sand as well as mud/silt areas. Gravel is defined as pebble, cobble and boulder.

Areas of pebble and sand were assessed. Areas of mud/silt were assessed for the presence of upper bands of pebble and sand.

Negative beaches fall into three categories:

1. Areas with boulder or cobble on rock ramp were surveyed to ensure the presence/absence of pebble/sand bands. If areas of boulder and cobble did not yield pebble and sand, they were classified as “negative”.

2. Areas of mud/silt may have a thin layer (veneer) of pebble and cobble. Due to the lack of motility of mud/silt areas, these are classified as “negative”.

3. Pebble/sand beaches that failed to pass statistical analysis are also classified as “negative”.

6.3 Project Limitations

The project was limited to assessing beaches as potential spawning habitat for two species of beach spawning forage fish, surf smelt and Pacific sand lance. Data are compiled after one visit to the beach in summer months. The methods used in a forage fish habitat assessment do not allow one to determine the presence or absence of spawning activity as sediments are not collected for nor screened for the presence of embryos. Spawning surveys are conducted over two spawning seasons (24 months) and follow strict protocols (Moulton and Penttila 2001). The project undertaken grades beaches as being “potential” spawning beaches, but it does not confirm the presence or absence of spawning activity.

7. Methods

Forage Fish Habitat Assessments – Assessing Potential Forage Fish Spawning Habitat.

Actual forage fish spawning beaches are determined after a two-year embryo survey and the presence of two or more embryos in a sample (Moulton and Penttila 2001). In the absence of such comprehensive surveys, beaches may be classified as potential surf smelt/Pacific sand lance spawning habitat following a habitat assessment. The habitat assessment protocol used in this project, the Forage Fish Habitat Assessment, has been developed through a collaboration of forage fish biologists from British Columbia and Washington State. Due to the current transition of the Department of Fisheries and Oceans Habitat Program to the Fisheries Protection Program and numerous staff reassignments, the FFHA protocol vetting process has been stalled. Numerous Regional Districts in British Columbia have had shoreline areas assessed using this particular FFHA methodology for land-use planning decisions.

7.1 General Methodology

The FFHA entails a survey of habitat attributes for each area of unconsolidated sediments making up the upper component of intertidal beaches (beach berm/beach face and mid intertidal). Measurements are taken of physical variables of the beach as well as grain-size analysis. Additional variables are measured to assess human activities that may have directly modified the foreshore or adjacent backshore areas. Assessments are conducted by experienced beach spawning forage fish biologists/technicians.

Physical variables from potential beaches are compared to a database of habitats that were monitored using spawning surveys (over 2 years) and were positive or negative for spawning by surf smelt and/or Pacific sand lance in British Columbia and Washington State. The software program PRIMER-E, a multivariate statistical program, set at an 80% similarity threshold, is used to test potential beaches to this BC/WA database. The PRIMER-E software program is used extensively by ecologists to describe similarities and differences among biological communities, habitat types, or for monitoring biological communities and habitats.

Using statistical analyses, a statistical probability can be assigned to each beach measured. Beaches are assigned as being either surf smelt, surf smelt/Pacific sand lance, or Pacific sand lance. For shoreline property owners undertaking works that may impact the foreshore, a professional habitat assessment is required by the Department of Fisheries and Oceans (DFO). In the absence of a two-year spawning survey, a FFHA can provide a good indication of potential

surf smelt and sand lance habitat for use by landowner and other agencies in shoreline management.

7.2 Specific Methodology

7.2.1 Forage Fish Grain-Size Profile Types

The FFHA uses a method developed by Mr. Dan Penttila (former Washington Department Fish and Wildlife Forage Fish Expert) and Ms. R de Graaf to examine sediment types. Surf smelt beach grain-size profiles are divided into five grain-size types. Pacific sand lance beaches are classified into three grain-size types. In winter months, surf smelt and Pacific sand lance embryos can be found in the same beach sediment sample. Mixed surf smelt/Pacific sand lance beaches have grain-size profiles classified by mixed, winter surf smelt and Pacific sand lance beach types. This is because of the overlap of the use of sediment sizes and beaches by the two species. Pacific sand lance beach Type 1 is similar to Surf Smelt Type 1 and 2. Pacific sand lance beach Type 1 is a grain-size profile with coarser pebble that PSL Type 2 and Type 3. This grain-size type is common of beaches where surf smelt and Pacific sand lance spawn on the same beaches. It is also common of beaches where only Pacific sand lance spawn but have a high percentage of coarse pebble and lower percentage of small pebble and sand.

The standard beach types are fully described in the FFHA methodology. When the FFHA methodology evaluation process is completed by the Department of Fisheries and Oceans, complete details and a manual will be available.

7.2.2 Grain-Size Analysis and Statistical Testing

A series of 14 US standard sieves are used to divide 2 L of sediment into grain-size classes. Sediments were dried and weighed and percentage of weight in each sieve recorded. Cumulative frequency curves are generated. Cumulative frequency curves of North and South Pender island beaches being tested are compared to the Grain-Size Types using similarity tests (Kolmogorov-Smirnov) to a threshold of 80%.

7.2.3 Beach Metrics

The beach is assessed for sediment depths, widths, length, erosion sources, beach character, beach slope, overhanging shade vegetation, marine riparian vegetation, modification of foreshore and backshore and the presence of structures that modify both foreshore and backshore zones (Moulton and Penttila 2001; Therriault et al. 2002). The average depth of sediment is determined over three measurements taken along the beach unit (de Graaf and Penttila 2006). The width of the spawning zone is measured as the area of potential spawn deposition to the nearest 10

centimetres at the time of the survey (Moulton and Penttila 2001; de Graaf and Penttila 2006). The length of spawning sediments is measured as the length of the beach composed of appropriate unconsolidated sediments. Beach character is the sediment character of the upper beach and ranges from mud to boulder (Moulton and Penttila 2001). The slope of the upper beach is measured in degrees using a clinometer. Marine riparian overhanging shade is classified into percentage of the length of the beach unit (Moulton and Penttila 2001). The presence or absence at a beach unit of marine riparian vegetation is noted and categorized according to vegetation category. Vegetation categories are grasses, shrubs and trees and combinations of these categories (de Graaf and Penttila 2006). Modification of the foreshore is categorized as the presence of structures that may impede sediment movement, either from land-based erosion sources (bluffs, banks, creeks, rivers) or across the shore (Moulton and Penttila 2001). Modification of the foreshore is measured by a percentage of the total length of the beach unit being impacted (Moulton and Penttila 2001). The presence or absence of modification to the backshore region is noted (up to 30 meter landward of the high water mark) (de Graaf and Penttila 2006). Photo-logs for each beach consist of photos of backshore, marine riparian zones, foreshore, and sediment bands (Moulton and Penttila 2001).

7.2.4 Statistical Analyses of Beach Metrics:

A database of positive and negative beaches from British Columbia and Washington State is used to assess the probability that a beach would support forage fish spawning. Beach metrics are used in a Principal Component Analysis using PRIMER-E software. Beaches that cluster with known positives are tested for similarity. A threshold of 80% or greater has been successful in other forage fish habitat assessments where beaches were tested for and found to bear embryos. Beaches that cluster with known negatives are still entered into Grain-Size frequency curve analysis. Beach metrics of negative beaches commonly overlap with positive beaches. This is a reminder that models lack other variables important to the fish that we do not measure or cannot measure.

7.2.5 Habitat Coverage:

Beaches are categorized as having continuous sediment bands or discontinuous sediment bands. If the beach sediment bands are interrupted by bands of unfavorable habitat, they are scored as discontinuous if the interruption is less than 100 m. If the interruption is greater than 100 m, the area is assessed as separate beach units.

8. Results

8.1 North Pender

8.1.1 Statistical Analyses

In total, 82 beach areas were assessed. Principal Component Analysis using PRIMER-E and beach metrics clustered 54 beaches within 80% similarity to known positive beaches in BC and Washington State. 50 of these beaches had continuous habitat and 4 had discontinuous habitat. 32 beaches were comprised of unconsolidated sediments such as mud, silt, cobble that are not suitable as spawning habitat (Figure 1: North Pender Map of Assessed Potential Forage Fish Spawning Beaches).

8.1.2 Grain-Size Analyses

Grain-size analyses were used to test for likelihood of beaches to support spawning. All grain-size frequencies curves were classified to Type curves. All of the 54 beaches showed grain-size frequencies curves that were within 80% and higher similarity to known positive spawning beaches (Appendix A, Figures 3-8).

8.1.3 Length of Potential Forage Fish Spawning Habitat

The total length of potential spawning habitat is 4,469 meters and classified as 500 m specific to Pacific sand lance (11 %), 62 m specific to surf smelt (1.4%), and 3907 meters as mixed surf smelt/Pacific sand lance spawning habitat (87.6%) (Table 1).

Table 1: Classification of N Pender
Potential Forage Fish Beach Types

	PSL	SS	SS/PSL	Total
Length (m)	500	62	3907	4469
Length Percentage	11%	1.40%	87.60%	100%

PSL - Pacific sand lance
SS - Surf Smelt

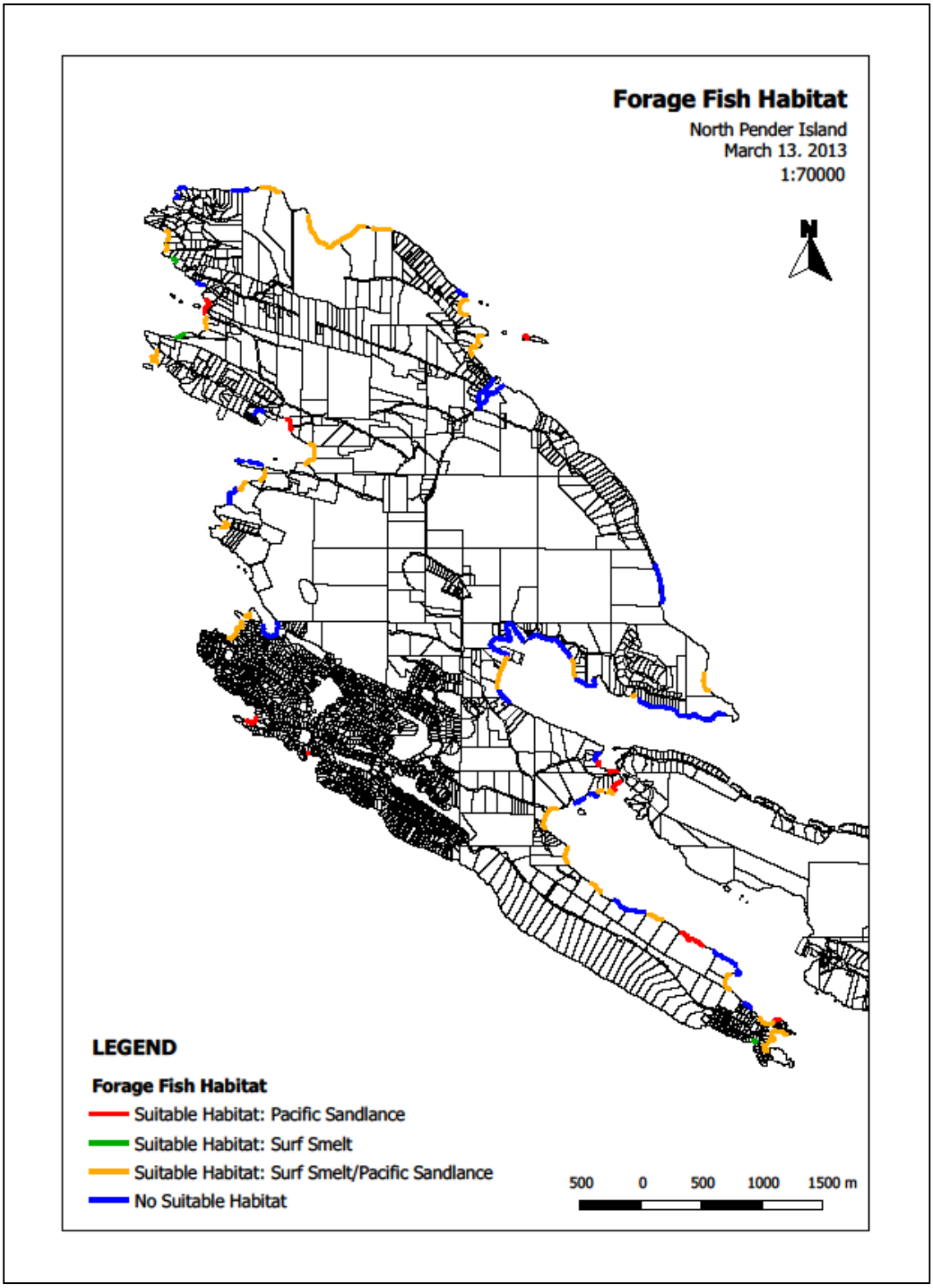


Figure 1: Potential Beach Spawning Forage Fish Spawning Habitats – North Pender

8.1.4 Potential Forage Fish Spawning Habitat Types

Of the 54 potential spawning beaches, 13 were classified as Pacific sand lance, 3 as surf smelt, and 38 as mixed surf smelt/Pacific sand lance spawning habitat (Table 2). Of the Pacific sand lance beaches, grain size analysis assessed ten (10) as Type 1 and three (3) as Type 3 Pacific Sand lance beaches. Of the surf smelt beaches, grain size analysis assessed two (2) as Type 1 and one (1) as Type 2 Surf Smelt beaches. Of the mixed surf smelt/Pacific sand lance beaches, grain size analysis assessed twelve (12) as Type 1; twelve (12) as Type 2; nine (9) as Type 3, and five (5) as Type 4 Surf Smelt beaches (Appendix A).

Table 2: North Pender Grain-Size Types

	PSL	SS	SS/PSL
PSL TYPE 1	10		
PSL TYPE 2			
PSL TYPE 3	3		
SS TYPE 1		2	12
SSTYPE 2		1	12
SS TYPE 3			9
SS TYPE 4			5
SS TYPE 5			

8.1.5 Foreshore Modification

Modification of the foreshore is classified as a percentage of the length of the beach that has been altered from a natural state by structures that would impede movement of sediments either to the beach or along the beach. Thirty (30) of the beaches had unmodified shorelines and twenty-four (24) were modified. Of the 54 beaches, 55% were in a natural state; 26% were 1-25% impacted; 6% were 26-50% impacted; 6% were 51-75% impacted; and 7% were 75-100% impacted (30, 14, 3, 3, and 4 respectively)(Table 3).

Table 3: Foreshore Modification - North Pender

	0% impact	1-25% Impact	26-50% Impact	51-75% Impact	76-100% Impact
Count	30	14	3	3	4
Percentage	55	26	6	6	7

8.1.6 Foreshore and Backshore Structures

Of the 24 potential forage fish spawning beaches with modified foreshore zones, sediment impeding structures were classified as nine (9) vertical seawalls, five (5) riprap revetments; two (2) stairways to the beach; one (1) foreshore cement infill revetment; seven (7) boat ramps; four (4) wooden piers/docks spanning the intertidal zones; one (1) boat; two (2) boathouses; and one (1) building (Table 4).

Of the potential spawning beaches, 42, or 78%, had modified backshore zones. Backshore structures, comprised thirty-seven (37) homes; one (1) seawall; one (1) riprap retaining wall; six (6) stairways to the beach; one (1) wooden pier/dock spanning the intertidal zone with footings in the backshore; and two (2) boathouses (Table 4). Backshore structures that may negatively impact beaches by disrupting sediment transport were calculated as a percentage of total structures after removal of homes. (Table 4).

Table 4: Foreshore and Backshore Structures - North Pender

	Foreshore Count	Foreshore Percentage	Backshore Count	*Backshore Percentage
Building	2	6	37	
Boat Ramp	7	21		
Boat	1	3		
Boat House	2	6	2	18
Dock/Wooden Pier	4	12	1	9
Seawall	9	27	1	9
Riprrap	5	15	1	9
Infill	1	3		
Stairs	2	6	6	
Total	33		48	

*[houses] removed

8.1.7 Overhanging Shade Vegetation

Marine riparian overhanging shade is classified into percentage of the length of the beach unit with tree branches overhanging the spawning zone. Trees are, generally, located above the high water mark and subject to removal by property owners. Of the 54 beaches, 20% of the beaches had no overhanging shade; 35% had 1-25% overhead shade; 30% had 26-50% overhanging shade; 11% had 51-75% overhanging shade; 4% had 76-100% overhanging shade (11, 19, 16, 6, and 2 respectively)(Table 5).

Marine riparian vegetation may be absent due to soil conditions, the type of land form, or due to landscaping. Of the beaches with no overhanging shade, 18% had modified foreshore and 82% modified backshore zones; beaches with 1-25% overhead shade, 32% had modified foreshore and 79% modified backshore zones; beaches with 26-50% overhead shade had 38% modified foreshore and 75% modified backshore zones; beaches with 51-75% overhead shade had 50% modified foreshore and 83% modified backshore zones; and beaches with 75-100% overhead shade had 50% modified foreshore and 50% modified back shore zones (Table 5). In general, foreshore and backshore areas had significant losses of shade bearing trees.

Table 5: Overhanging Shade Vegetation - North Pender

	Fully exposed	1-25% Shade	26-50% Shade	51-75% Shade	76-100% Shade
Count	11	19	16	6	2
Percentage	20	35	30	11	4
Foreshore Modified Percentage	18	32	38	50	50
Backshore Modified Percentage	82	79	75	83	50

8.2. South Pender

8.2.1 Statistical Analyses

In total, 48 beach areas were assessed. 32 beaches were classified as being potential forage fish habitat and 16 as not potential. 30 of these beaches had continuous habitat and 2 had discontinuous habitat. Principal Component Analysis using PRIMER-E and beach metrics clustered all 32 beaches within 80% similarity to known positive beaches in BC and WA State. 12 beaches were comprised of unconsolidated sediments such as mud, silt, cobble that are not suitable as spawning habitat (Figure 2: South Pender Map of Assessed Potential Forage Fish Spawning Beaches).

8.2.2 Grain-Size Analyses

Grain-size analyses were used to test for likelihood of supporting spawning. All grain-size frequencies curves were classified to Type curves. All of the 32 beaches showed grain-size frequencies curves that were within 80% and higher similarity to known positive spawning beaches (Appendix A, Figures 9-12).

8.2.3 Length of Potential Forage Fish Spawning Habitat

The total length of potential spawning habitat is 3,098.3 meters and classified as 73 m specific to Pacific sand lance (2.4%), 461.3 m specific to surf smelt (15%), and 2,564 meters as mixed surf smelt/Pacific sand lance spawning habitat (83%) (Table 6).

Table 6: Classification of S Pender
Potential Forage Fish Beach Types

	PSL	SS	SS/PSL	Total
Length (m)	73	461.3	2564	3,098.30
Length Percentage	2.40%	15%	83%	100%

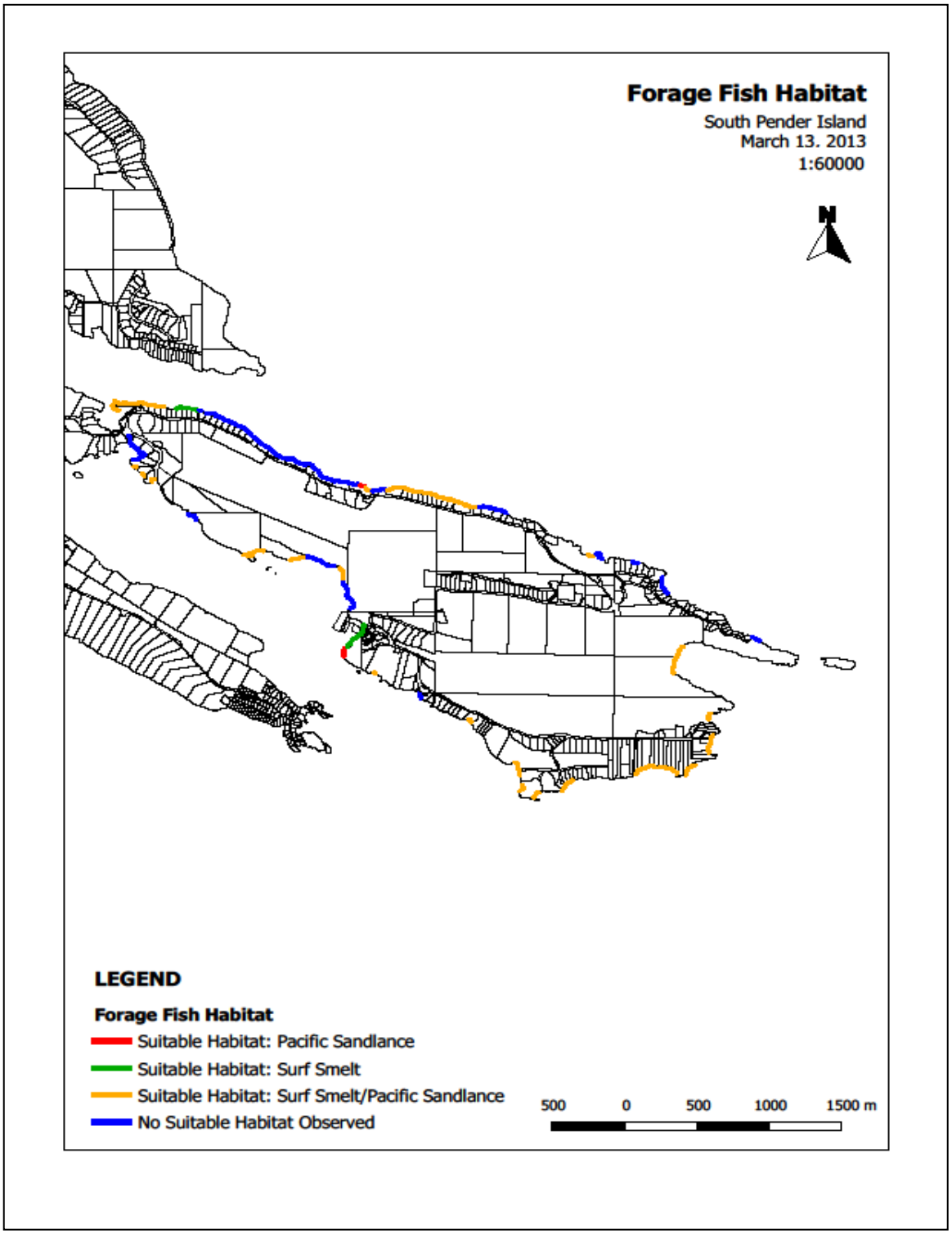


Figure 2: Potential Beach Spawning Forage Fish Spawning Habitats – South Pender

8.2.4 Potential Forage Fish Spawning Habitat Types

Of the 32 potential spawning beaches, 3 were classified as Pacific sand lance, 3 as surf smelt, and 26 as mixed surf smelt/Pacific sand lance spawning habitat (Table 7). Of the Pacific sand lance beaches, grain size analysis assessed three (3) as Type 1 Pacific sand lance beaches. Of the surf smelt beaches, grain size analysis assessed two (2) as Type 1 and one (1) as Type 2 Surf Smelt beaches. Of the mixed surf smelt/Pacific sand lance beaches, grain size analysis assessed nine (9) as Type 1; ten (10) as Type 2; seven (7) as Type 3 (Appendix B).

Table 7: South Pender Grain-Size Types

	PSL	SS	SS/PSL
PSL TYPE 1	3		
PSL TYPE 2			
PSL TYPE 3			
SS TYPE 1		2	9
SSTYPE 2		1	10
SS TYPE 3			7
SS TYPE 4			
SS TYPE 5			

8.2.5 Foreshore Modification

Modification of the foreshore is classified as a percentage of the length of the beach that has been altered from a natural state by structures that would impede movement of sediments either to the beach or along the beach. Of the 32 beaches, 84% were in a natural state;
12.5% were 1-25% impacted; and 3.5% were 26-50% impacted (27, 4, and 1 respectively). No beaches were classified in the highest impact categories of 51-75% and 75-100% (Table 8).

Table 8: Foreshore Modification Categories - South Pender

	0% impacted	1-25% Impacted	26-50% Impacted	51-75% Impacted	76-100% Impacted
Count	27	4	1	0	0
Percentage	84	12.5	3.5	0	0

8.2.6 Foreshore and Backshore Structures

Six potential forage fish spawning beaches had modified shorelines. Sediment impeding structures were classified as three (3) vertical seawalls, two (2) riprap revetments; one (1) stairway to the beach; two (2) piers/dock spanning the foreshore and one (1) outfall pipe. The marina at Poets Cove accounted for four foreshore structures and five residential properties accounted for five foreshore structures (Table 9).

Of the potential beaches, 18, or 56%, had modified backshore zones. The majority of the structures were homes. Other than homes, these consisted of one (1) riprap revetment and three (3) stairways (Table 9). Backshore structures that may negatively impact beaches by disrupting sediment transport were calculated as a percentage of total structures after removal of homes (Table 9).

Table 9: Foreshore and Backshore Structures South Pender

	Foreshore Count	Foreshore percentage	Backshore Count	*Backshore Percentage
Building			18	
Boat Ramp				
Boat				
Boat House				
Dock/Wooden Pier	2	22		
Outfall Pipe	1	11		
Seawall	3	33		
RipRap	2	22	1	25
Stairs	1	11	3	75
Total	9		22	

*[houses] removed

8.2.7 Overhanging Shade Vegetation

Marine riparian overhanging shade is classified into percentage of the length of the beach unit with tree branches overhanging the spawning zone. Trees are, generally, located above the high water mark and subject to clearing by property owners. Of the 32 beaches, 38% of the beaches had no overhanging shade; 31% had 1-25% overhead shade; 16% had 26-50% overhanging shade; 9% had 51-75% overhanging shade; 6% had 76-100% overhanging shade (12, 10, 5, 3, and 2 respectively) (Table 10).

Overall, the percentage of overhanging shade vegetation is low. Marine riparian vegetation may be absent due to soil conditions, the type of land form, or due to landscaping. Of the beaches with no overhanging shade, 25% had modified foreshore and 58% modified backshore zones; beaches with 1-25% overhead shade, 10% had modified foreshore and 60% modified backshore zones; 26-50% overhead shade had 20% modified foreshore and 60% modified backshore zones; 51-75% overhead shade had 33% modified foreshore and 33% modified backshore zones; and 75-100% overhead shade, 0% modified foreshore and 100% modified backshore zones (Table 10). In general, areas of low foreshore modification have higher percentages of overhanging shade vegetation. Backshore development impact on degree of overhanging shade vegetation was variable.

Table 10: Overhanging Shade Vegetation - South Pender

	Fully exposed	1-25% Shade	26-50% Shade	51-75% Shade	76-100% Shade
Count	12	10	5	3	2
Percentage	38	31	16	9	6
Foreshore Modification Percentage	25	10	20	33	0
Backshore Modification Percentage	58	60	60	33	100

9. Summary and Recommendations

With approximately 7.5 kilometers of potential spawning habitat over 86 beaches, North and South Pender islands provide an excellent area to safeguard and protect these critical fish habitats. As stated in the introduction, marine shorelines are critical fish habitat not only for spawning surf smelt and Pacific sand lance, but also provide rearing grounds for juvenile salmonids. Habitats such as marine riparian vegetation, gravel/sandy beaches and high water-quality are important to maintain the health of these spawning areas. Key to maintaining and restoring these shoreline areas will be measures to limit physical structures that negatively affect sediment transport as well as actions that protect marine riparian vegetation. Education of land owners and an expanded spawning survey project are all central to protecting these beaches.

Marine riparian vegetation is a valued ecosystem component that provides benefits for human security and benefits to the ecosystem. Recent studies from Puget Sound and Squamish confirm the use of marine shorelines as rearing habitat for juvenile salmonids, such as Chinook. Dietary analyses show that up to 50% of the stomach contents of juvenile Chinook were composed of insect “windfall”, insects transported by winds from marine shoreline vegetation to the water’s surface (Brennan and Culverwell 2004). Marine vegetation is also important for the survival of summer surf smelt embryos. Foreshore areas on North Pender such as Clam Bay and Browning Beach could benefit by replanting tall vegetation. Overtime, restoration of trees at areas such as these would also provide overhanging shade for summer surf smelt embryos.

On North Pender, while the number of concrete seawalls affecting potential forage fish beaches was not high, there were some shoreline properties that had significant hardening. In light of future sea level change predictions, as well as shoreline development, pressures to harden shorelines will increase.

There are a generous number of beach access areas on North and South Pender and these are very important in areas of bluffs and high-banks. Designating beach access points benefits management of fragile slopes by reducing the need for private stairways. Overall, the stairways that were constructed down bluffs and high-banks were excellent and appeared to maintain vegetation within the stair footprint.

An area of concern on North Pender is Grimmer Bay. One section of the shoreline has a cluster of neighbouring shoreline properties serving as boat storage for derelict boats and the infrastructure of what may have been a former boat building business. All of these items are in the foreshore. Piles of paint cans, solvents and construction materials are stored inappropriately

on the foreshore. Grimmer Bay also has a large seawall and concrete roadway extending to the shore. Recently the seawall was extended to protect an archeological site. Upland development along Grimmer Bay has also been extensive in some areas.

North Pender appears to have higher losses of marine riparian vegetation and overhanging shade vegetation and a higher foreshore modification impact level than South Pender. On North Pender, 44% of the beaches were impacted by structures that impeded the delivery of sediments to the beaches or the transport of sediments along the drift cell with only 16% (5 of 32) of the beaches being so impacted on South Pender. Also, on South Pender there were no foreshore modification classes noted above 51%. Commercial development on South Pender at Poets Cove accounted for a significant percentage of the foreshore structures documented (4 of 9 foreshore structures). Five residential properties accounted for one set of stairs, one seawall, two riprap structures and one pier/dock. On South Pender, backshore modification is generally correlated with land-use; residential land-use accounted for 15 of the 32 beaches. With the exception of a few properties, the majority of land-owners on both North and South Pender have maintained high levels of vegetation and had low levels of impact to the shoreline.

It should be noted that only potential forage fish beaches were inventoried for foreshore structures such as seawalls and private docks. There are a significant number of shoreline properties without unconsolidated sediment beaches that have private docks.

More generally, it was noted that bluffs are a common land form on North and South Pender. Protecting soils and vegetation on bluff tops is critical to managing erosion. A general perception is that wave forces are largely responsible for eroding bluffs. However, in some cases, it is actually human activities on bluff tops and high-bank land forms that contribute more to slumping bluffs and damage to residential properties. Both North and South Pender have a large number of properties located on bluff tops. Some land owners have responded by adding riprap or seawalls at the high water mark along their property lines which encroach on the foreshore (e.g. Irene Bay, N. Pender). Educating land owners about methods to reduce soil saturation by rain and storm water is a primary recommendation. Modification of bluff top activities would reduce the need for erosion protection at bluff toes, preventing damage to spawning habitat. Managing storm water, setting structures back from the edge, maintaining vegetation and using pervious gravels in driveways are all common ways of protecting bluff top properties. Controlling storm water runoff and reducing impervious surfaces is not just for the shoreline property owner but is part of good management throughout a watershed. Excellent resource materials for managing building on many land forms, including bluffs, are available on the Washington State, Department of Ecology website.

Throughout North Pender and South Pender, continued good stewardship of shoreline vegetation needs to be actively encouraged and could be formalized in regulation. Section 3.4.4 of the Islands Trust Policy Statement requires that local trust committees address protection of sensitive coastal areas in official community plans and regulatory bylaws. Section 3.4.5 requires that local trust committees address the planning for and regulation of development in coastal regions to protect natural coastal processes. Both the North Pender and the South Pender Official Community Plans have objectives to protect sensitive marine habitats. Potential forage fish spawning beaches are a sensitive nearshore habitat and protection measures for these beaches could be included in Land Use Bylaws and shoreline development permit areas. In creating regulatory protection mechanisms, there should also be consideration of bylaw enforcement.

Forage Fish Habitat Assessments can only grade beaches as to their spawning potential. FFHAs can overestimate actual spawning habitats. The actual presence or absence of spawning activity at beaches can only be determined after conducting spawning surveys according to establish protocols. Islands Trust communities are undertaking these spawning surveys. In the interests of effective land-use management, the Islands Trust and the Island Trust Fund would be well served to support these communities in the future.

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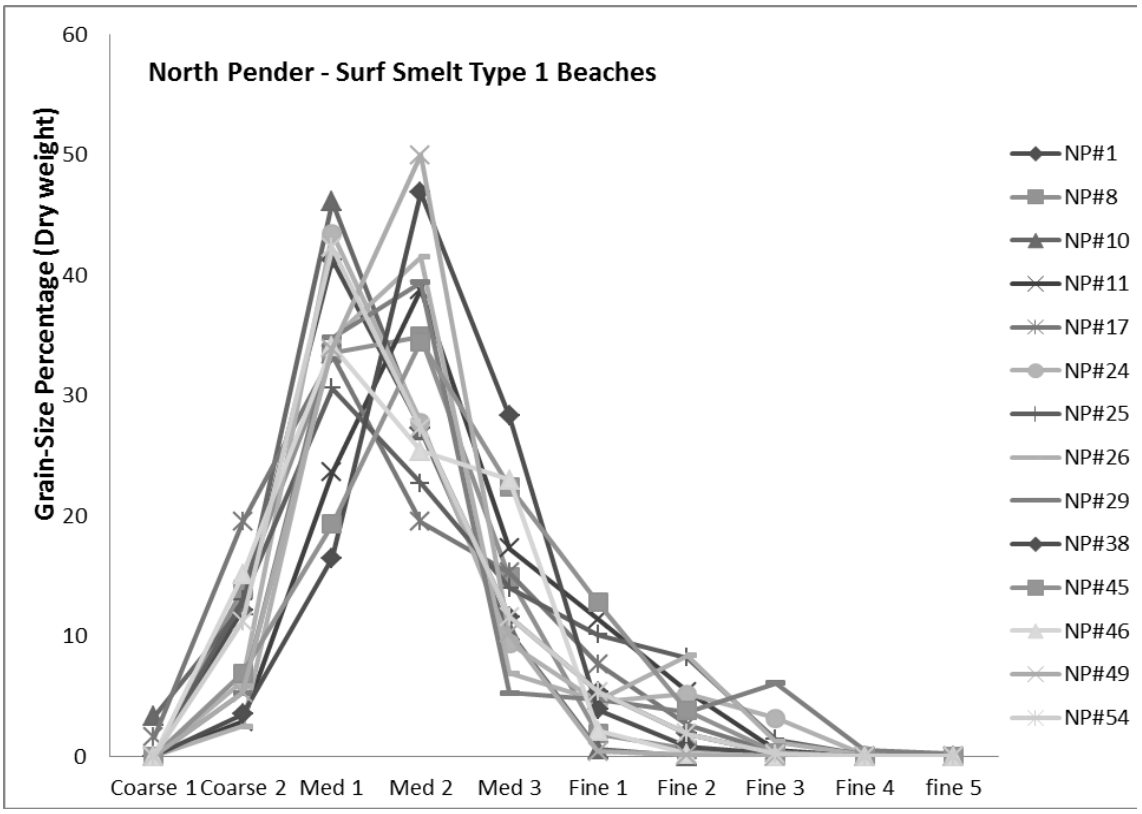


Figure 3: North Pender – Surf Smelt Type 1 Beaches

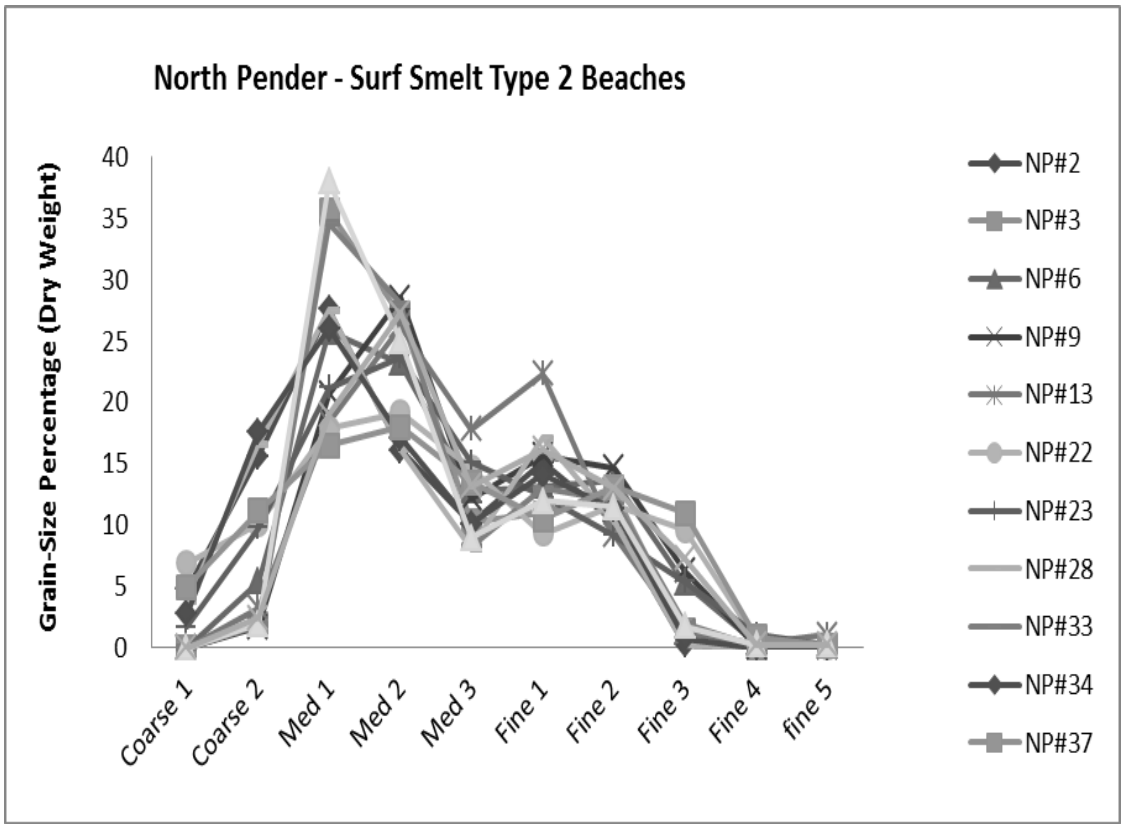


Figure 4: North Pender - Surf Smelt Type 2 Beaches

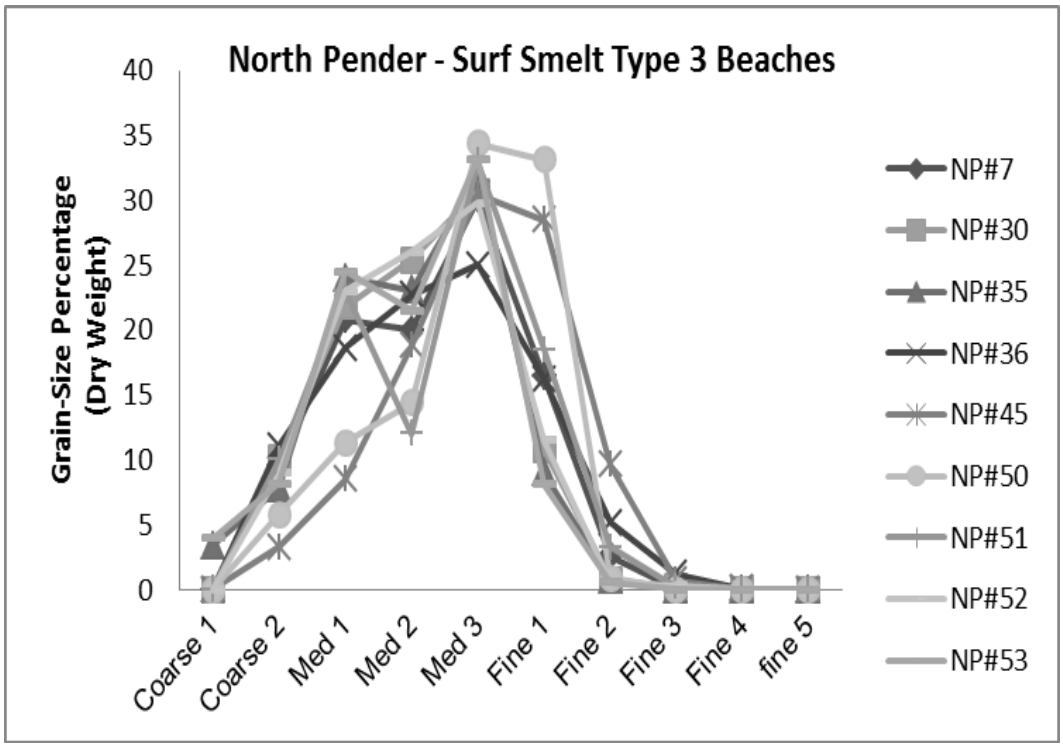


Figure 5: North Pender
Surf Smelt type 3 Beaches

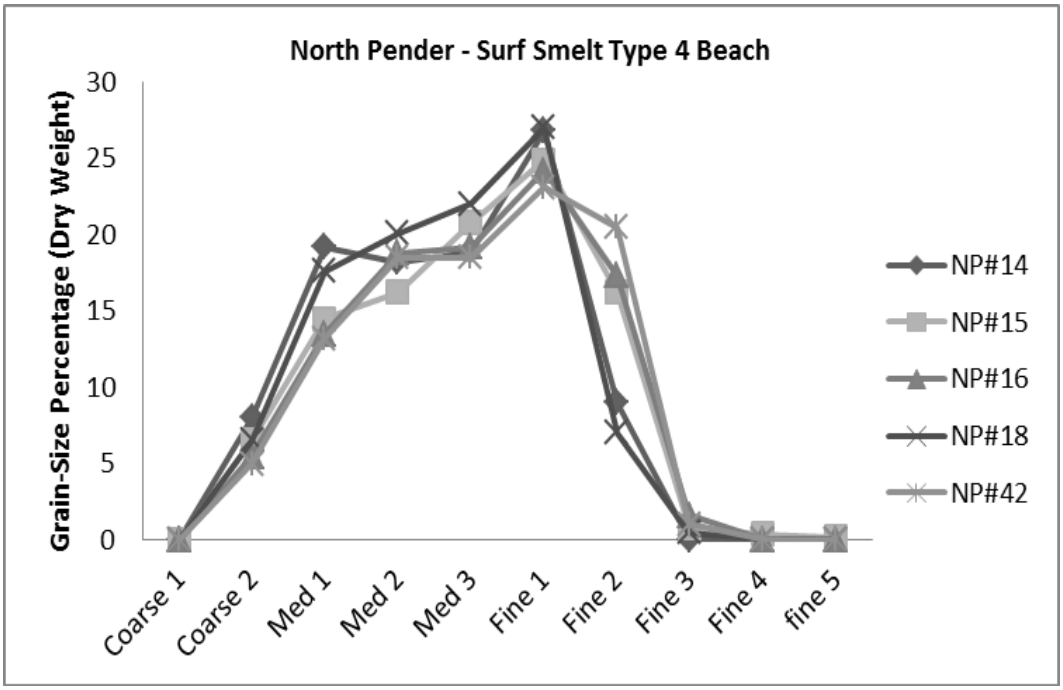


Figure 6: North Pender
Surf Smelt Type 4 Beaches

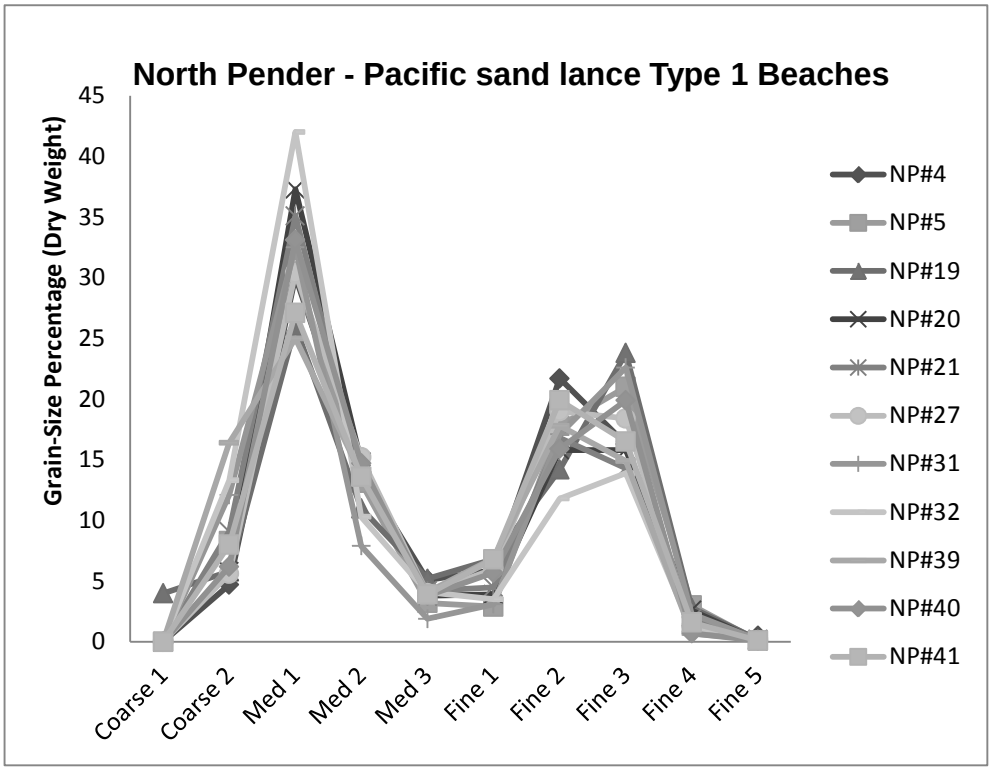


Figure 7: North Pender –
Pacific sand lance Type 1 Beaches

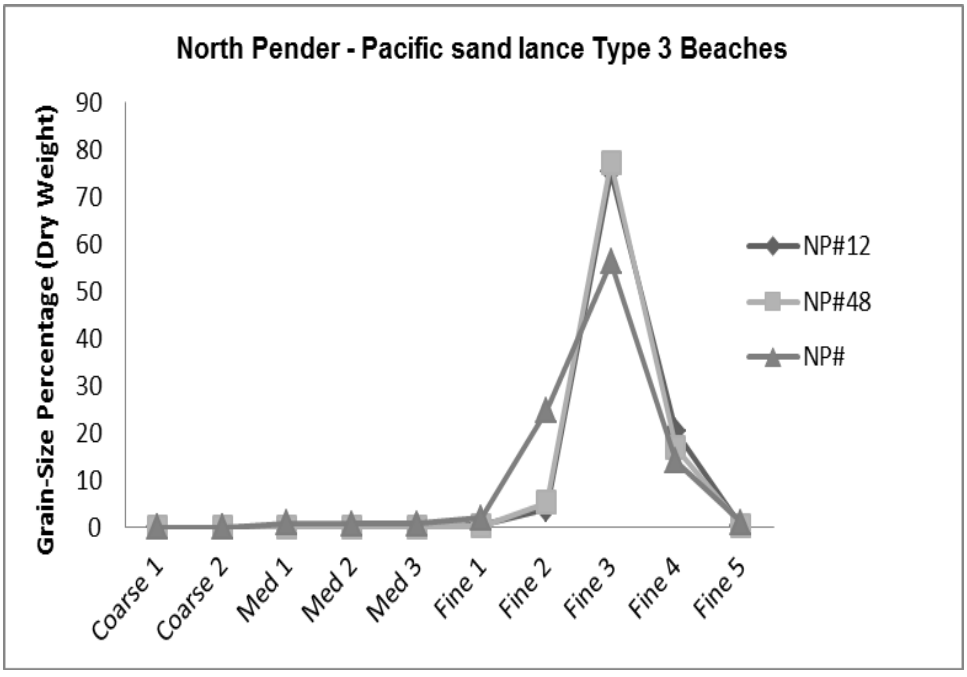


Figure 8: North Pender
Pacific sand lance type 3 Beaches

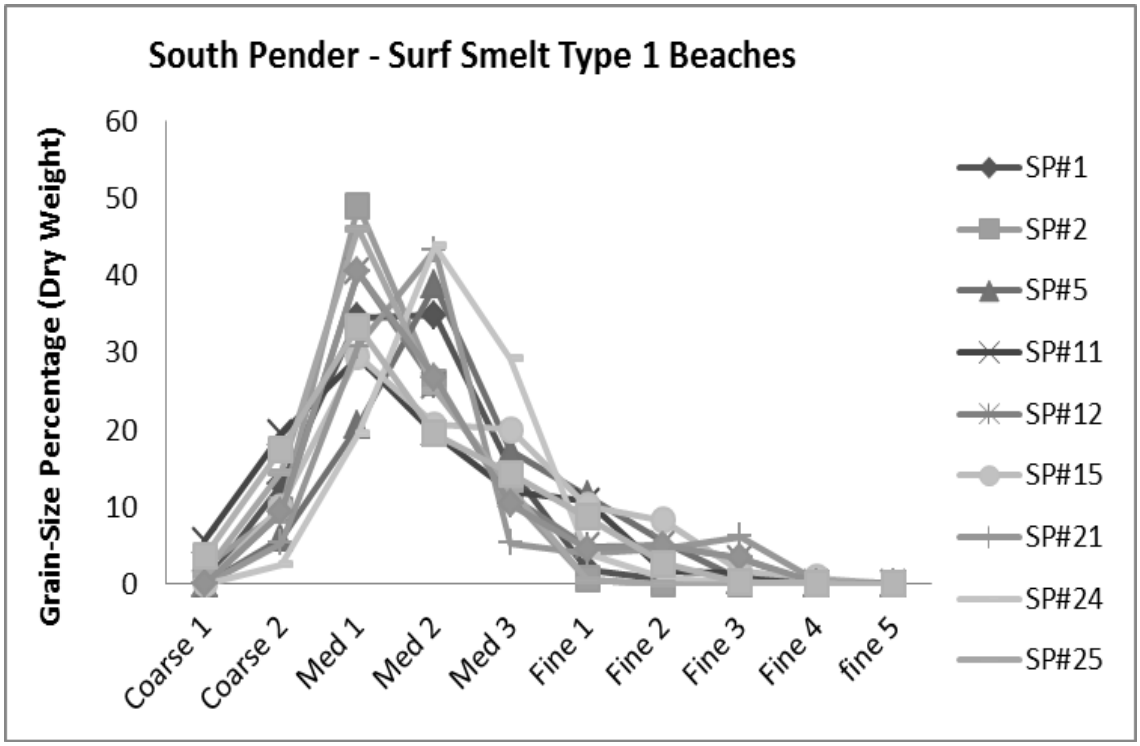


Figure 9: South Pender –
Surf Smelt Type 1 Beaches

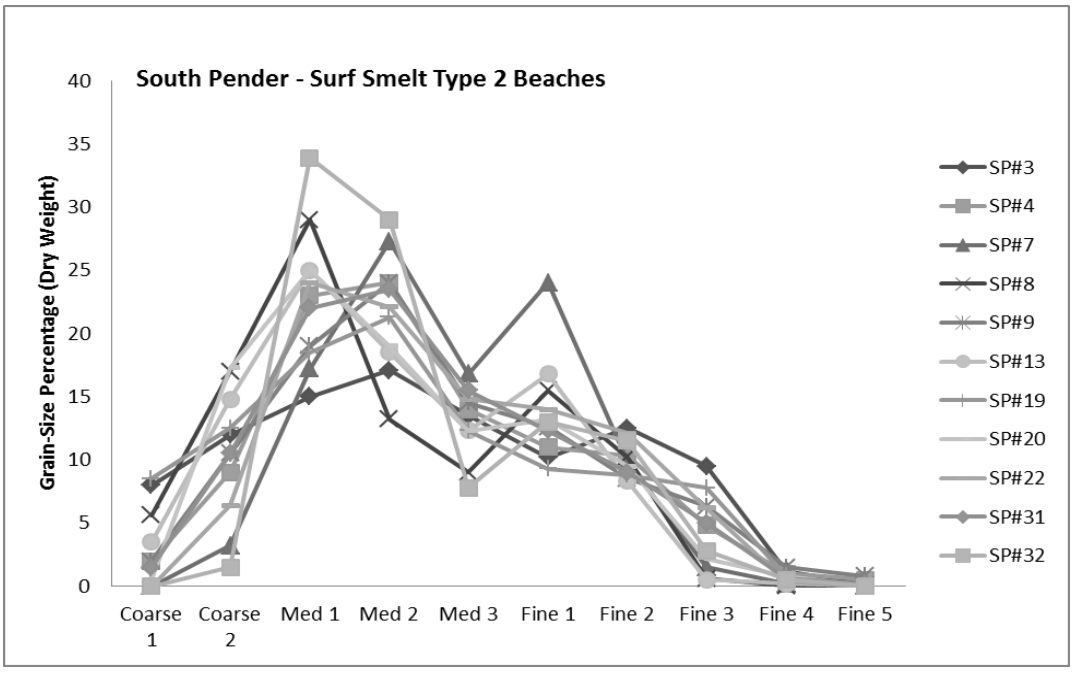


Figure 10: South Pender
Surf Smelt Type 2 Beaches

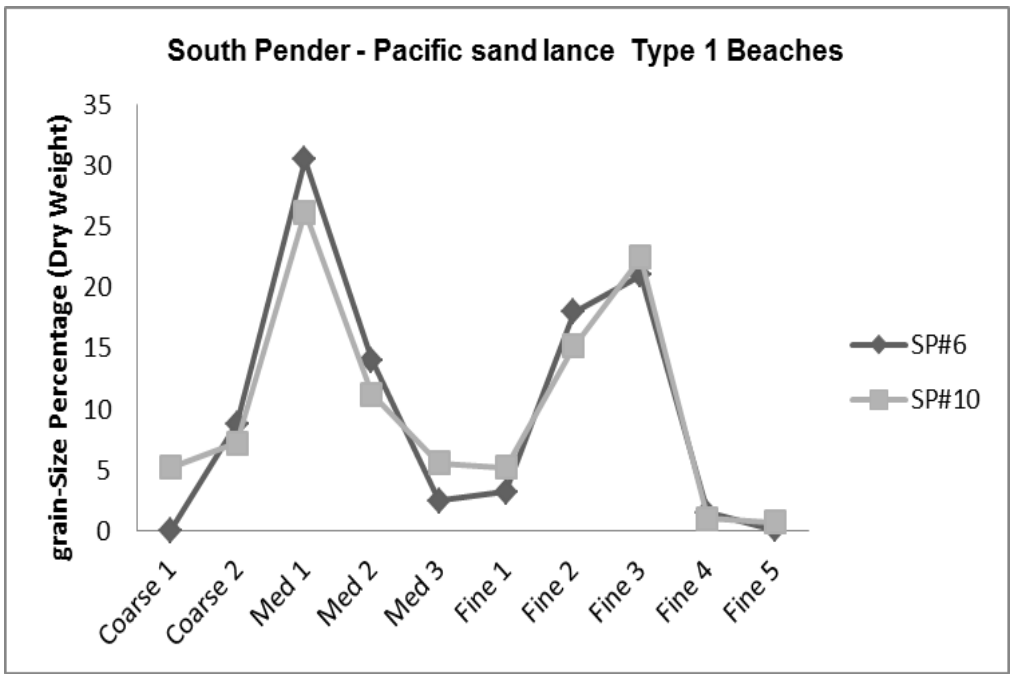


Figure 11: South Pender
Pacific sand lance Type 1 Beaches

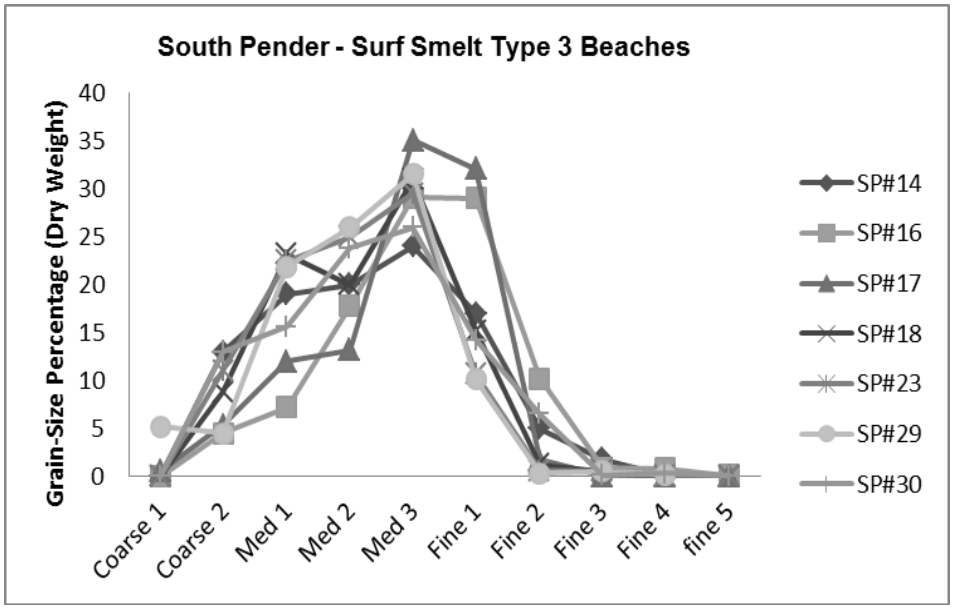


Figure 12: South Pender
Surf Smelt Type 3 Beaches

Appendix B

Beach Type Classifications - North Pender

	Surf Smelt Type 1		Surf Smelt Type 2
Beach Number	North Pender Beach Name	Beach Number	North Pender Beach name
NP#1	Stanley Pnt; Vassaleves	NP#2	Stanley Pnt; Glass Beach
NP#8	Stalker Rd	NP#3	Bridges Rd Beach
NP#10	James Pnt W side	NP#6	Grimmer (Camelot)
NP#11	James Pnt MacKinnon Rd	NP#9	James Pnt S side
NP#17	Panda Bay	NP#13	Boat House Bay
NP#24	Peter Cove 2	NP#22	Wallace Point
NP#25	Peter Cove 4	NP#23	Peter Cove 1
NP#26	Peter Cove 5	NP#28	Starvation Bay 2
NP#29	Starvation Bay 3	NP#33	Bedwell Harbour 2
NP#38	Canal South 1	NP#34	Bedwell Harbour 3
NP#45	nr Razor Pnt	NP#37	pocket cove N Medicine
NP#46	nr Hope Bay	NP#43	Port Browning N2
NP#49	Bricky Bay	NP#44	Port Browning N 1
NP#54	Peter Cove 3		

	Surf Smelt Type 3		Surf Smelt Type 4
Beach Number	North Pender Beach Name	Beach Number	North Pender Beach Name
NP#7	Grimmer (S of Camelot)	NP#14	Roe Bay
NP#30	Starvation Bay	NP#15	Roeland
NP#35	Bedwell Harbour 4	NP#16	Irene Bay
NP#36	Medicine beach	NP#18	Chart Rd
NP#45	Welcome Bay	NP#42	Browning Beach
NP#50	Tracy Rd		
NP#51	Clam Bay 1		
NP#52	Clam Bay 2		
NP#53	North of Clam Bay		

	Pacific sand lance Type 1		Pacific sand lance Type 3
Beach Number	North Pender Beach Name	Beach Number	North Pender Beach Name
NP#4	pocket nr Grimmer	NP#12	Otter Bay; Niagara Rd
NP#5	nr Grimmer Bay	NP#48	Fance Islet
NP#19	Thieves Bay 1		
NP#20	Thieves Bay 2		
NP#21	Boat Nook		
NP#27	Starvation Bay 1		
NP#31	Bedwell Harb		
NP#32	Nr Timbers		
NP#39	Canal South 2		
NP#40	Shark Cove NE side bridge		
NP#41	Shark Cove mid		

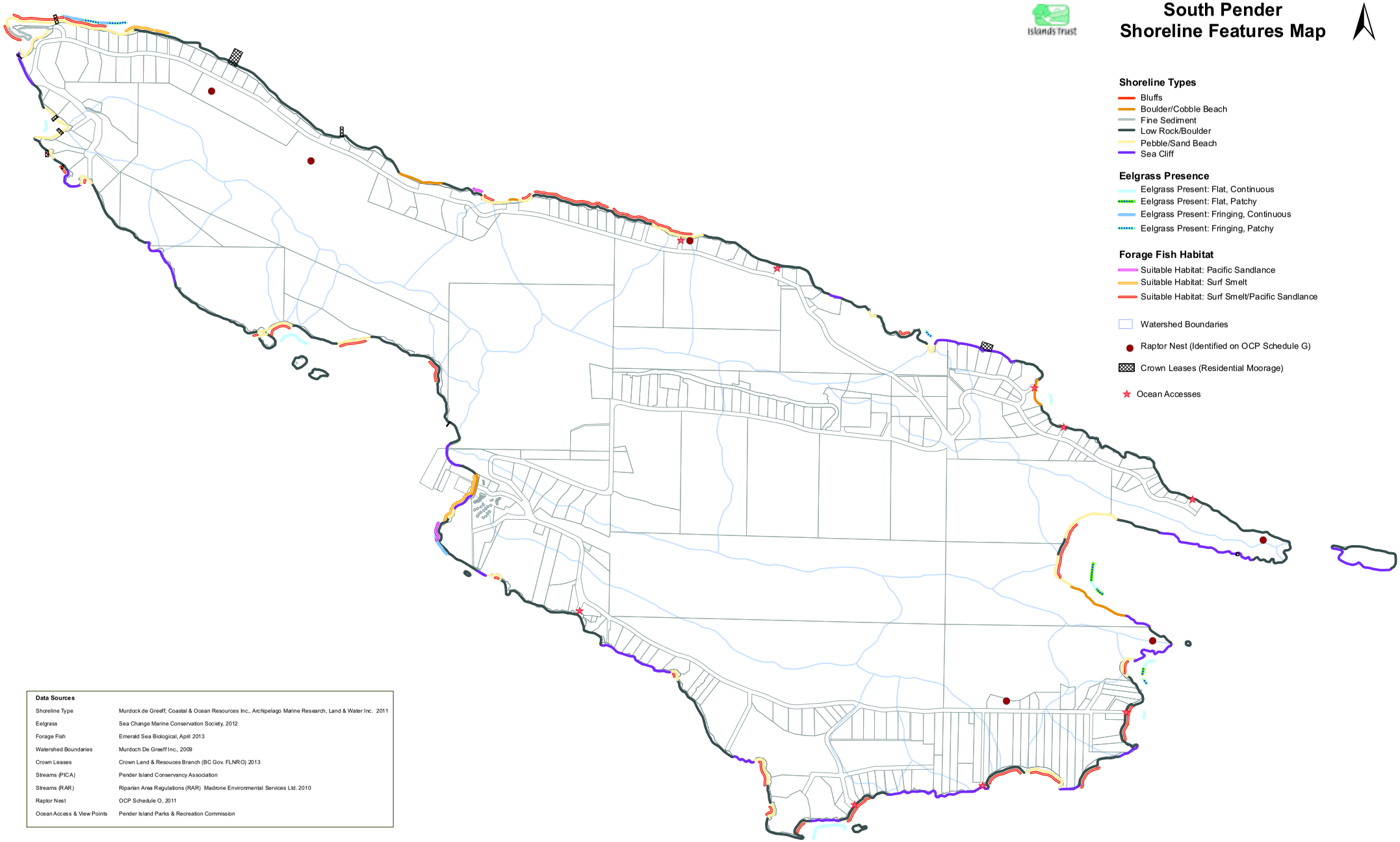
Appendix C

Beach Type Classifications - South Pender

	Surf Smelt Type 1		**Surf Smelt Type 2**
Beach Number	South Pender Beach Name	Beach Number	South Pender Beach name
SP#1	Ainsile Pnt 1	SP#3	Ainsile Pnt 3
SP#2	Ainsile Pnt 2	SP#4	Beaumont Mrn Park SW
SP#5	Beaumont Mrn Park SE	SP#7	nr RedMarker
SP#11	South of Poets Cove	SP#8	S of Mrn Park 1
SP#12	Tilly Pnt 1	SP#9	Poets Cove Marina
SP#15	Tilly Pnt 4	SP#13	Tilly Pnt 2
SP#21	Canned Cod Bay	SP#19	Brooks Pnt
SP#24	Mortimor Spit 2	SP#20	Gowland Pnt
SP#25	Mortimor Spit 3	SP#22	Camp Bay
SP#26	Spender Coast nr Mortimor Spit 3	SP#31	S Pender mid E coast 4
SP#27	E of Mortimor Spit 2	SP#32	S Pender SE coast 5

	Surf Smelt Type 3		**Pacific sand lance Type 1**
Beach Number	South Pender Beach Name	Beach Number	South Pender Beach Name
SP#14	Tilly Pnt 3	SP#6	Islet Mrn Park
SP#16	Craddock Rd Beach Access	SP#10	Day Beacon P Cove
SP#17	Drummond N	SP#28	S Pender mid E coast
SP#18	Drummond S		
SP#23	Mortimor Spit 1		
SP#29	S Pender mid E coast 2		
SP#30	S Pender mid E coast 3		

South Pender
Shoreline Features Map



Data Sources	
Shoreline Type	Murdock de Greeff, Coastal & Ocean Resources Inc., Archipelago Marine Research, Land & Water Inc. 2011
Eelgrass	Sea Change Marine Conservation Society, 2012
Forage Fish	Emerald Sea Biological, April 2013
Watershed Boundaries	Murdoch De Greeff Inc., 2009
Crown Leases	Crown Land & Resouces Branch (BC Gov. FLNRO) 2013
Streams (PICA)	Pender Island Conservancy Association
Streams (RAR)	Riparian Area Regulations (RAR) Madrone Environmental Services Ltd. 2010
Raptor Nest	OCP Schedule O, 2011
Ocean Access & View Points	Pender Island Parks & Recreation Commission

0 250 500 1,000 Meters

Memorandum

Date August 27, 2013

File Number SP-6500-20 Shoreline Review

To South Pender Island Local Trust Committee
For the meeting of Sept 6, 2013

From Andrea Pickard, Local Planning Services

Re Shoreline Review

Attached to this memo is a copy of the 1994 Atamanenko Report commissioned to review where residential docks may be physically feasible.

The information in the report is provided as information only and may assist the South Pender Island Local Trust Committee discussions regarding the shoreline review and/or the marine geoexchange options.

pc Robert Kojima, Regional Planning Manager

SOUTH PENDER ISLAND
RESIDENTIAL DOCKAGE
OVERVIEW

A. Introduction

The basic intent of this overview study is to identify areas on South Pender Island where docks may be physically feasible. Environmentally sensitive elements and land use conflict areas are to be taken into account within the review.

The overview of the potential residential dockage facilities accommodates the present Official Community Plan policy as follows:

"New wharf facilities will not be permitted in areas fronting land designated Small. Holding Rural Residential, Rural Comprehensive Development, Park, or in front of environmentally sensitive areas."

B. Shoreline Zoning and Existing Docks

The shoreline zoning and the location of five existing docks are shown on **Map 1**.

The location of the docks are as follows:

one dock near Mortimer Spit
one dock within Shark Cove
two docks south east of Ainslie Point on Lots 4 and 6
one dock north of Bedwell Harbour marina

C. Environmentally Sensitive Elements

The following natural resource features critical to the location of dockage facilitate were identified. A boat field trip was taken. Current data available through the Ministry of Environment, Lands and Parks was recorded and analyzed. The environmentally sensitive elements and their location are shown on **Map 2**. These are as follows:

The prevailing winds toward South Pender Island are generally from the south western direction. Hydrographic charts mainly indicate foreshore obstructions and water depths surrounding South Pender Island.

Oil spill research data provided by the Ministry of Environment, Land and Parks indicate wave exposure intensity variation from a very protected shoreline between Mortimer Spit, through the canal to beyond Ainslie Point. Two areas offer general protection from wave action westerly from Mortimer Spit to north of Little Bay and from Hay Point to south from the boundary of Beaumont Marine Provincial Park. The remaining portions of the shoreline are considered to be semi-protected from excess wave exposures.

Map 2 also illustrates the extent of the shoreline for its prominent features, such as rock cliffs, rock platforms, varied underwater obstructions and shallow areas. The upland terrain slopes are noted in percentages in order to illustrate the general landscape along the immediate shoreline of South Pender.

D. Possible Land and Resource Conflict Areas

Map 3 illustrates the possible conflict areas. The very protected and shallow foreshore area from Mortimer Spit to beyond Ainslie Point affords the prime area for dockage or moorage facilities. Presently there are three docks located within this area fronting private residential properties. Owners of five additional residential parcels might apply for dockage fronting their properties. Environment Canada, Environmental Assessment Section is concerned with the cumulative impact of dockage facilities on natural resources. They encourage community dockage and moorage facilities to locate at well spaced intervals (letter of January 8, 1994 attached). Heavy marina traffic usage through the passage between North and South Pender would provide undue conflict situations.

The described protected areas from Mortimer Spit to west of Little Bay afford the most likely placements for future dockage. The sand/gravel and rock platform shoreline along with the upland residential properties physical sites provide potential for appropriate dockage use. This is particularly evident near Mortimer Point. The attached photo illustrates that dockage can be constructed regardless of the steepness of the upland terrain provided that safe footings and anchorage to the upland is completed. However, within this shoreline area there are approximately 25 existing residential parcels in the R1/CD zone and 12 parcels in the R1 zone. There is also a potential for an additional 10 parcels in the R1 Zone. Therefore a total of 47 separate property owners could request dockage facilities within the shoreline area from Mortimer Point to west of Little Bay.

The remaining semi-protected and major portion of South Penders shoreline is where most smaller residential properties have development within the policies of the Official Community Plan. This shoreline is more profoundly exposed to the prevailing south westerly winds. Shallow areas and varied rock obstructions along with steep cliffs have discouraged the location of docks.

E. Possible Dockage Areas

Map 3 illustrates the possible dockage areas.

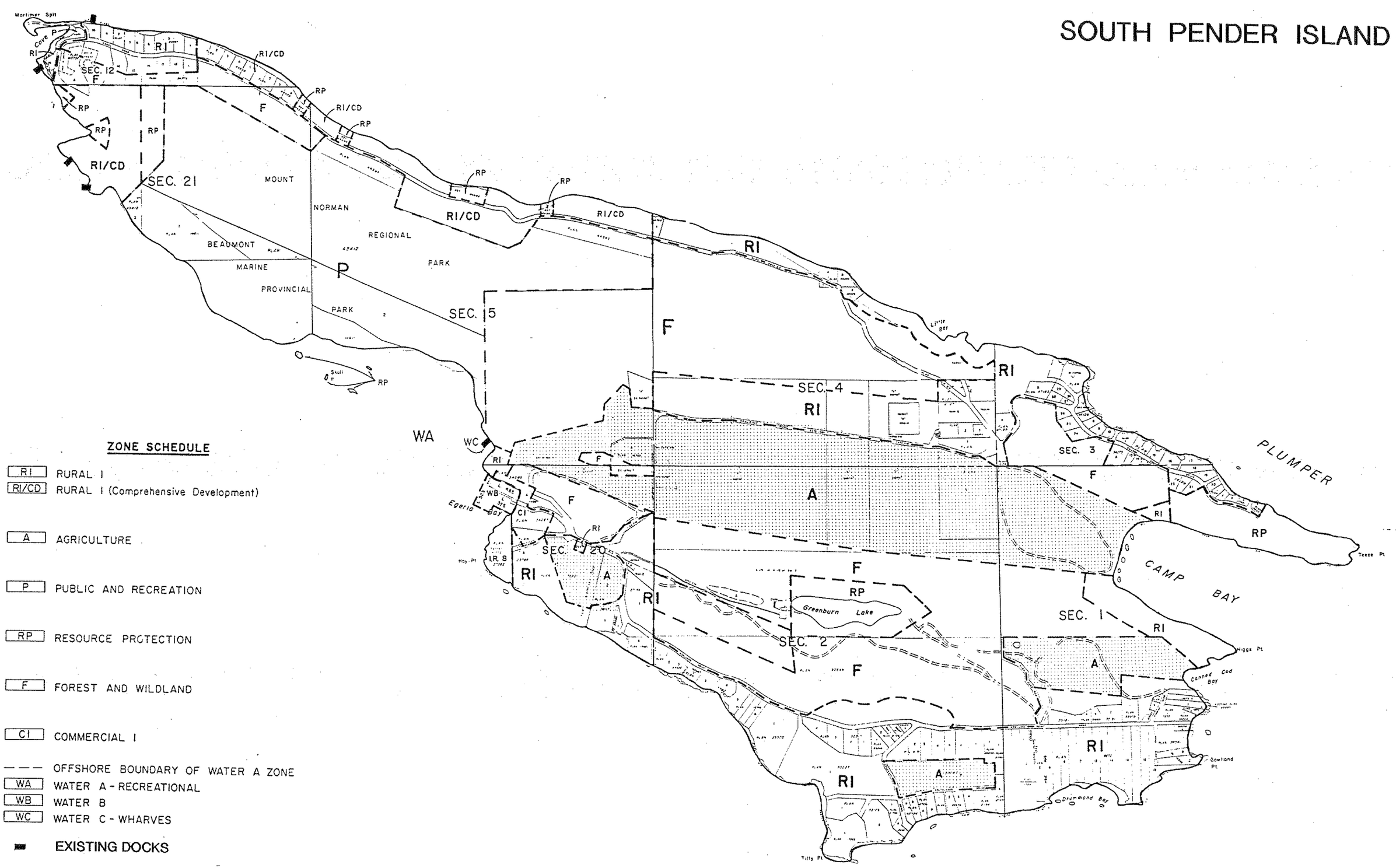
The South Pender shoreline affords the following as possible dockage areas but with the limitations as described in the above sections.

1. Mortimer Spit/Shark Cove
2. Mortimer Spit to west of Little Bay

George T. Atamanenko
May 30, 1994

jas\overview.sp

SOUTH PENDER ISLAND



ZONE SCHEDULE

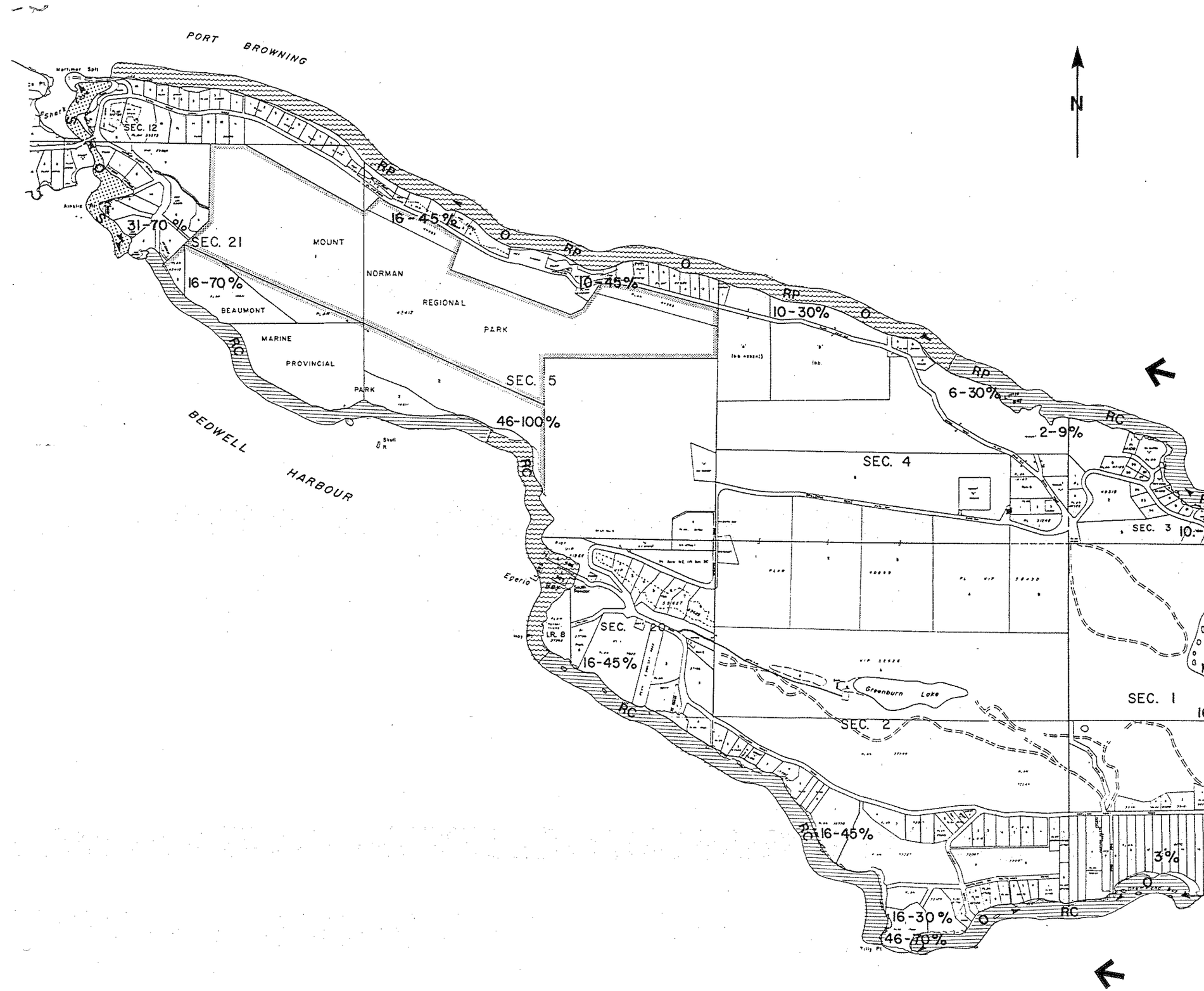
- RI — RURAL 1
- RI/CD — RURAL 1 (Comprehensive Development)
- A — AGRICULTURE
- P — PUBLIC AND RECREATION
- RP — RESOURCE PROTECTION
- F — FOREST AND WILDLAND
- CI — COMMERCIAL 1
- ——— OFFSHORE BOUNDARY OF WATER A ZONE
- WA — WATER A - RECREATIONAL
- WB — WATER B
- WC — WATER C - WHARVES
- EXISTING DOCKS
- AGRICULTURAL LAND RESERVE
- ZONE BOUNDARY

MAP 1

SCALE 1: 18,000 (approx.)

SOUTH PENDER ISLAND

Environmentally Sensitive Elements



← Prevailing Winds

WAVE EXPOSURE

- Very Protected
- Protected
- Semi-Protected

SHORELINE

- RC — Rock Cliff
- RP — Rock Platform
- ◄O► — Obstructions
- ◄S► — Shallow

10-45 % UPLAND SLOPE PERCENTAGE

MAP 2

SOUTH PENDER ISLAND

N

Possible Land & Resource Conflict Area

Possible Dock Areas

BROWNING

Mortimer Spit

Shark

Amshe

SEC. 12

SEC. 21

MOUNT NORMAN REGIONAL PARK

BEAUMONT MARINE PROVINCIAL PARK

SEC. 5

SEC. 4

SEC. 3

BEDWELL HARBOUR

Skull I.

PLUMPER

Esperia Bay

SEC. 20

LR. 8

Greenburn Lake

SEC. 1

SEC. 2

CAMP BAY

Higgs Pt.

Canned Cod Bay

Bowlland Pt.

MAP 3

SCALE 1:18,000 (approx.)

STAFF REPORT

June 6, 2013 **File No.:** SP-3050-20-08

To: South Pender Island Local Trust Committee
For the meeting of June 18

From: Andrea Pickard
Local Planning Services

CC: Robert Kojima, Regional Planning Manager

Re: Advisory Planning Commission Bylaw and Terms of Reference

Project Overview

At the regular business meeting of April 16th the South Pender Island Local Trust Committee (LTC) directed staff to prepare a bylaw to amend the Advisory Planning Commission Bylaw to allow for a minimum of five and not more than seven members. The LTC also directed staff to prepare draft terms of reference for the Advisory Planning Commission (APC).

Attached to this report is:

- Draft Bylaw No. 112, an administrative bylaw to amend the APC Bylaw,
- A copy of Bylaw No. 98, Advisory Planning Commission Bylaw, 2005 using mark-up, and
- A draft terms of reference.

Project Background

Concern of stating 'a minimum' number of Advisory Planning Commission (APC) members in a bylaw was raised and the potential ramifications if the number of APC expressions of interest were less than the stated minimum requirement. Therefore, referring to a 'minimum' number of appointments was not used in Draft Bylaw 112 and was alternatively included in the terms of reference.

The matter of real or perceived conflict of interest has also been a discussion point in recent months and an additional clause has been included in the attached copy of Bylaw 98 for the LTC's consideration. The proposed amendment states:

> *If an APC member has a direct or indirect pecuniary interest, or another interest that constitutes a conflict of interest with regard to a matter referred by the LTC, the member shall declare this and remove themself from the discussion and not*

attempt to influence the discussion related to the matter before, during or after the meeting.

The above clause is consistent with the language used in s. 100(2) of the *Community Charter,* although it is a shortened version.

The draft terms of reference attached were modeled on recent Salt Spring Island and Gabriola Island examples. However, using the comments tool it has been noted where staff recommends the LTC give additional consideration to their suitability for South Pender Island.

Next Steps

To amend an administrative bylaw there is no requirement for a public hearing and the amending bylaw may be given three readings at one meeting. The bylaw would then need to be forwarded to Executive Committee for approval before being adopted by the LTC. Adoption of the bylaw could occur at a meeting or by resolution-without-meeting, as could any additional APC appointments.

The LTC can 'terms of reference' are not a bylaw and can be approved by resolution.

Recommendations

If the LTC wants to consider adopting terms of reference then you may not want to proceed with giving readings to Draft Bylaw 112 until the terms of reference have been reviewed and considered ready for approval.

If the LTC decides not to proceed with terms of reference then readings of Draft Bylaw 112 could be considered.

Prepared and Submitted by:

Andrea Pickard — June 6, 2013
Date

Concurred in by:

Robert Kojima — June 6/13

Regional Planning Manager — Date

DRAFT

SOUTH PENDER ISLAND LOCAL TRUST COMMITTEE

BYLAW NO. 112

****

A bylaw to amend the South Pender Island Local Trust Committee
Advisory Planning Commission Bylaw

****

The South Pender Island Local Trust Committee, having jurisdiction in respect of the South Pender Local Trust Area in the Province of British Columbia pursuant to the *Islands Trust Act*, enacts as follows:

1. South Pender Island Local Trust Committee Advisory Planning Commission Bylaw, 2005 is amended as follows:

   a. Section 2 - **Appointment of Members**, Subsection (a), is amended by replacing the words ”not more than five” with the words “up to seven”.

2. This bylaw may be cited as "South Pender Island Local Trust Committee Advisory Planning Commission Bylaw, 2005, Amendment No. 1, 2013".

READ A FIRST TIME THIS DAY OF , 201_

READ A SECOND TIME THIS DAY OF , 201_

READ A THIRD TIME THIS DAY OF , 201_

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS DAY OF , 201_

ADOPTED THIS DAY OF , 201_

CHAIR

DEPUTY SECRETARY

U:\LOCAL TRUST COMMITTEES\South Pender\Bylaws\Administrative\APC\Draft Bylaw No. 112 amendment.doc

SOUTH PENDER ISLAND LOCAL TRUST COMMITTEE

BYLAW NO. 98

****

A BYLAW TO ESTABLISH AN ADVISORY PLANNING COMMISSION FOR THE SOUTH PENDER ISLAND LOCAL TRUST AREA PURSUANT TO THE *LOCAL GOVERNMENT ACT* AND THE *ISLANDS TRUST ACT*

****

The South Pender Island Local Trust Committee being the Local Trust Committee having jurisdiction on and in respect of the South Pender Island Local Trust Area in the Province of British Columbia, pursuant to the *Islands Trust Act*, R.S.B.C., 1989, enacts as follows:

1. Establishment

(a) The South Pender Island Local Trust Committee may appoint one or more Advisory Planning Commissions (APC) for the South Pender Island Local Trust Area to advise as follows:

i) If one Advisory Planning Commission (APC) is appointed, that Commission shall advise the Local Trust Committee on matters respecting land use, community planning, or proposed bylaws and permits, pursuant to the *Local Government Act* that are referred to it by the Local Trust Committee.

ii) If a second or additional Advisory Planning Commission (APC) is appointed , those Commission(s) shall advise the Local Trust Committee on matters respecting one or more special projects that are matters respecting land use, community planning, or proposed bylaws and permits, pursuant to the *Local Government Act* that are referred to it by the Local Trust Committee

2. Appointment of Members

(a) The Advisory Planning Commission(s) consists of ~~not more than five~~ up to seven members for each Commission. Every member must be an elector of the Local Trust Committee, as defined in Section 5 of the *Local Government Act*, and at least 2/3 of the members must be residents of the Local Trust Area.

Comment [AP1]: Effect of bylaw 112

(b) A Local Trustee, officer or employee of the Islands Trust, or an approving officer is not eligible to be a member of the APC.

(c) The Local Trust Committee shall by resolution appoint members to serve up to a three-year term commencing January 1st.

(d) The Local Trust Committee may, by resolution, remove a member at any time.

(e) Where a member resigns or an appointment is otherwise terminated, the Local Trust Committee may appoint a member to serve the balance of the term of the appointment.

((f) The members must, during the first meeting after January 1st, from among the members elect a Chairperson, and a Deputy Chairperson to act in the place of the Chairperson in the absence of the Chairperson.

(g) The Deputy Chairperson shall, in the absence of the Chairperson, serve as described in Section 3(b).

(h) In the event that the Chairperson resigns or the Chairperson position is otherwise terminated, the **Secretary** shall write the South Island Local Trust Committee to advise them and the **Deputy Chairperson** shall serve until a Chairperson is elected in accordance with Section 2 **(f).**

3. Roles

(a) Secretary

(1) The Local Trust Committee may appoint a Secretary to the Advisory Planning Commission. For certainty a Secretary appointed by the Local Trust Committee is not a member of the APC.

(2) The Secretary is to:

i) assist the Chairperson, as required, in arranging meetings of the APC;

ii) ensure that proper notification of meetings is given in compliance with this Bylaw;

iii) keep legible minutes of all meetings;

iv) provide copies of all minutes and recommendations of the APC to the Local Trust Committee and the Secretary of the Islands Trust; and

v) maintain an annual record book of approved minutes to be available to the public upon request.

(3) If a Secretary is not appointed by the Local Trust Committee then the APC may elect a member to act as a Secretary. For certainty the Secretary elected by the APC is member of the APC and will serve without remuneration.

(b) Chairperson

(1) The Chairperson is to:

i) receive referrals from the Local Trust Committee and, in response, decide when and where meetings shall be held;

ii) ensure proper conduct of all meetings in accordance with the requirements of this Bylaw, the principles of procedural fairness, and in accordance with the requirements of the *Islands Trust Act*, the *Local Government Act*, the Community Charter or regulations under those Statutes;

iii) sign the minutes certifying that they are true and correct after they have been approved by the APC;

iv) in the absence of a Secretary, appoint a member of the APC to record the minutes of the meeting; and

v) in the absence of a Secretary, to act in the capacity of a Secretary for purposes established in this Bylaw, unless another member of the APC is appointed by the Chair to undertake such responsibilities.

4. Referrals to the Commission

(a) The Local Trust Committee may by resolution, refer any matter respecting land use, community planning or proposed bylaws and permits under Divisions 2, 7, 9 and 11 of Part 26 of the *Local Government Act*.

(b) The APC must meet, when there is a need to consider a referral, at a duly constituted meeting as defined under this Bylaw and as called by the Chairperson.

(c) At its first meeting, the APC shall select a regular monthly meeting day to consider referrals.

(d) In the event that no referral is received by the Secretary at least 7 calendar days prior to the date of the next regular meeting, then no meeting need be held.

(e) A meeting of the APC on any particular referral must be held not more than 40 days after the date of receipt of that referral unless the Local Trust Committee has requested a response by an earlier specified date.

(f) The Local Trust Committee may refer a plan or bylaw amendment or permit that has been partially processed and seen at the application stage by the Advisory Planning Commission for additional recommendations if it feels changes to the application warrant the review. In these cases the APC may be asked to respond in a briefer than normal time period.

(g) The Chairperson may call an extraordinary meeting after consultation with the Secretary and all other members of the APC to deal with any matter for which a quick response is requested.

(h) Although the recommendations of the APC must be received by the Local Trust Committee, the Local Trust Committee is not bound by the recommendations.

5. Notice of Meeting

(a) An employee of the Islands Trust shall mail or otherwise deliver documentation associated with any referral from the Local Trust Committee to all members and the Secretary of the APC.

(b) The Secretary must send a notice of meeting upon receipt of a referral to be discussed to each APC member at least 5 calendar days prior to the regularly scheduled meeting.

(c) The Secretary must confirm by telephone or note, the date and time of any extraordinary meetings with each member of the APC.

(d) The Secretary must ensure an applicant is notified of the date, time and place of the APC meeting at which his or her application or proposal will be discussed at least five calendar days prior to the meeting.

(e) The Secretary must ensure the Local Trustees and the employee as referred to in Section 5.(a) are notified of each APC meeting at least five calendar days prior to the day of the meeting.

(f) Where a matter upon which a recommendation has been made is referred back to the APC for further comment within a limited time period, the Secretary must notify the Local Trust Committee of an extraordinary meeting. The Secretary may invite the applicant if further information is required at least two days prior to the meeting unless the applicant agrees to a lesser notice.

6. Conduct of Meeting

(a) All deliberations of the APC must take place in a meeting, and all APC meetings must be open to the public with the exception that the meeting may be closed if it relates to a matter specified in S.90(1) of the Community Charter.

(b) A quorum of the APC is 50% of those appointed.

(c) The Chairperson is to convene the meeting and may adjourn it from time to time.

(d) An applicant must be afforded the first opportunity to present his or her proposal and to answer any questions asked by APC members.

(e) If the applicant or his or her agent fails to appear and was duly notified as required by this Bylaw, the APC may proceed to reach its recommendation in his or her absence.

(f) At the request of any member of the APC, the Chairperson must invite any elected official, staff or resource person present or member of the public at the meeting to comment on the matters before the APC. Any Local Trustee, officer or employee of the Islands Trust may attend at a meeting of the APC in a resource capacity.

(g) The APC must not receive development proposals and other applications directly from applicants.

(h) The APC must not consult directly with other government agencies.

(i) ~~(i)~~ If the Chairperson considers that another person at the meeting is acting improperly, the Chairperson may order that the person is expelled from the meeting.

(j) If an APC member has a direct or indirect pecuniary interest, or another interest that constitutes a conflict of interest with regard to a matter referred by the LTC, the member shall declare this and remove themself from the discussion and not attempt to influence the discussion related to the matter before, during or after the meeting.

7. Notice of Recommendation

(a) If a Local Trustee did not attend an APC meeting, the Local Trustee may require a verbal report from the Chairperson.

(b) The Secretary must ensure minutes of each meeting of the APC are recorded and approved by the APC at its subsequent meeting.

(c) The Secretary must ensure a completed referral form recording the response of the APC and a copy of the draft minutes are submitted to the Local Trust Committee and Islands Trust office within seven calendar days of the meeting.

(d) A recommendation of the APC may be in the form of recorded commentary, in the form of minutes or in the form of a resolution, provided that, where requested by any member, all dissenting opinions are also recorded.

8. Transition

(a) South Pender Island Local Trust Committee Bylaw No. 79 cited as the "South Pender Island Local Trust Committee Advisory Planning Commission Bylaw, 1996" is repealed.

9. This Bylaw may be cited as the "South Pender Island Local Trust Committee Advisory Planning Commission Bylaw, 2005".

READ A FIRST TIME THIS 23rd DAY OF June , 2005

READ A SECOND TIME THIS 23rd DAY OF June , 2005

READ A THIRD TIME THIS 23rd DAY OF June , 2005

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS
28th DAY OF June , 2005

ADOPTED THIS 29th DAY OF August , 2005

_____ _____

DEPUTY SECRETARY

CHAIRPERSON

South Pender Island Advisory Planning Commission

Terms of Reference

South Pender Island Local Trust Committee Bylaw No. 98 authorizes the establishment of an Advisory Planning Commission (APC), as well as a special project Advisory Planning Commission, to advise on matters of land use, community planning, or proposed bylaws and permits, pursuant to the *Local Government Act* that are referred to it by, and at the discretion of, the South Pender Island Local Trust Committee (LTC).

This Terms of Reference guides the mandate, roles and responsibilities, conduct, and membership of the Advisory Planning Commissions and their members. The operations of the Advisory Planning Commissions are guided by the South Pender Island Local Trust Committee Bylaw No. 98. Both documents should be referred to for guidance.

1. Mandate
   a. The APC shall provide recommendations to the South Pender Island Local Trust Committee on matters referred to it concerning land use, community planning or proposed bylaws and permits.
   b. APC meetings are to follow the *Community Charter's* requirements for open meetings, public access to records, and the posting of notices for public meetings. In addition to the South Pender Island Local Trust Committee Bylaw No. 98, meeting procedures and the conduct of meetings shall be guided by the adopted policies of the Islands Trust Council and the South Pender island Local Trust Committee.
   c. Ensure the applicant of any application based referral is provided opportunity to attend meetings and provide input to the APC.

2. Roles and Responsibilities

   The South Pender Island Local Trust Committee shall:
   a. Strive to appoint APC members of various local areas on South Pender and/or representative of various community organizations.
   b. Upon request of the APC, function in a resource capacity for the APC without interfering or unduly influencing any recommendations of the APC.
   c. Strive to appoint no less than five APC members.

   All APC members shall:
   a. Exercise their judgement based on personal experience and knowledge of the subject matter as objectively applied to a specific application or issue. Conversely, responsibility to provide opportunities for public consultation and the gauging of community opinion is more appropriately considered one of the roles of the LTC.
   b. Be guided by the general policy intent as set out in the South Pender Island Official Community Plan and Land Use Bylaw.
   c. Ensure all deliberations of the APC take place at a meeting of the APC and such meetings must be open to the public with appropriate notice of meeting time and location.

Comment [AP1]: This is essentially noted in the APC bylaw as well 3bII) and 6a) but posting of notices is not explicit

Comment [AP2]: Referred to in 5d) and 6d) of the bylaw

Comment [AP3]: Although this is in other drafts it may not be suitable for SPI as drafted but you may want to consider a similar statement

Comment [AP4]: Option to consider instead of using 'a minimum' reference in the bylaw

d. Establish a schedule of regular meetings on an annual basis.
e. Recognize that appointment to the APC does not authorize members to trespass; however if a site visit is warranted to provide a better understanding of the proposal Islands Trust staff shall be contacted in order to obtain the owner's consent and to arrange a site visit. A minute taker is not required but all deliberations must take place during the scheduled, public meeting. Preferably, site visits should take place on the same day that a committee is meeting.

Islands Trust staff shall:

a. Advise the APC Chair of a referral from the Local Trust Committee as soon as possible, and strive to have the referral package prepared and distributed within one week of the LTC decision to refer a matter to the APC, excepting requests for supplemental information which may require additional time to prepare.
b. Provide APC members with a reference manual upon appointment to the APC.
c. Provide opportunities for training sessions regarding meeting procedures and other matters that will be of benefit to the APC process.
d. Attend APC meetings upon request if possible.
e. Provide opportunity to review the referral information in detail with the Chair before the meeting.
f. As necessary, request additional information from other governmental agencies or individuals that would be helpful to the APC.

3. Conduct
   a. APC members shall listen to and acknowledge the views of others, including those expressed by an applicant, and promote a meeting environment where all opinions are respected and all members are comfortable expressing their views.
   b. If an APC member believes they may have a direct or indirect conflict of interest, the member must declare this, state in general terms why this is believed to be the case, and physically remove themselves from the meeting. APC members are encouraged to discuss and receive advice from Islands Trust staff if they believe they may have a potential conflict of interest.
   c. APC members who declare a conflict of interest remain entitled to advocate their position as a member of the general public, however they shall clearly indicate they are speaking as an individual in those circumstances.
   d. The APC may only request information from other agencies or individuals through the Islands Trust staff.

4. Membership
   a. APC members who are absent from three or more consecutive regular meetings may be requested by the Local Trust Committee to resign membership.
   b. Upon expiry of an APC member's appointment, APC members can apply to be reappointed by the Local Trust Committee.

Comment [AP5]: Could delete, is in 4c) of the bylaw

Comment [AP6]: It may be preferable to also address this in the APC bylaw for clarity

Comment [AP7]: This is also in the bylaw 6h) so may not be required

Comment [AP8]: The LTC may want to consider terms addressing possible staggering of appointments as previously discussed when appointments were made for 1 year to be off-set from the Trustee term

Memorandum

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Date August 13, 2013

File: SP-6500-02 Land Use Bylaw Review 2012

From South Pender Island Local Trust Committee
For the meeting of Sept 6, 2013

Re Post Public Hearing - Proposed Bylaw 111

The South Pender Island Local Trust Committee (LTC) is considering a bylaw to amend the South Pender Island Land use Bylaw. A community information meeting and public hearing was held on August 10, 2013 and the draft minutes of the meeting will be included in the Sept 6th agenda as a separate item.

A public hearing is a quasi-judicial process and specific procedures must be followed within and following the hearing.

Following the hearing, the LTC may choose to give further readings to a bylaw, defeat a bylaw, or alter a bylaw within certain parameters. The procedural steps following the close of the hearing are as follows:

1. Consideration of Second and Third Reading (this may include amendments to alter a bylaw).
2. Forwarding of the bylaws to Executive Committee for approval.
3. Reconsideration and adoption.

Following the close of the hearing, the LTC may not hear further submissions without holding a new hearing. The principle is that if new information is considered by the LTC, all other interested parties also need to have the opportunity to consider any new relevant material and to make further representations to the LTC. The courts have clarified that this does not open the door to endless public hearings: a local government body can legitimately decide that after a hearing it wishes to hear further from staff on issues raised at the hearing.

A bylaw may be altered after the hearing, based on information received or heard by the LTC at any point prior to the close of the hearing, provided that the amendments do not alter use or increase density, or decrease density without a landowner's consent.

The next steps for the LTC are to consider Second and Third Reading, and to forward the bylaw to Executive Committee for approval. Once the Executive Committee approves the bylaw, then it needs to return to the LTC for adoption.

Consideration of any amendments to the proposed bylaw based on information or comments received can be discussed after the close of the Public Hearing.

Attached to this memo is Proposed Bylaw 111. Staff has identified one amendment to the bylaw to provide certainty and clarity in the text which is related to previous direction of the LTC. The recommended amendment is shown using mark-up in clause 1 of the attached bylaw. Any other possible amendments will require direction of the LTC.

The LTC is reminded the Policy Statement Checklist was included with the staff report received at the April LTC meeting. The checklist is used when reviewing proposed bylaws for compliance with the directive policies in the Policy Statement and they form part of the referral package to Executive Committee. A copy can be provided to the LTC upon request.

RECOMMENDATIONS:

1. THAT the South Pender Island Local Trust Committee Proposed Bylaw 111 be amended by inserting into clause 1, which amends the definition of floor area, "and deleting "collection of rainwater" and inserting "storage of water"" as shown in the Staff Memo dated August 13, 2013.

OPTIONS:

1. THAT the South Pender Island Local Trust Committee Proposed Bylaw No. 111, cited as "South Pender Island Land Use Bylaw No. 92, 2003, Amendment No. 1, 2012" be amended as follows: …….

2. THAT the South Pender Island Local Trust Committee give Second Reading to Proposed Bylaw No. 111, cited as "South Pender Island Land Use Bylaw No. 92, 2003, Amendment No. 1, 2012" as amended.

3. THAT the North Pender Island Local Trust Committee give Third Reading to Proposed Bylaw No. 111, cited as "South Pender Island Land Use Bylaw No. 92, 2003, Amendment No. 1, 2012".

4. THAT the South Pender Island Local Trust Committee Proposed Bylaw No. 111, cited as "South Pender Island Land Use Bylaw No. 92, 2003, Amendment No. 1, 2012" be forwarded to the Secretary of the Islands Trust for Executive Committee approval.

5. THAT the South Pender Island Local Trust Committee direct staff to proceed no further with Proposed Bylaw No. 111, cited as "South Pender Island Land Use Bylaw No. 92, 2003, Amendment No. 1, 2012".

PROPOSED

SOUTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 111

****

A BYLAW TO AMEND SOUTH PENDER ISLAND LAND USE BYLAW No. 92, 2003

****

WHEREAS the South Pender Island Local Trust Committee is the Local Trust Committee having jurisdiction on and in respect of the South Pender Island Local Trust Area, pursuant to the *Islands Trust Act*;

AND WHEREAS Section 29 of the *Islands Trust Act* gives the South Pender Island 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 South Pender Island Local Trust Committee wishes to amend Land Use Bylaw No. 92, 2003;

AND WHEREAS the South Pender Island Local Trust Committee has held a Public Hearing;

NOW THEREFORE the South Pender Island Local Trust Committee enacts in open meeting assembled as follows:

A. Bylaw No. 92, cited as "South Pender Island Land Use Bylaw No. 92, 2003" is amended as follows:

1. Section 1.1 (Definitions) is amended for “floor area” by deleting “the outer surface of the exterior walls” and inserting “the interior surface of the exterior walls” and deleting “collection of rainwater” and inserting “storage of water” such that it reads “floor area” means the sum of the horizontal areas of all storeys in a building, measured to the interior surface of the exterior walls, exclusive of any floor area occupied by a cistern used for the storage of water for domestic use or fire protection, and exclusive of all areas of a floor having a floor and ceiling less than 1.5 metres apart.”

2. Section 1.1 (Definitions) is amended for “pump/utility house” by deleting “an accessory building” and inserting “a building” such that it reads: "pump/utility house" means a building with a maximum floor area of 2.9 square metres (32 square feet) containing only equipment for pumping and processing of water or sewage, or electrical equipment and communication service equipment.

3. Section 1.1 (Definitions) is amended for “structure” by inserting “above or below ground utility lines” such that it reads: "structure" means anything that is constructed or erected and that is fixed to, supported by or sunk into land or water, but excludes septic fields, septic tanks, absorption fields and related appurtenances below ground, above or below ground utility lines, concrete and asphalt paving, or similar surfacing of the land.

4. Section 1.1 (Definitions) is amended by inserting in the correct alphabetical location “”storage building” means a non-residential building for the storage of goods and materials for use on the lot on which it located, and for the storage of personal property of the owner of the lot.”

5. Section 1.1 (Definitions) is amended by inserting in the correct alphabetical location “”solar collectors” means a device or combination of devices that uses direct sunlight as a source of energy for such purposes as generating electricity, heating or cooling a structure, heating or pumping of water and may include a water storage tank. For certainty, equipment with a built-in solar power source such as lighting fixtures are not considered ‘solar collectors’ for the purpose of this bylaw.

6. Part 3 (General Regulations) is amended by inserting a new Section 3.14 “Attached Dwellings” with the following subsections: “(1) Where a lot is permitted more than one dwelling in Part 5 of

this bylaw, two dwellings may be attached subject to each dwelling complying with their respective floor area regulation. For clarity, permitted dwellings include single family dwellings or cottages.
(2) Despite 3.14(1) dwellings may not be attached on land within the Agricultural Land Reserve where second dwellings are only permitted for persons engaged in on-going agricultural activities.

7. Section 3.3 (Siting and Setback Regulations) is amended by inserting a new subsection (6) "Despite the setback provisions in Part 5 of this Bylaw pump/utility houses and solar collectors less than 4.6 metres in height may be sited as close as 3.0 metres to a lot line. "

   Following the definition the following be added: *Information Note*: *Buildings or structures sited within 4.5 metres of a dedicated road require a permit from the Ministry of Transportation and Infrastructure.*

8. Subsection 3.4(2) (Height Regulations) is amended by inserting "and storage buildings are" and deleting "is" such that is reads: "A building or structure accessory to a single family dwelling and storage buildings are not to exceed 4.6 metres (15 feet) in height."

9. Subsection 3.4(2) (Height Regulations) is amended by deleting "4.6 metres (15 feet)" and inserting "7.3 metres (24 feet)"

10. Subsection 3.4(3) (Height Regulations) is amended by deleting "4.6 metres (15 feet)" and inserting "7.3 metres (24 feet)"

11. Subsection 3.7(1) (Agricultural Uses, Buildings and Structures) is amended by deleting "4.6 metres (15 feet)" and inserting "7.3 metres (24 feet)"

12. Subsection 3.4(4) (Height Regulations) is amended by inserting "roof-top mounted" such that it reads: "The height regulations for buildings and structures specified elsewhere in this Bylaw do not apply to radio, telecommunications and television antennas, chimneys, flag poles, lightning poles, fire and hose towers, utility poles, roof-top mounted solar collectors, farm silos and grain bins and water storage tanks.

13. Subsection 3.5(4) (Accessory Uses, Buildings and Structures) is amended by inserting "including storage buildings" such that it reads: "Subject to the density and siting provisions in Part 5, the total floor area of all accessory buildings, including storage buildings, on a lot shall not exceed the following:"

14. Section 3.5 (Accessory Uses, Buildings and Structures) is amended by inserting a new subsection (6) that reads: "Where storage buildings are a permitted use in Part 5 of this Bylaw, they may be constructed prior to a single family dwelling subject to:
    (a) The use is limited to the storage of goods and materials for use on the lot on which it is located, and for the storage of personal property of the owner of the lot;
    (b) Only one storage building is permitted on any lot;
    (c) The floor area is not to exceed the allowable floor area based on the lot size as specified in Subsection 3.5.(4);
    (d) The storage building is not to be used for human habitation; and
    (e) For certainty, the use of storage buildings as a commercial storage facility is prohibited.

15. Subsection 4.2(4) (Zone Boundaries) is amended by deleting "scaling from Schedule "B" and in that case the zone boundary is the midpoint of the line delineating the zone boundary" and inserting "reference to the digital records stored and maintained in a geographical information system (GIS) at the offices of the Islands Trust" such that it reads: "Where a zone boundary shown on Schedule "B" 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 reference to the digital records stored and maintained in a geographical information system (GIS) at the offices of the Islands Trust"

16. Subsection 5.1(1) (Rural Residential One (RR1) Permitted Uses) is amended by inserting a new Article (f) “Storage buildings subject to Subsection 3.5(6)”

17. Subsection 5.1(3) (Rural Residential One (RR1) Density) is amended by inserting at the end “,which may be attached subject to Section 3.14.”

18. Subsection 5.1(4) (Rural Residential One (RR1) Density) is amended by inserting at the end “,of which two of the permitted dwellings may be attached subject to Section 3.14.”

19. Subsection 5.1(6) (Rural Residential One (RR1) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

20. Subsection 5.2(1) (Rural Residential Two (RR2) Permitted Uses) is amended by inserting a new Article (f) “Storage buildings subject to Subsection 3.5(6)”

21. Subsection 5.2(3) (Rural Residential Two (RR2) Density) is amended by inserting at the end “, which may be attached subject to Section 3.14.”

22. Subsection 5.2(4) (Rural Residential Two (RR2) Density) is amended by inserting at the end “,of which two of the permitted dwellings may be attached subject to Section 3.14.”

23. Subsection 5.2(6) (Rural Residential Two (RR2) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

24. Subsection 5.3(1) (Rural Residential Three (RR3) Permitted Uses) is amended by inserting a new Article (f) “Storage buildings subject to Subsection 3.5(6)”

25. Subsection 5.3(3) (Rural Residential Three (RR3) Density) is amended by inserting at the end “,which may be attached subject to Section 3.14.”

26. Subsection 5.3(4) (Rural Residential Three (RR3) Density) is amended by inserting at the end “, of which two of the permitted dwellings may be attached subject to Section 3.14.”

27. Subsection 5.3(6) (Rural Residential Three (RR3) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

28. Subsection 5.5(3) (Community Service (S1) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

29. Subsection 5.6(3) (Government Service (S2) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

30. Subsection 5.7(1) (Agriculture (A) Permitted Uses) is amended by inserting a new Article (f) “Storage buildings subject to Subsection 3.5(6)”

31. Subsection 5.7(6) (Agriculture (A) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

32. Subsection 5.8(1) (Forestry (F) Permitted Uses) is amended by inserting a new Article (g) “Storage buildings subject to Subsection 3.5(6)”

33. Subsection 5.8(2) (Forestry (F) Density) is amended by inserting at the end “,which may be attached subject to Section 3.14.”

34. Subsection 5.8(5) (Forestry (F) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

35. Subsection 5.9(1) (Natural Resource (NR) Permitted Uses) is amended by inserting a new Article (e) “Storage buildings subject to Subsection 3.5(6)”

36. Subsection 5.9(3) (Natural Resource (NR) Density) is amended by inserting at the end “,which may be attached subject to Section 3.14.”

37. Subsection 5.9(5) (Natural Resource (NR) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

38. Subsection 5.10(3) (Passive Recreation Park (P1) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

39. Subsection 5.11(3) (Heritage Community Park (P2) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

40. Subsection 5.12(3) (Natural Area Community Park (P3) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

41. Subsection 5.13(3) (National Park (NP) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

42. Subsection 5.14(4) (Conservation (RC) Siting and Size) is amended by deleting “or pump/utility house” such that it reads: “The minimum setback for any building or structure, except a fence, shall be:”

B. This Bylaw may be cited for all purposes as “South Pender Island Land Use Bylaw No. 92, 2003, Amendment No. 1, 2012.”

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

READ A FIRST TIME this	18th	day of	June	, 2013.
PUBLIC HEARING HELD this		day of		, 201_.
READ A SECOND TIME this		day of		, 201_.
READ A THIRD TIME this		day of		, 201__
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST this		day of		, 201_.
ADOPTED this		day of		, 201_.

SECRETARY **CHAIR**

STAFF REPORT

August 27, 2013

File No.: SP-6500-20 Marine Geoexchange Systems

To: South Pender Island Local Trust Committee
For the meeting of Sept 6, 2013

From: Andrea Pickard, Local Planning Services

CC: Robert Kojima, Regional Planning Manager

Re: Marine Geoexchange Systems

Preliminary Report

At the April 16th meeting of the South Pender Island Local Trust Committee (LTC) staff were directed to remove marine geoexchange loops from a draft bylaw of proposed amendments to the South Pender Island Land Use Bylaw (LUB). Subsequently at the June meeting the LTC considered a full range of regulatory options available for the LTC to regulate marine geoexchange loops. At the June meeting the LTC requested a more detailed report focusing on two of the regulatory options:

1. Adoption of new policies in the South Pender Island Official Community Plan (OCP) that would establish criteria to support a rezoning application, and
2. Adoption of a new development permit area (DPA) with relevant guidelines for marine geoexchange systems.

Background

The source of energy used in geoexchange systems is the latent heat energy stored in rocks, soils and water below the ground surface, which is often referred to as earth or geothermal energy. Below a certain depth ground temperature is relatively constant, typically in the range of 10-16 degrees Celsius; this constant temperature effect also occurs in large water bodies. Geoexchange systems utilize this stored heat (thermal energy) to provide heat during the winter, and cooling during the summer. Unlike other heat sources that typically convert a source of energy to create heat, such as burning heating oil, geoexchange systems move the heat energy from one location to another using standard pump and compressor technology (the exchange).

The industry preference is to use the term 'geoexchange systems' for relatively low-temperature systems used for a building's heating and cooling system; while the term 'geothermal systems' is used for high-temperature systems used for power generation i.e.; from geysers.

Increasingly owners are looking for renewable energy sources to reduce greenhouse gas emissions, using technologies that are reliable and resilient to a wide range of climatic conditions and are less reliant on traditional fuel sources. In recent years there has been an increased interest to install ground sourced heat pumps or geoexchange systems.

Land-based geoexchange systems located within the boundary of the property are considered accessory structures to the residential use of the property. However, when it is not feasible to install a land-based system then waterfront property owners could consider locating a system within the adjacent body of water, such as the ocean. Under the current regulations marine based geoexchange systems are not a permitted use in any of the water zones; therefore, a property owner would need to apply for a bylaw amendment (rezoning) to allow the use in the marine zone.

Issues

Increasing levels of greenhouse gas (GHG) emissions, due in part to the combustion of hydrocarbon based fuel sources, is a global concern due to the climate impacts; therefore efforts to reduce GHG emissions should be encourage where they are appropriate. Potential GHG reduction strategies include using alternative energy sources that should also be renewable and sustainable. Geothermal energy is a suitable alternative where the negative impacts from development can be mitigated so the overall result is a positive benefit to the environment. Ensuring the best technological design and construction practices are applied, in conjunction with minimal disturbance to the natural environment can ensure the overall goals are achieved.

Consideration of marine geoexchange systems is an example of the balance required between advancing environmentally friendly options with potential impacts. Rather than simply allowing these structures in the marine zones the LTC would like to consider more regulatory options to ensure any potential negative impacts can be mitigated and the potential positive impacts are feasible.

As discussed in the previous report at the June meeting, currently marine based geoexchange systems are not a specified permitted use in any of the water zones; therefore, a property owner would need to apply for a bylaw amendment (rezoning) to allow the use in the marine zone. There are no policies within the South Pender Island Official Community Plan that specifically addresses marine geoexchange systems and whether an LTC should support a rezoning application, or under what conditions a proposed marine geoexchange system should be supported.

Alternatively if the use was permitted within a zone then options to regulate the development include:

- How a use is defined within the Land Use Bylaw, which cannot be amended by variance so in order to be compliant with the bylaw the use would also have to fit within the definition,
- Adopt new general regulations within the bylaw that would specifically apply to marine geoexchange systems, similar to the regulations for home occupation,
- Identify marine geoexchange loops as a permitted use but also designate the marine waters and upland areas (7.5 m from the natural boundary of the sea) as a development permit area with applicable guidelines, this would mean any proposed system would need to demonstrate to the LTC that is complies with the guidelines. If the proposed

system complies with the development permit guidelines then the LTC would have to issue the required permit.

Options and Alternatives

OCP Policies

Currently there are no OCP policies that specifically address alternative sources of renewable energy, including land or marine based geoexchange systems. However, there is a goal in subsection 2.2.7 – To support the provincial target of reducing greenhouse gas emissions by 33% by 2020 from 2007 levels. Emission reductions within the local trust area may result from individual and community initiatives, the actions of other levels of government, technological changes, and changes to land use policies and regulations.

The general policies include 2.4.4 – In its decision-making, the Local Trust Committee will ensure that land use planning and development promote reductions in greenhouse gas emissions, support efforts to adapt to climate change impacts, and recognize the role of existing rural and natural areas in the absorption of carbon.

The LTC could consider goals that would be generally supportive of alternative energies, as well as specific criteria for marine based geoexchange systems. Adopting new OCP policies may indicate to a property owner that an application would be supported as long as the proposed system complies with the policies, however it would not fetter the decision of the LTC. Since an application to rezone would still be required, if additional concerns were raised that could not be mitigated or addressed by the owner then the LTC would not be obligated to approve the application based solely on the OCP policies.

Some examples of OCP policies the LTC could consider are:

1) The LTC supports incorporating renewable energy sources and energy efficient building design for all new buildings or when renovating existing buildings.

2) The LTC should ensure that land use planning and development support reductions in greenhouse gas emissions and efforts to adapt to climate change impacts.

3) The LTC may consider amending zoning regulations to permit or facilitate small-scale renewable energy production, such as solar collectors, wind turbines and geoexchange heating and cooling.

4) The LTC may consider approving applications for site-specific rezoning for the purpose of permitting a marine based geoexchange systems provided that:

    a) The proposed system is to be used for the abutting upland property,
    b) A rationale is provided outlining why a marine based system is proposed rather than a land based system located within the property boundaries,
    c) The system meets or exceeds the Design and Installation of Earth Energy Systems CSA standards CAN/CSA-448-02,
    d) The system is designed and installed by a Registered System Designer accredited by the Canadian Geoexchange Coalition or the International Ground Source Heat Pump Association,

e) The system is a closed-loop system with a preference for systems using only freshwater as the heat transfer fluid,
f) When freshwater is not the proposed heat transfer fluid, a rationale as to why it cannot be used should be provided and the heat transfer fluid proposed should have the lowest environmental risk possible,
g) The system design considers local climate change impacts, such as sea level rise and increased storm intensity and frequency,
h) Any proposed disturbance to an archaeological site obtains the necessary Archaeological Impact Assessment and/or Heritage Alteration Permit as required by the Archaeology Branch,
i) An environmental impact assessment indicates there is no disruption to natural coastal process, sensitive marine or terrestrial habitat, and disturbance to upland vegetation is minimized,
j) The system will not be located in areas suitable for forage fish habitat or with eelgrass present,
k) Areas of moderate or high steep slope hazard are avoided when possible and when they cannot be avoided an assessment of whether the proposed system would result in an accepted probability of a geotechnical hazard prepared by a geotechnical engineer (P. Eng) or professional geoscientist (P. Geo) is provided, and
l) All necessary approvals or permits will be obtained from provincial and federal agencies.

Development Permit Areas

The LTC could permit marine geoexchange systems as a use in the marine zones and concurrently adopt a development permit area (DPA) with guidelines to regulate them. It would be appropriate to designate both the marine waters and at minimum 7.5 m upland from the natural boundary of the sea to coincide with the setback as a development permit area.

The structures and uses permitted within a marine zone are listed in the following table noting which could also be addressed in DPA guidelines and required to obtain a permit, unless they were otherwise exempt from requiring a permit.

Marine Zone	Permitted Uses	Comment
Marine General W1	Anchorage and moorage of private vessels by the owner or occupier of the upland lot abutting the water area in which the vessel is anchored or moored	Not LTC jurisdiction to regulate
	Floats, docks, wharves, ramps, walkways accessory to the residential use of an abutting upland lot, or adjacent upland lots, and providing access to that lot or lots	Recommend to address; structures over/in water separately from land based
Marine Protection W2	Anchorage and moorage of private vessels by the owner or occupier of the upland lot abutting the water area in which the vessel is anchored or moored	Not LTC jurisdiction to regulate

Marine Zone	Permitted Uses	Comment
	The only structures permitted are anchorage apparatus, buoys, stairs adjacent to designated public accesses or temporary floats	Stairs or floats suitable for DPA
Marina W3	Marinas	The W3 zone is currently captured in DPA One – Commercial Form and Character, however structures not requiring a building permit are exempt, which would include the marine structures.
	Boat rentals, excluding rental of personal watercraft	
	Marine fuelling stations	
	Facilities for the temporary mooring of water taxis, pleasure craft, fishing boats and sea planes	
	Buoys, floats, wharves, docks, slips, ramps, walkways, piers, floating breakwaters, boat launching ramps, dolphins and pilings and buildings necessary for the establishment or operation of uses permitted in this zone	
Marine Transportation Service W4	Government wharf	Federal operations, not subject to local bylaws.
	Customs building	
	Signs, boat launching ramps, buoys, floats, wharves, docks, slips, ramps, walkways, piers, floating breakwaters, dolphins and pilings and buildings necessary for the establishment or operation of uses permitted in this zone	
National Park Marine W5	Marine navigation aids	Not LTC jurisdiction to regulate
	Natural resource management and protection	Federal operations, not subject to local bylaws.
	Docks, wharfage, and moorage accessory to the upland National Park lands	

A proposed DPA could be drafted to include only guidelines for a marine geoexchange loop and exempt other permitted structures, or include guidelines to also capture other structures such as stairs and docks providing access to the foreshore. The recent Shoreline and Marine DPA adopted for Galiano Island is an example of a comprehensive approach; see subsection V.2 of the Galiano Official Community Plan at:
http://www.islandstrust.bc.ca/ltc/gl/pdf/glbylbaseocp0108.pdf

Examples of DP guidelines, limited to regulating marine geoexchange loops only, are outlined below.

Development Permit Area 4 – Marine Geoexchange Systems

Designation

Development Permit Area 4 – Marine Geoexchange Systems includes all land 7.5 m upland of the natural boundary of the sea, and seaward to the boundary of the area of bylaw application.

Authority

The Marine Geoexchange Systems 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, Section 919.1(1)(b) for the protection of development from hazardous conditions, and Section 919.1(1)(j) for establishment of objectives to promote the reduction of greenhouse gas emissions.

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 a Commitment of Trust Council includes that protection must be given to the natural processes, habitats and species of the Trust Area, including those of old forests, Coastal Douglas-fir forests, Coastal Western Hemlock, Garry Oak/Arbutus forests, wetlands, open coastal grasslands, the vegetation of dry rocky areas, lakes, streams, estuaries, tidal flats, salt water marshes, drift sectors, lagoons, kelp and eel grass beds (Ecosystems 3.1.1) 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 (Coastal Areas and Marine Shorelands 4.5.3).

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 (Coastal and Marine Ecosystems 3.4.4);
- the planning for and regulation of development in coastal regions to protect natural coastal processes (Coastal and Marine Ecosystems 3.4.5) ;
- the needs and locations for marine dependent land uses (Coastal Areas and Marine Shorelands 4.5.8);
- the location of buildings and structures so as to protect public access to, from and along the marine shoreline and minimize impacts on sensitive coastal environments (Coastal Areas and Marine Shorelands 4.5.10); and

- the identification of areas hazardous to development, including areas subject to flooding, erosion or slope instability, and strategies to direct development away from such hazards (Growth and Development 5.2.6);

Furthermore, a goal of the South Pender Island Official Community Plan includes: to support the provincial target of reducing greenhouse gas emissions by 33% by 2020 from 2007 levels. Emission reduction within the local trust area may result from individual and community initiatives, the actions of other levels of government, technological changes, and changes to land use policies and regulations.

Shorelines within the South Pender Island Local Trust Area have high ecological function and values and may be subject to shoreline erosion in some locations. Due to their physical and biological characteristics and situation they need to be carefully managed to avoid potential negative impacts of development. Development and associated shoreline improvements or protection measures can threaten the ecological and physical integrity of the foreshore and upland.

Developments that advance the reduction of greenhouse gas emissions should be supported where they are sustainable and can be demonstrated to have minimal impacts on the environment.

The Objectives of the development permit area are:

1. To plan and regulate new development in a manner that preserves and protects the long-term physical integrity and ecological values of shorelines and associated foreshore and upland areas.
2. To manage development to minimize disruption of natural features and processes and to retain, wherever possible, natural vegetation and natural features.
3. To balance development opportunities, specifically those advancing alternative sources of renewable energy, with the ecological conservation of the shoreline environment.
4. To maintain the public's use and access to these important recreation areas in a way that does not compromise the ecological integrity of the shoreline or put users at undue risk
5. To mitigate the anticipated effects of climate change.
6. To protect development from hazardous conditions resulting from shoreline erosion.

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 for this purpose is based on the special conditions or objectives supporting the designation of the DPA. Development approval information means information on the anticipated impact of the proposed activity or development on the community or the natural environment.

Applicability

This Development Permit Area applies to all development proposed within the Marine Geoexchange Systems DPA, which is all land 7.5 m upland of the natural boundary of the sea, and seaward to the boundary of the area of bylaw application.

A development permit is required for the subdivision of land, construction of, addition to, or alteration of a building or structure, or the alteration of land, except where such activities are specifically exempt.

Exemptions

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

a) The construction of new land based buildings or structures permitted within 7.5 metres of the natural boundary, not including any structures for the purpose of a marine geoexchange system.
b) The construction of and installation of new marine based structures, not including any structures for the purpose of a marine geoexchange system.
c) Alteration of land, not including paved areas of asphalt, concrete or similar materials unless authorized through a development variance permit for a structure within the setback.
d) Subdivision of land.
e) Repair, maintenance, alteration or reconstruction of existing lawful buildings, structures or utilities, including those that are lawfully non-conforming (a building permit may still be required).
f) The removal of trees or vegetation and planting of trees or vegetation.
g) The placement of impermanent structures such as benches, tables and garden ornaments.
h) Emergency actions required to prevent, control or reduce an immediate threat to human life, the natural environment or public or private property including buildings or structures for the purpose of:
    i. Forest fire, flood and erosion protection works;
    ii. Protection, repair or replacement of public facilities;
    iii. Clearing of an obstruction from a bridge, culvert, dock wharf or stream; or
    iv. Bridge repairs.

Guidelines for marine geoexchange systems:

General:

1. Any marine geoexchange system to be sited within 50 metres of a registered archaeological site shall obtain the necessary permits and approvals under the *Heritage Conservation Act* from the Archaeology Branch of the province of British Columbia, or provide written confirmation that a permit or approval is not required.

2. Any marine geoexchange system shall obtain the necessary permits or approvals from Fisheries or Oceans Canada or other federal agencies with marine jurisdiction.

3. Any marine geoexchange system shall obtain the necessary permits or approvals for the use of Crown land and any other provincial agency with relevant jurisdiction.

System Design:

4. Marine geoexchange systems shall be closed-loop systems with no direct connection between marine water and the heat transfer fluid.
5. Marine geoexchange systems should be designed using fresh water as the circulating heat transfer fluid whenever possible. When freshwater cannot be used, it shall be demonstrated that the heat transfer fluid proposed has the least environmental risk possible, particularly for species in the aquatic environment.
6. All marine geoexchange systems shall meet or exceed the Canadian CSA design standards CAN/CSA-448-02, as amended from time to time.
7. All marine geoexchange systems shall be designed and installed by a Registered System Designer accredited by the Canadian Geoexchange Coalition or the International Ground Source Heat Pump Association.
8. All marine geoexchange systems shall take into account predicted sea level rise, storm surges, and other anticipated effects of climate change in the design of the system.

Upland:

9. All upland components within 7.5 metres of the natural boundary of the sea shall be located below ground whenever possible. If the terrain is not suitable for below ground installation then any exposed components shall be completely protected from damage, screened by vegetation, and follow the natural topography such that it is no further than 1.0 metre above ground at any point.
10. Existing, native vegetation should be retained wherever possible to minimize disruption to habitat and to protect against erosion and slope failure.
11. If the area has been previously cleared of native vegetation, or is cleared during the process of development, replanting requirements may be specified in the development permit.
12. 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 should 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.
13. The siting of the marine geoexchange system shall be designed to avoid disturbance to any 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.
14. Marine geoexchange systems shall not be sited in areas identified as having moderate or steep slope hazards without providing an assessment of potential geotechnical hazards that may affect the subject site and neighbouring properties. Geotechnical assessments shall include whether the proposed development would result in an accepted probability of a geotechnical hazard with supporting rationale and recommended mitigation strategies where appropriate.

15. In areas of steep slopes the removal of trees or other vegetation should be minimized and only where replacement vegetation/erosion control measures can be 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.

Marine:

16. Any marine geoexchange system shall not impede public access to or along the foreshore.
17. Marine geoexchange systems shall not be sited in areas with eelgrass present or areas identified as suitable for forage fish habitat.
18. All development within this development permit area should be undertaken and completed in such a manner as to prevent the release of sediment or sediment laden water to the shore or to any watercourse or drainage system 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.
19. A bio-assessment of the marine and foreshore areas by a qualified biologist shall be required confirming that no adverse impacts to fish or fish habitat are anticipated as a result of a proposed marine geoexchange system.
20. Where possible, marine geoexchange systems should be integrated into new or sited underneath existing docks to reduce the overall footprint of disturbance to the marine environment.

Special conditions:

21. Permits may include, as a condition, the provision of security to guarantee the performance of terms of the permit.
22. A development permit may require monitoring by a qualified professional of the implementation of environmental mitigation, restoration or enhancement planting or other measures required by a development permit, until all such measures have been completed and the professional has provided a report confirming completion to the standard specified in the permit.
23. The Local Trust Committee may consider variances to siting or size regulations to meet the objectives of the development permit area.

Analysis

The LTC should provide direction on how to proceed. The draft DPA guidelines above only address the construction and installation of marine geoexchange systems. If the objective is to address impacts to the shoreline from development more comprehensively then the LTC could consider an approach similar to Galiano Island. To remind the LTC the other options discussed at the June meeting included:

	Objective	LUB impact	OCP impact	Comment
1	Not permitted use and not generally supported	No change	Amend OCP to include policies not supportive of the marine use	Most restrictive option: Application to amend the LUB and OCP would be required
2	Status Quo	No change	No change	Application to amend the LUB required
3	*Not permitted use but supportable – addressed in this report*	*No change*	*OCP policies to clarify when supported*	*Application to amend the LUB required but less perceived risk to owner when proposal complies with policies*
4	*Permit the use but regulate- addressed in this report*	*LUB amended to add as a permitted use*	*OCP amended to adopt DPA*	*Application for a development permit would be required, proposal to comply with established guideline*
5	Permit the use with limited regulation	LUB amended to permit use and include definition of use and/or general regulations for specific use	No change required	General regulations in LUB cannot be as extensive as guidelines included in DPA option No application required if proposal complies
6	Permit the use	LUB amended to add use, consider less restrictive definition	No change required	Most permissive option: no application required if proposal complies

Depending upon how the LTC decides to proceed one or both of the OCP and LUB may require future amendments. The LTC may also want to consider referring the matter to the Advisory Planning Commission for comment.

Options:

Options for how the LTC could proceed include:

1. Direct staff to prepare a subsequent report with a draft project charter (scope, timeline, budget) to amend the OCP policies for marine geoexchange systems,
2. Direct staff to prepare a subsequent report with a draft project charter (scope, timeline, budget) to amend the LUB and OCP for a DPA addressing marine geoexchange systems only.
3. Direct staff to prepare a subsequent report to consider a more comprehensive shoreline DPA addressing any buildings or structures and land alterations.
4. Direct staff to proceed no further and maintain status quo.
5. Refer the matter to the APC for comment and defer your decision to a future LTC meeting.

RECOMMENDATIONS:

Resolutions for the LTC's consideration are provided for your convenience only.

1. THAT the South Pender Island Local Trust Committee direct staff to prepare a report including a draft project charter to proceed with potential OCP policies regarding marine geoexchange systems.

2. THAT the South Pender Island Local Trust Committee direct staff to prepare a report including a draft project charter to proceed with potential development permit area guidelines for marine geoexchange systems only.

3. THAT the South Pender Island Local Trust Committee direct staff to prepare a report to consider a comprehensive development permit area addressing shoreline and marine impacts.

4. THAT the South Pender Island Local Trust Committee direct staff to proceed no further and remove marine geoexchange systems from the work program.

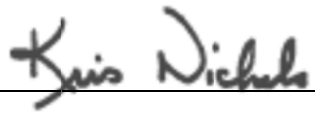
5. THAT the South Pender Island Local Trust Committee refer the matter to the Advisory Planning Commission and defer the decision on how to proceed to a future meeting.

Prepared and Submitted by:

August 27, 2013

Date

Concurred in by:



August 28, 2013

Date

(acting RPM)

South Pender Island Local Trust Committee

POLICIES AND STANDING RESOLUTIONS

Revised: February 14, 2012

No	Meeting Date	Resolution No.	Issue	Policy
1.	May 23, 2006	SP-LTC-12-06	Adoption of Minutes	That staff prepare draft of meeting minutes for Local Trust Committee reading, correction and amendment as soon as possible following meetings. The South Pender Island Local Trust Committee will adopt these minutes by Resolution without Meeting within fourteen business days, if possible, of each meeting. [The adopted minutes will be posted to the website as soon as possible and a copy will also be included in the next meeting's agenda package].
2.	April 14, 2009	SP-LTC-19-09	Website	It was Moved and Seconded that the South Pender Island Local Trust Committee request that the "latest news" section of the South Pender Island webpage be updated monthly with the addition of the South Pender Island Local Trust Committee Report to the Pender Post.
3.	October 5, 2010		Follow up action list	Send FUAL to trustees once drafted following the meeting.

Islands Trust

Top Priorities

South Pender Island

No.	Description	Activity	Received/Initiated	Responsibility	Target Date	Status
1	LUB Review and Update	1. Determine Scope of Review 2. Determine Timeline 3. Determine Methodology 4. Techncial Update 5. Initiate Background Work on selected topics 6. Undertake Community Consultation/Communications 7. Legislative Process	Oct-04-2011	Andrea Pickard		On Going
2	Shoreline Protection	1. develop new MapIT shoreline application for South Pender 2. develop web-based, interactive resource including interactive mapping and educational information	Oct-04-2011	Andrea Pickard		On Going
3	Marine Geothermal loops	consider alternative options to permit/ regulate ocean loops	Apr-16-2013			On Going
4	APC Bylaw	consider amending the APC bylaw and consider adopting related terms of reference	Apr-16-2013			On Going

Islands Trust

Projects

South Pender Island

No.	Description	Activity	Received/Initiated	Status
1	Development Approval Information Bylaw	To draft a DAI bylaw to provide certainty with respect to requirements for development permit applications	May-04-2010	On Going
2	Forest Lands	Public education regarding best management and stewardship practices on forest lands including wildfire prevention and preparedness	Feb-14-2012	On Going
3	Sensitive Ecosystem Mapping	consider DPA or other protective measure	Feb-14-2012	On Going
4	Geological Hazard Mapping	consider DPA or other protective measures	Feb-14-2012	On Going
5	Raptor Nests	consider DPA or other protective measure	Feb-14-2012	On Going
6	Parks and Recreation	update OCP schedule with more specific information after PIPRC Master Plan is reviewed	Feb-14-2012	On Going
7	Community Transition and Resilience	Support ongoing development of community transition and resilience to worldwide challenges such as climate change, peak oil, and food security	Jun-19-2012	On Going
8	Area Farm Plan	Potentially a Southern Gulf Island regional farm plan in conjunction with the CRD	Sep-18-2012	On Going
9	LUB Information Notes	consider including for clarification on: • roadside farm stands (setbacks, MoTI) • agriculture vs home occupation	Jun-18-2013	On Going

Print Date: Aug-28-2013

Applications w/ Status - South Pender Island
Status: Open

Applications

Subdivision

File Number	Applicant Name	Date Received	Purpose
SP-SUB-2011.2	Airey Group **Planner:** Andrea Pickard	Oct-26-2011	To create 4 new lots + remainder.

Planning Status

Status Date: Jun-06-2012

on June agenda for further discussion re: parkland and APC comments

Status Date: Apr-12-2012

PIPRC response considered at Apr LTC, referred to APC to discuss with stakeholders invited to participate

Status Date: Feb-09-2012

park proposal outline received and forwarded to PIPRC for comment

Sharon Lloyd-deRosario

From: Nancy Roggers
Sent: August-26-13 1:51 PM
To: Andrea Pickard; Ken Hancock; Liz Montague; Mike Jones; Robert Kojima; Sharon Lloyd-deRosario; Lori Foster
Subject: S Pender LTC expenses - August 2013

Islands Trust
LTC EXP SUMMARY REPORT F2014
Invoices posted to August 31, 2013

665 South Pender	Invoices posted to August 31, 2013	Budget	Spent	Balance
65000 665	LTC "Trustee Expenses"	1,100.00	279.76	820.24
65200 665	LTC Local Exp LTC Meeting Expenses	1,500.00	627.87	872.13
65210 665	LTC Local Exp APC Meeting Expenses	500.00	213.23	286.77
65220 665	LTC Local Exp Communications	500.00	258.07	241.93
65230 665	LTC Local Exp Special Projects	2,000.00	-	2,000.00
65240 665	LTC Local Exp Miscellaneous	250.00	-	250.00
TOTAL LTC Local Expense		4,750.00	1,099.17	3,650.83
73001 665 2011	South Pender OCP/LUB	2,000.00	1,729.27	270.73
73001 665 4005	South Pender Shoreline Protection	5,000.00	3,537.50	1,462.50
TOTAL Project Expense		7,000.00	5,266.77	1,733.23

Thanks!

Nancy Roggers
Finance Officer

Islands Trust
#200 1627 Fort Street
Victoria, B.C. V8R 1H8
Phone: (250) 405-5154
Fax: (250) 405-5155
www.islandstrust.bc.ca

Memorandum

Date August 16, 2013 File Number

To Galiano Island Local Trust Committee
Mayne Island Local Trust Committee
North Pender Island Local Trust Committee
Saturna Island Local Trust Committee
South Pender Island Local Trust Committee

From Robert Kojima
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.

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 reivews 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 included the attached table with all draft project submissions for information. LTCs should review the specific requests. The preliminary project requests have been drafted based on Top Priority work program items which are currently anticipated to commence, 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. Each LTC should identify any other projects it is currently considering and include 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 by including (deleting) _____and forward to Financial Planning Committee as revised.

Attachments:

1. Summary table of LTC project budget requests
2. Project Budget Submission worksheet

pc Island Planners

Galiano:

1. LUB Phase II (completion) - $3000 (Public hearings)
2. STVR review (completion) - $2500 (communication, public hearing)
3. Groundwater DPA (completion) - $2500 (communication, public hearing)

Mayne

1. RAR (completion) - $2000 (communication, public hearing)
2. LUB update - $5000 (communication, CIM and public hearing)

North Pender

1. Conservation subdivision review (completion) - $2000 (public hearing)
2. Road and transportation amendments (OCP and LUB) - $2500 (CIM and public hearing)
3. LUB updates - $5000 (CIMs, communications, public hearings)

Saturna

1. LUB update (completion) - $2000 (public hearing)
2. Density and Accommodation review (completion) - $2500 (public hearing, communications)

South Pender

1. Marine Geothermal (completion) - $2000 (public hearing)
2. Farm Plan (participation and matching funding) - $5000
3. LUB updates (new) - $4000 (communications, CIMs, public hearing)

S. PENDER	Project	Budget	Strategic Plan	Prov. Requirement	Continuation of existing OCP/LUB	Newly Adopted Policy in OCP	Notes	Approved by LTC	Approved by FPC	Approved by TC
Project #1	Marine geothermal (completion)	$ 2,000.00			x		public hearing			
Project #2	LUB amendments	$ 4,000.00					communications, CIM public hearing			
Project #3	Farm Plan (funding support)	$ 5,000.00					funding support			
	TOTAL PROJECTS	$ 11,000.00								

Memorandum

Date June 18, 2013

File Number 4020-20 Foreshore Structures

To Local Trust Committee

From Local Planning Committee

Re **PROACTIVE BYLAW ENFORCEMENT OF ILLEGAL STRUCTURES ON THE FORESHORE**

At the May 9th, 2013 Local Planning Committee (LPC) meeting the following resolution was passed:

It was MOVED and SECONDED
That the Local Planning Committee direct staff to ask the Local Trust Committees if they are willing to pilot a project on proactively enforcing illegal structures on the foreshore.

CARRIED

As a result, this memo is to ask whether there is willingness to participate in a pilot project regarding proactively enforcing illegal structures on the foreshore. Attached is a copy of the staff briefing report considered at the LPC meeting.

The purpose of this project is to address the issue of proactive bylaw enforcement of illegal structures on the foreshore and to develop a generalized approach that all islands could use through education, proactive enforcement and regulation. The intent of this project is to address the issue of illegal foreshore structures (e.g. buildings, decks, seawalls, etc.) through various methods of improving awareness about, and enforcement of, regulations pertaining to structures built near the sea.

At this stage, it is just to gather the interest of the LTCs and then a decision will be made on which LTC and what sort of pilot project it will be given the resources (staff and funding) available.

Please indicate your interest by e-mail to Kris Nichols, Island Planner at knichols@islandstrust.bc.ca . The LPC will take the LTCs interests and comments into consideration at the August LPC Meeting.

Attachment: Staff Briefing Report

Pc David Marlor, Director

BRIEFING

To: Local Planning Committee **For the Meeting of:** May 9, 2013

From: Kris Nichols, Island Planner **Date Prepared:** April 30, 2013

pc: David Marlor, Director **File No:** 4020-20 Foreshore Structures

SUBJECT: PROACTIVE BYLAW ENFORCEMENT OF ILLEGAL STRUCTURES ON THE FORESHORE

DESCRIPTION OF ISSUE:

Local Planning Committee (LPC) has as its number one priority on its Work Program, "Develop Mechanism for Proactive Bylaw Enforcement of Illegal Structures on the Foreshore". The purpose of this work program priority/project is to address the issue of proactive bylaw enforcement of illegal structures on the foreshore and to develop a generalized approach that all islands could use through education, proactive enforcement and regulations.

Initially, this priority was to be addressed in the form of a project charter. It was decided by staff in consultation with the LPC Chair and the Director of Local Planning Services that a project charter would not be the best approach to take at this time given the uncertainty of some of the issues around doing proactive enforcement, participation by the Local Trust Committees and resources (staff, time and money) required to carry out the project given the current budget of $2000.00. Staff determined that a report would be the best approach in order to provide information to understand the issues around proactive bylaw enforcement of illegal structures on the foreshore and to present options for consideration of moving forward.

The intent of this report is to outline the issues and the possible scope of enforcement that could occur and present options for LPC discussion and direction for moving forward.

BACKGROUND:

This project has been initiated by the Local Planning Committee (LPC). This topic is in the Strategic Plan as item 2.2. The intent of this project is to address the issue of illegal foreshore structures (e.g. buildings, decks, seawalls, etc.) through various methods of improving awareness about and enforcement of regulations pertaining to structures built near the sea.

Residents that have built within the setback to the sea have done so either through not being aware of current bylaw regulations or thinking that a replacement structure is permitted without adhering to the bylaws. Some may also believe that if a building permit is not required (e.g. seawall construction) there is no issue with other local bylaw requirements such as setbacks from the sea or development permits. As well, those that do build ignoring the regulations recognize that currently there is little risk. The structures are also generally not that visible except from the seaward side of the property that bylaw officers cannot easily access, making proactive enforcement difficult when you don't know where the structures are. The best option for viewing these foreshore structures is by boat, plane or helicopter, but to do this for all the islands with approximately 1377 km of shoreline may not a feasible solution. Residents that chose to ignore the regulations are generally aware that they can apply for a development

variance permit retroactively and in many cases these get approved, thereby weakening the argument for restrictive development of structures within the foreshore.

Generally, bylaw enforcement is complaint driven. That being said, the Islands Trust bylaw enforcement policy does permit bylaw enforcement officers to initiate enforcement on the foreshore without complaint as these areas are considered as environmentally sensitive. Pro-active enforcement is generally the best approach which should be combined with education (i.e. workshops, letters, brochures, web postings, newspaper advertisements, etc.) as bylaw officers have limited resources and capacity to do this on their own. Increasing proactive enforcement should result in greater compliance as it would increase the risk to property owners who ignored the regulations, but more importantly education of the regulations and their rationale and subsequent enforcement should help to reduce the number of bylaw infractions and protect these environmentally sensitive areas.

Rationale for Proactive Enforcement of Illegal Foreshore Structures

In establishing some of the background rationale for this priority staff has met with Bylaw Enforcement staff to gain a further understanding of the need for proactive enforcement and the specific file types (e.g. docks, decks, seawalls, etc.). Staff has reviewed the bylaw files pertaining to illegal foreshore structures on each of the islands. There are 38 files bylaw enforcement files currently open. They are as follows:

Island	Files	Generalized Type
Denman	6	Stairs to Foreshore: 5 Building: 1
Gabriola	1	Stairs to Foreshore & Log Seawall: 1
Galiano	2	Retaining Wall: 1 Stairs to Foreshore: 1
Gambier	8	Concrete Dock: 1 Structure (not specified): 5 Rip Rap Seawall: 2
Hornby	0	N/A
Lasqueti	0	N/A
Mayne	0	N/A
North Pender	5	Wooden Ramp to Foreshore: 1 Seawall (Possibly Rip Rap): 1 Dock: 2 Stairs to Foreshore: 1
Saturna	3	Deck: 2 Platform: 1
Salt Spring	8	Seawall (no indication of what type): 2 Groyne: 1 Deck with Stairway to Beach: 2 Deck: 2 Concrete Seawall: 1
South Pender	0	N/A
Thetis	5	Concrete Seawall: 1 Deck and Dock: 1 House/Deck/Stairs: 1 Float/Boat Ramp/Stairs: 1 Addition to Cabin: 1
Totals	38	Stairs to Foreshore: 7 Building: 1 Stairs to Foreshore & Log Seawall: 1 Retaining Wall: 1 Concrete Dock: 1 Structure (not specified): 5

		Rip Rap Seawall: 2 Wooden Ramp to Foreshore: 1 Seawall (not specified what type): 3 Dock: 2 Deck: 4 Platform: 1 Groyne: 1 Deck with Stairway to Beach: 2 Concrete Seawall: 2 Deck and Dock: 1 House/Deck/Stairs: 1 Float/Boat Ramp Stairs: 1 Addition to Cabin: 1

Table 1 – Foreshore Enforcement Files

The files listed above give a good indication of the issues that are prevalent for bylaw enforcement in addressing illegal structures on the foreshore with the most prevalent being providing access to the foreshore through the construction of stairs. The enforcement of these files will help to establish that there are regulations pertaining to illegal structures within the foreshore. It is hoped that through such enforcement that others will learn of the need to follow the regulations. This would have to be coupled with proactive enforcement in order to be more effective in getting the word out or to tackle those that were not a result of a complaint or happened upon by the enforcement officer. Again, bylaw enforcement will have to consider existing resources in order to determine whether they can expand their current enforcement program which will be needed at the outset. It should be noted that because four local trust committees do not have foreshore violations does not mean that they do not have illegal structures on the foreshore, they just don't have any recorded complaints.

Project Outline:

Staff has outlined in brief the project objectives and scope to address illegal foreshore structures. This is based on the original discussion at LPC, however, after some analysis staff realize that the project will have to be further defined prior to proceeding with further (more detailed) project evaluation.

<u>Proposed Project Objectives</u>

- Initiate proactive enforcement through regulation, education and awareness.
- Reduce the number of development variance permits that are applied for retroactively in the foreshore areas.
- Educate property owners with sea frontage on the importance of maintaining these environmentally sensitive areas and providing alternatives to hard structures where "green" structures could be utilized lessening the environmental impact.
- Educate agencies (e.g. CRD, VIHA, etc.) and contractors that deal with property owners with sea frontage (e.g. building permits, septic fields, etc.)
- Develop as required regulations that will help to protect the foreshore areas from illegal structures (e.g. development permits, additional setbacks, etc.)
- Establish general procedures for the enforcement of regulations with a combination of proactive enforcement and education. This would include an analysis as to the best way to establish a benchmark and the subsequent reviews of the island shorelines.

Proposed Project Scope

- Increase communication around education and awareness regarding foreshore/setback from the sea structure construction.
- Review of existing regulations on all Islands to determine if new regulations are required.
- Review of differing island approaches being taken for pro-active foreshore enforcement (i.e. existing bylaws, communication, etc.)
- Review of the current regulations used on each island regarding the ability to construct structures within the foreshore/setback to the sea.
- Determine the best approach to identifying structure on the foreshore (i.e. boat, plane, helicopter, roads, etc.) initially and a timeframe for subsequent analysis.

ATTACHMENT(S):

AVAILABLE OPTIONS:

Options to Consider for Proactive Enforcement

There are a number of options that should be considered by the LPC as to the direction to take toward increasing proactive enforcement of illegal structures on the foreshore. It is important to remember that currently the budget for this project is $2000.00 and that as this is an enforcement issue there are limited staff resources that need to be considered.

1. Trust Wide Proactive Enforcement
   This would be the most financially, staffing and time dependent option. It would involve researching the shorelines of all the islands to locate through GPS possible infractions and then identifying the specific properties and determining whether they had been given variances to accommodate the infractions or to determine when they may have occurred. It would then entail being proactive with the land owners and following up with their infractions. Follow up would be required by either bylaw enforcement staff or planning staff. Creating a foreshore picture of illegal structures would be a useful tool, but would have to be maintained every 2-3 years to be effective.

   Pros – this would create the best record of structures on the foreshore for all the local trust areas. It would enable staff to be proactive in their approach by identifying specific properties and thereby proposing specific remedies.

   Cons – It would be costly and time consuming for staff to establish the record and for follow up. Additionally, funding would be required and buy-in from all the local trust committees and respective staff. It would also have to be done every 2-3 years to remain effective. It would take staff away from current bylaw enforcement duties and file management. It may increase staff requirements for follow up.

2. Island Proactive Enforcement – Establish Generalized Approach
   The intent would be to take one local trust area to establish a proactive enforcement approach and to use that approach, once determined, in other local trust areas (with variations). .

   In addition, this approach could involve establishing an education and awareness program that could ultimately be used for other islands.

   Pros – this approach would create a sample proactive enforcement approach for a specific local trust area that could be used in other local trust areas. It would provide an

idea of what extra resources (i.e. staffing, time and money) would be required to do the proactive enforcement.

Cons – this approach would be specific to one local trust area and not address illegal foreshore structures immediately in all the local trust areas.

3. Education and Awareness Approach – Trust Wide
   This is would be the least resource dependent approach and would deal with ways to educate land owners of the need to protect the shoreline and likely could be started with the $2000 allocated at this time. However, it could be argued that this is the least likely way to get results.

   1. Mail outs – to select foreshore property owners for a targeted mail out of information regarding island specific enforcement (i.e. setbacks, development permit areas, etc.)
   2. Pamphlets/Brochures – a more general approach through the development of a brochure to be available at offices and possibly used for a mail out and placed on website.
   3. Website Updates – to be placed on all Island's web pages in a similar format with the brochure, but with island specific references (i.e. links to zones, Development Permit Areas, etc.)
   4. Information meetings – build on Shoreline Workshops held over the past couple of months, but with specific reference to enforcement issues and what can and cannot be built in the foreshore areas.
   5. Encouraging Local Trust Committees to adopt Development Permits for Shorelines Areas – while this may not stop illegal structures from occurring, the process of implementing Development Permit Areas will help to educate people about the importance of protecting the foreshore areas.

   Pros – this approach is the least costly method to get information out to the residents. It ensures that those that are most likely to be able to impact the foreshore will be made aware of what is permitted to be constructed and what is not. May be a first approach to enforcement and could be evaluated at a later date to see what else may be needed. It fits within the allocated budget.

   Cons – this approach may be the least likely to get results as it may just be considered another piece of paper and or meeting by the local trust committee.

4. Status Quo Approach
   Given that illegal foreshore activities are only 13.9% of enforcement files and the anticipated impact that proactive enforcement may have on current resources (staff, time and money) that no proactive enforcement be taken.

   Pro – keeps resources as they are currently being used.

   Con – illegal foreshore structures may continue to be an issue for many islands and enforcement will remain to be both complaints driven and proactive where noticed.

Staff Summary:

It should also be noted that the active files indicated in the table (See Table 1) represent 13.9% of the total number of open enforcement files (273) currently. It should also be noted that being proactive regarding illegal foreshore structures is important in order to address some environmental concerns; however, the reality is that it will have an impact on the existing enforcement resources and will undoubtedly increase the number enforcement files that staff will have to address. It will also likely impact planning staff for follow up where applications are made. It has to be understood that a shift in the allocation of the limited resources (i.e. staff,

time and money) would be required to be more proactive in enforcement thereby impacting what kind, how and when infractions are being dealt with.

A sample approach could be done with the $2000 currently allocated for this project, but certainly not the most effective approach, which is to survey all the foreshore properties in order to be truly proactive as to what currently exists on the foreshore properties. The LPC in making its decision about how to proceed will have to consider:

- The amount of resources (staffing, time and money) they want the Islands Trust to spend on being proactive?
- Given the amount of resources required to do this proactive enforcement in an effective manner and the resultant impact it will have on current enforcement. Should this still be an LPC top priority for all the Islands?
- There is no additional staffing enforcement resources and that bylaw files will grow and that the initiation of taking proactive enforcement measures will take some time to fully implement?
- Would education and awareness through brochures, website, and/or mail outs be sufficient given the resource limitations?

Given the possible breadth of this project and its scope staff is providing information to inform the LPC discussion on the various options considering the allocated budget available. Given the budget allocated, the most cost effective approach would be to do a brochure that could be useable for all islands and put on the websites as information as to what can and cannot be done and who to contact for further information.

FOLLOW-UP:

That the Local Planning Committee discuss and decide upon an option regarding proactive bylaw enforcement for illegal foreshore structures based on the information provided in this report entitled, "*Proactive Bylaw Enforcement of Illegal Structures on the Foreshore*" dated April 30, 2013.

Date: April 30, 2013

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