



STAFF REPORT

Date: November 8, 2013

File No.: 6500-20

To: Thetis Island Local Trust Committee
For meeting November 20, 2013

From: Jason Youmans, Planner 1

Re: Regulatory Options for Managing Docks on Ruxton Island

OVERVIEW

The purpose of this staff report is to inform the Thetis Island Local Trust Committee of the regulatory options available to manage the development of residential and/or community docks on Ruxton Island.

At its September 25, 2013 meeting, Thetis LTC passed a motion that read, "Direct staff to prepare a short summary report on the various options available to address docks on Ruxton Island and their implications, including more technical inquiry into temporary docks, shared docks, development permit area guidelines, site-specific zoning, and rezoning."

This staff report provides the information requested in the above resolution. It addresses the following topics: temporary docks, shared docks, zoning, and development permit areas.

It provides staff comment and concludes with recommendations that:

- Thetis LTC establish a zone in the land use bylaw around the perimeter of Ruxton Island within which docks are not a permitted use
- Thetis LTC include a policy in the Thetis Associated Islands Official Community Plan that Thetis LTC will support rezoning for community docks
- Thetis LTC consult with the community regarding a shoreline development permit area around the perimeter of Ruxton Island to minimize the environmental consequences of any future dock construction or other shoreline works
- Thetis LTC refer this staff report to the Ruxton Island Advisory Planning Committee for comment

BACKGROUND

Community consultation during the Associated Islands community plan project has demonstrated there to be considerable debate among property owners on Ruxton Island about whether docks should be permitted along the shoreline and what form they might take. The conversation concerning docks has touched on numerous topics, from environmental impacts and aesthetic values to emergency access and security. Comments were received on this issue during initial research prior to development of the draft OCP, during public review of the draft OCP, from members of the Ruxton Island Advisory Planning Committee, and at the most recent community information meeting on Ruxton Island on August 3, 2013. Despite the volume of opinion and comment received, it remains unclear to staff where majority opinion on the Island falls on the matter.

Since 1984, uses along the Ruxton Island shoreline have been governed through a Marine Environment Protection (W-1) zone which states that “No wharves, floats, breakwaters, pilings, or other permanent structures shall be permitted.” It is clear from recent conversations with some Ruxton Island property owners that a segment of the population feels that the prohibition of docks is unreasonable and an impediment to accessing their properties. Others feel that the 1984 bylaw lacks clarity. It is equally clear, however, that many property owners would strongly object to any relaxation of the current restriction on docks.

In determining how best to regulate docks on Ruxton Island, Thetis LTC should consider policies of the *Islands Trust Policy Statement* including, but not limited to:

3.4.4 Local trust committees ... shall, in their official community plans and regulatory bylaws,

- address the protection of sensitive coastal areas.

4.5.10 Local trust committees ... shall, in their official community plans and regulatory bylaws,

- address the location of buildings and structures so as to protect public access to, from and along the marine shoreline and minimize impacts on sensitive coastal environments.

4.5.11 Local trust committees ... shall, in their official community plans and regulatory bylaws,

- address opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways

5.5.4: Local trust committees ... shall, in their official community plans and regulatory bylaws,

- address the designation of locations for marinas, boat launches, docks and anchorages so as not to degrade sensitive marine or coastal areas.

5.5.5 Local trust committees ... shall, in their official community plans and regulatory bylaws,

- address the designation of locations for community and public boat launches, docks and anchorages.

Thetis LTC may also wish to consider, in their decision making, the range of community opinion they have received on the issue of docks during the course of developing the new Thetis Associated Islands official community plan.

Furthermore, Thetis LTC may wish to review the findings of McElhanney Consulting's *Ruxton Island Community Dock Options Study*. This study was commissioned to determine the feasibility of constructing a community dock at the terminus of any of the Island's right-of-ways and used five criteria (exposure, access from sea, access from land, distance to lots, ease of construction) to assess 15 prospective locations. Thetis LTC might consider that the feasibility findings of the McElhanney report are at least partly applicable to private docks constructed in the vicinity of some of the assessed public locations. Complementing the *Dock Options Study* was a case study of community and shared docks around the B.C. coast, which was presented to the Thetis LTC at its July 24, 2013 meeting. This report demonstrated that establishing zoning to allow community docks is but one small part of a far larger effort required to construct and operate community docks.

Limiting Factors

Trustees should note that external factors beyond Local Trust Committee land use regulations can impact future dock development on Ruxton Island.

The McElhanney *Dock Options Study* reviewed the various levels of provincial and federal permitting that are/may be required for constructing a dock in marine waters. These permits can be considered limiting factors. A given application might, for example, be denied provincial tenure because of the marine habitat at the proposed site or because of archaeological values present on the foreshore, damage to which cannot be mitigated. Transport Canada, meanwhile, might deny dock construction at a proposed site if it is perceived to pose a navigation hazard.

Certainly the topography and marine conditions at various shoreline sites around Ruxton Island will also significantly impact where and whether docks can be built. There are 122 waterfront properties on Ruxton Island. How many of these could actually support a dock is unknown. However, as one local dock building firm noted during research into this issue, if a property owner wants to spend enough money, a dock can be built almost anywhere.

The proposed establishment of the Southern Strait of Georgia National Marine Conservation Area may also influence use of the Ruxton Island foreshore and shorelines throughout the Islands Trust Area.

Temporary/Seasonal Docks

The idea of permitting only temporary or seasonal docks on Ruxton Island has emerged during local debate on the issue. For the purposes of this report, “temporary” refers to the dock’s physical infrastructure and ease of removal, while “seasonal” refers to the duration of time the dock is in the water. By this definition, it is assumed that all “seasonal” docks are probably “temporary” (i.e. easily removed), but all “temporary” docks are not necessarily “seasonal.”

Temporary Docks

In the coastal context, permanent and temporary docks are differentiated by the absence on the foreshore or in the water of permanent pile-driven or concrete-supported wharves or piers. Piled structures are generally built to ensure that public access along the foreshore is not interrupted by a ramp that runs from an upland property to a float, that none of the infrastructure rests on the foreshore or seafloor, and that the dock can withstand inclement conditions. The Crown owns the foreshore below the high water mark for the benefit of all British Columbians and will not approve “improvements” (i.e. docks) that unduly restrict foreshore access. This means that in many cases, absent a pier, only properties that slope steeply away from the water or that have a suitable upland structure can support a ramp that allows sufficient underside clearance so as not to obstruct the beach. The Province assesses applications for water lot tenure based on the perceived foreshore impact of a proposed development. It does not, therefore, differentiate between temporary and permanent structures when granting permits, since a temporary structure might be in place just as long as a permanent one. And although they might be “temporary,” any dock on the B.C. coast must still be robust enough to withstand wind and waves. Taken together, the various shoreline types on Ruxton Island and currently available dock technology means there will be circumstances where pier-less docks are viable on the Island and circumstances where they are not. If the Thetis LTC is zoned to prohibit permanent structures (i.e. piers) on the Ruxton foreshore, this would reduce the number of Island properties that could entertain a dock, and in doing so reduce the cumulative impact of docks on the shoreline. Requiring upland structures to be set back from the natural boundary of the sea could also influence the number of properties that could accommodate a temporary dock, as such a regulation would limit the physical infrastructure that could support a ramp.

When considering temporary docks, the word temporary refers to the docks, not the regulation that permits them. If temporary docks are made a permitted use and the community later decides they are no longer desired, they can’t simply be ordered removed just because their removal is easy.

The use of temporary docks will do little to limit the perception of negative aesthetic impacts associated with docks, especially for Ruxton property owners who, as a largely summer population, will be on-Island for the duration of time that temporary docks likely will be in the water. If Ruxton’s temporary docks are made seasonal, and permanent structures on the foreshore are prohibited, this would mitigate against negative aesthetic impacts during the winter months.

Temporary docks are superior to permanent docks from an environmental perspective, as the absence of permanent structures on the foreshore and in the water means less disturbance of habitat and fewer impacts on natural processes.

Seasonal Docks

Seasonal docks are docks that remain in the water for only part of the year. The duration of this period could be defined by bylaw, or, as is the case where seasonal docks are currently used in the Trust Area, at the discretion of their owners. There is nothing in the Province's language to differentiate permanent from seasonal docks, so any proposal for tenure of a Crown water lot for a seasonal dock will be held to the same standards as an application for a year-round structure.

Maintaining security on the Island has been raised by some property owners as an argument against permitting docks. Seasonal docks are superior to permanent ones from a security standpoint, insofar as their removal during the off-season makes access to the largely unattended island nominally more difficult. Furthermore, decommissioning seasonal docks during the winter months means fewer problems for property owners who return in the spring to find that a storm has swept their dock away.

Research into the issue of seasonal docks has suggested that local officials should consider where and how temporary or seasonal docks will be stored during the off-season. Some property owners may have lots that lend themselves to storage of such infrastructure. Others, however, may hire a contractor to raft and store them on water in a sheltered bay for the winter. Where they are ultimately stored may not be zoned for such a purpose, thus leading to bylaw enforcement issues in the Trust Area and creating aesthetic concerns for anyone whose property looks out onto them.

Discussion

If Thetis LTC believes that temporary seasonal docks can help achieve Ruxton community and Islands Trust objectives, the Thetis Associated Islands Land Use Bylaw could define "temporary dock" in a satisfactory manner and control for the maximum duration that such structures would be permitted in the water in a calendar year. If Thetis LTC believe that certain Ruxton property owners' concerns about emergency ingress and egress are sufficient to warrant permitting private residential docks, then temporary seasonal docks would be preferable from a marine environmental and aesthetic standpoint to permanent foreshore structures.

Private Shared Docks

The notion of permitting private shared docks on Ruxton Island has also emerged during local debate on the issue. While such an approach is feasible, it will be only briefly touched on here, as its implementation requires significant forethought on the part of staff and the Thetis LTC.

Private Shared (or “neighbourhood”) docks represent an opportunity to cap the total number of private docks that could ever be built on Ruxton Island. For example, establishing a shared dock zone that permits only docks shared by two adjacent waterfront property owners immediately halves the number of docks that could ever be built. Requiring sharing among three adjacent property owners reduces the potential dock build-out on the Island by two-thirds. Determining the number of property owners required to join a shared dock would be at the discretion of the Thetis LTC.

People’s general unwillingness to share their private property with others would likely provide a natural check on the number of property owners that would actually establish a shared dock. However, as the allocation of shared docks on Ruxton Island would be determined on a first-come, first-served basis, one could foresee a potential scramble to become part of a shared dock arrangement “before it’s too late” and before all necessary impacts are considered by property owners.

What makes a shared dock zone particularly complex for local government is determining the instrument by which sharing will be controlled and monitored. To make a shared dock zone function with adequate oversight, the Thetis LTC would need a regulatory trigger—a development permit being the most obvious option—the granting of which would be partly contingent on proof that the dock is indeed being shared. The strongest form of proof in this situation would be the registration on title of restrictive covenants that prevent all properties involved in a sharing arrangement—with the exception of the host—from building docks of their own in the future. The LTC might also consider requiring proof of participation in a non-profit society governing a shared dock’s operations as a condition of any shared dock development permit. Participation in a non-profit shared dock society could be used as a mechanism to provide dock access to upland property owners. The LTC would need to determine the minimum and maximum number of waterfront and upland properties that would be required to permit a shared dock. In addition to restrictive covenants, easements should be required across the property hosting the dock to ensure reliable access to the shared dock for current and future property owners.

While such prescriptive regulations are complex and potentially onerous on property owners, it seems otherwise insufficient to simply require a declaration at the time of rezoning that a dock will be shared in perpetuity; leniency at the outset of a shared dock scenario could potentially lead to reactive and expensive bylaw enforcement when shared docks gradually slip toward becoming private docks. This could also create problems for property owners who thought they had use of a shared dock and find they no longer do, impacting enjoyment of their property and potentially its resale value.

Discussion

If so directed by Thetis LTC, staff can further investigate the technical requirements of a shared dock zone and the mechanisms to control sharing. However, staff do not advocate the shared dock approach at this time, as, like temporary and seasonal docks above, it is unclear if the problem it is well suited to resolve—namely balancing demand

for residential docks against environmental and aesthetic considerations—actually exists on Ruxton Island. In the Metro Vancouver jurisdictions where shared dock zoning exists, they have been implemented as a solution to extremely high demand for private residential docks among waterfront property owners and the threat that demand poses to the marine environment. Ruxton is not currently confronted by a comparable intensity of demand. However, if in the future demand for private residential docks on Ruxton Island grows very strong, Thetis LTC may wish to consider this regulatory approach.

REGULATORY OPTIONS

Zoning

Zoning is used in many coastal jurisdictions to regulate docks. See attached Appendix A for example W1 zoning regulations from North Pender Island, which is typical of dock-permitting water zones in the Trust Area. While zoning generally controls only use, density, size and siting, some jurisdictions, such as Gambier Island, have included extra provisions in their water zoning to ensure docks adhere to certain conditions of use. Please see Appendix B attached for reference.

Potential water zoning possibilities for Ruxton Island include one of the following, or combinations thereof:

a) *Water zoning does not permit docks:*

Within such a zone, property owners wishing to construct a dock would be required to apply for rezoning, thus setting in motion a formal review and public process. The final decision on any rezoning rests with the Thetis Island LTC, informed by policies in the Official Community Plan, the Islands Trust Policy Statement, and information on the impacts of the proposed dock such as environmental concerns, and implications for the use and enjoyment of neighbouring properties. If Thetis LTC chooses this option, it will be important to adopt clear policies in the OCP that outline the circumstances under which a rezoning for a dock would be supported, desired characteristics of docks, and there could be different policies for different types of docks such as private, shared or community.

When the new Thetis Associated Islands land use bylaw is adopted, it will contain water zones around other islands (eg. Hudson, Reid, Dayman) where docks are permitted. Rezoning parts of the Ruxton shoreline could then be a matter of applying one of these dock-permitting zones to the subject water lot. Alternatively, site-specific zones could be created at the time of each rezoning application according to the applicant's needs and Islands Trust's requirements.

Once a given lot was rezoned to allow a dock, no further permit would be required from the Local Trust Committee. However, the Province would refer

each application for water lot tenure to staff for comment. Staff would assess each application to ascertain compliance with the zone's requirements.

b) *Water zoning permits private docks on all waterfront properties:*

Within such a zone, docks would be allowed on all waterfront properties. The permitted siting and size requirements of private residential docks would be defined in the regulation. No permits would be required from the Local Trust Committee, but the Province would refer each application for water lot tenure to staff for comment. Staff would assess each application to ascertain its compliance with the Land Use Bylaw.

c) *Water zoning permits temporary or seasonal private docks on all waterfront properties:*

Within such a zone, docks would be allowed on all waterfront properties. All docks, however, would be required to comply with the definitions of "temporary" and/or "seasonal" as defined in the bylaw, and any other siting and size requirements listed there. Such a zone might also prohibit the presence of permanent structures on the foreshore. No permits would be required from the Local Trust Committee, but the Province would refer each application for water lot tenure to staff for comment. Staff would assess each application to ascertain its compliance with the Land Use Bylaw.

d) *Water zoning permits shared docks Island-wide:*

Within such a zone, docks would be allowed on any waterfront properties subject to meeting the "sharing" requirements laid out in the Land Use Bylaw's definitions. As mentioned above, such a zone would be well-complemented by a development permit area through which Islands Trust staff could proactively determine that the conditions of sharing were being met. Such a DPA could also set requirements for minimal environmental and aesthetic impacts. Thus, in addition to the Crown tenure referral from the Province, applicants would be required to obtain a development permit from the Local Trust Committee. Construction of such a dock would not begin until requisite proof of sharing was provided.

e) *Water zoning permits community docks Island-wide:*

Within such a zone docks would be allowed wherever the definition of "community dock"—as defined in the Land Use Bylaw—could be met. For example, if community dock was defined such that one could be established only at the end of a provincial road right-of-way, then that is where they would be allowed. If they were defined such that they could be established on private lots subject to access guarantees that make them "community" docks, then they could conceivably be permitted anywhere. The definition of "community dock" would need to be carefully considered before inclusion in the Land Use Bylaw.

f) *Location-specific Pre-zoning*

While it is possible to proactively zone certain areas of the Ruxton shoreline for docks, staff do not recommend this approach. It would be tempting, for example, to pre-zone the ends of all Ruxton Island's right-of-ways for community docks. These are, after all, the most logical places for such structures and pre-zoning such sites could be perceived as demonstrating leadership in helping meet a community need. However, some Island residents who live in the most favourable locations for a community dock—as determined by the McElhanney study—have already expressed their strong distaste for such developments. In many cases, locations most favourable for community docks are the very locations where the immediate neighbours will have the least to gain, since access to their properties from the water is already fairly easy. Additionally, pre-zoning locations for community docks would require establishing certain maximum size regulations—length, width, and total area—that might not be workable on the site ultimately selected by a community group pushing for dock development. Simply put, pre-zoning these areas for community dock use would deprive neighbours of the opportunity for the input into a given dock proposal that comes during a rezoning. Requiring all docks—including community ones—to undergo rezoning effectively puts the onus on the project's proponents to bring the community on side and present a proposal that the neighbourhood will support.

Development Permit Areas

The limited scope of issues for which zoning can control has led many coastal communities to adopt development permit areas to manage foreshore development to protect against negative impacts on sensitive ecosystems and to address other environmental considerations. Development Permit Areas are a complement to zoning, defining *how* a particular use is carried out, not *if* that use can be carried out. Development permit areas enable staff to request information that may be germane to a proposed development—such as environmental mitigation measures from a qualified professional—and to make adherence to those measures a condition of permit approval. Please see Appendix C attached for an example shoreline development permit area currently in force on Galiano Island, particularly the document's final two pages which speak directly to the issue of docks. Galiano Island's water zoning permits residential docks on the shoreline, and the development permit area adds a layer of oversight as to *how* the dock is sited and constructed. A shoreline development permit area could include other guidelines deemed important by the local community such as aesthetic guidelines.

Unlike a rezoning, a development permit does not require a public process. If the guidelines described in the development permit area are met, then the permit is granted. As such, a development permit area's guidelines must capture everything of

concern to the community, since residents will not have the opportunity to comment on a given development application.

Discussion

Regardless of how Thetis LTC chooses to zone the waters around Ruxton Island, a development permit area is also recommended to ensure that any future shoreline construction is done in such a way as to minimize adverse marine environmental impacts.

STAFF COMMENTS

Community feedback on the docks question has demonstrated that the issue remains unresolved among Ruxton residents.

In determining how best to manage dock development on Ruxton Island, Thetis LTC should consider what objectives it hopes to achieve through regulation. If protection of the marine foreshore environment is an important objective—and the Islands Trust Policy Statement says it is—then the fewer docks on the Ruxton shoreline the better and a zone that does not permit private docks is preferred. However, if providing safe access for property owners is considered a high priority, then permitting the development of one or more docks is desirable. Given that community interest in this issue runs very high, it seems essential that Thetis LTC make incorporating stakeholder input into docks decision-making a goal of its regulatory regime. Requiring all prospective dock developments to go through a rezoning process, for example, guarantees the local community a chance to comment, while also providing the Thetis LTC with a gauge by which to measure community sentiment on the issue over time and an indicator with which to judge whether the marine zoning should be revisited and made less restrictive in the future.

In the absence of clear community direction that private residential docks should be permitted, it seems unnecessary at this time for the Thetis LTC to create a zone that allows private docks—whether permanent, temporary, or shared—and in doing so entrench a significant departure from the status quo without a clear compelling reason. The fact that in the almost 30 years since the current “no docks” zone was established no Ruxton property owners appear to have sought rezoning to allow a residential dock suggests that demand for residential docks is not particularly high. Restricting docks through zoning, meanwhile, does not mean that property owners who want one are absolutely denied that opportunity. Rather, it means they will be required to go through a rezoning process in which community members can participate and the LTC will weigh community sentiment in their final decision. Development of individual docks within a no-dock zone would be decided on a case-by-case basis. Where this approach breaks down is in the event that the first few applications for private residential dock rezoning receive resounding support from the community, are adopted by the LTC, and the floodgates then open to a flurry of rezoning applications. This would suggest that

staff and the LTC have misread community feeling and might be compelled to amend its policies and regulations on docks.

Admittedly, the notion of a densely populated (in the summer months) island that lacks the convenience and emergency access provided by any form of dock is unusual. Therefore, staff believe that the Island would benefit from the provision of community docks at some point in the future. As noted above, staff are aware that proactively zoning one or more suitable areas for a community dock removes the barrier of rezoning that would otherwise be a required step to establish one. Rezoning can be expensive and time consuming, so pre-zoning is one of the few points in the community dock process with which the local trust committee is able to assist. Despite this, staff believe pre-zoning to be premature at this time. McElhanney Consulting's *Dock Options Study* evaluated suitable locations for a community dock at road endings. It identified several potential sites, but those which are most favourable are also located in areas of good moorage and where nearby property owners appear in least need of docking facilities. In addition, property owners adjacent to possible community dock sites have expressed concerns about siting structures at these locations at this time.

Given the preliminary nature of the McElhanney feasibility study, and the lack of clear neighbour support for possible dock locations at road endings, staff recommend that these areas are not pre-zoned for community docks. However, policies in the Official Community Plan should address the designation of locations for community docks and opportunities for sharing dock facilities in order to be consistent with the Islands Trust Policy Statement, and to capture the vision of the community at this time, to the extent that there is agreement.

Under a no-dock marine zone, community docks would be handled in the same way as private docks, which is that they would be permitted subject to rezoning. One can foresee that an application from a community group to rezone a water lot at the end of a right-of-way for a public-use dock might garner more community support than a private property owner's application to rezone for private moorage.

In sum, establishing a "no docks" zone around Ruxton Island means that Thetis LTC is able to assess any future shoreline rezonings on a case-by-case basis, whether they be for private residential docks, shared docks among neighbours, or public-access community docks from a residents' association, and will be guided by OCP policies addressing them.

RECOMMENDATIONS

- 1) **THAT** Thetis LTC establish a zone in the land use bylaw around the perimeter of Ruxton Island within which docks are not a permitted use

- 2) **THAT** Thetis LTC include a policy in the Thetis Associated Islands Official Community Plan that the LTC will support rezoning for community docks
- 3) **THAT** Thetis Island LTC consult with the Ruxton Island community regarding a shoreline development permit area to minimize the negative environmental consequences of any future dock construction or other shoreline works
- 4) **THAT** Thetis LTC refer this report to the Ruxton Island Advisory Planning Committee for comment

Prepared and Submitted by:



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November 8, 2013

Date

Concurred in by:

Courtney Simpson

November 8, 2013

Courtney Simpson, RPP, MCIP
Regional Planning Manager

Date

Appendix A

North Pender Island W1 Zone

8.19 Water 1 (W1) Zone

BL 139

8.19.1 Permitted Uses

- (1) The following uses and no others are permitted in the Water 1 (W1) Zone:
 - (a) private floats, wharves, ramps and walkways accessory to the residential use of an abutting upland lot or lots abutting the sea, and providing access to that lot or those lots;
 - (b) pilings necessary for the establishment or maintenance of the uses permitted by Clause 8.19.1(1)(a);
 - (c) boat launching ramps; and
 - (d) marine navigation, marine navigation aids and marker buoys.

8.19.2 Buildings Prohibited

- (1) No building, including a boat house, may be constructed or erected on any float or wharf in the Water 1 (W1) Zone.

8.19.3 Commercial and Industrial Activity Prohibited

- (1) For certainty, no commercial or industrial activity or use is permitted in the Water 1 (W1) Zone.

8.19.4 Residential Use Prohibited

- (1) No person may reside on any structure or on any boat or vessel moored or wharfed in the Water 1 (W1) Zone.

8.19.5 Setbacks

- (1) No structure may be located within 3 metres of the seaward projection of any side lot line of the abutting upland lot.

BL 132

8.19.6 Size of Structures

- (1) The maximum water area that may be covered by floats and wharves is 37 m².
- (2) The width of any ramp or walkway, including handrails, used to access any float or wharf permitted in clause 8.19.1(1)(a) shall not exceed 1.5 metres .

Appendix B

Gambier Island - W1 Zone

5.16 Marine General (W1) Zone

The purpose of the Marine General Zone is to provide regulations for the use of the foreshore and marine areas for private docks that provide access to upland residential lots.

Permitted Uses

- (1) The following uses are permitted, subject to the regulations set out in this section and Part 3, and all other uses are prohibited:
 - (a) Non commercial anchorage and moorage of private vessels.
 - (b) Accessory use to upland residential use.
 - (c) Utilities.

Permitted Buildings, Structures and Density

- (2) Permitted buildings are limited to one gear locker.
- (3) Permitted structures are:
 - (a) mooring buoys, floats, docks, wharves, ramps, and walkways providing marine access to upland residential uses; including dolphins and pilings necessary for the establishment or operation of the permitted use;
 - (b) neighbourhood dock;
 - (c) swimming floats;
 - (d) structures for utilities.

Siting and Size

- (4) The maximum area that may be covered by dock floats is:
 - (a) 65 square metres for a dock serving one lot;
 - (b) 65 square metres plus 47 square metres per lot served up to a maximum float size of 159 square metres, provided a restrictive covenant is registered on the title of the benefiting parcels to limit the total number of private docks.
- (5) Despite regulation 5.16(4), where the upland parcel has not been subdivided but subdivision potential exists based on the minimum average lot area for the applicable zone of the upland parcel, and a neighbourhood dock cannot be provided through regulation 5.16(4)(b) the maximum area that may be covered by dock floats may be increased by 47 square metres per potential lot to a maximum float size of 159 square metres, provided a restrictive covenant is registered on the title of the benefiting parcels to limit the total number of private docks.
- (6) The maximum area that may be covered by seasonal floats is 50 square metres surface area.
- (7) The width of any ramp or walkway, including handrails, used to access any float or wharf shall not exceed 1.5 metres.

Information Note: Some words and phrases are defined in Part 1.

A chart at the end of the Bylaw provides approximate imperial equivalents.

- (a) Despite 5.16(7), in areas outside the W1 (a) zone, the maximum width of any ramp or walkway, including handrails, used to access any float or wharf shall not exceed 2.4 metres.
- (8) Ramps shall have a minimum clearance of 0.5 metres above the natural boundary of the sea.
- (9) The maximum height of gear lockers is 2 metres.

Conditions of Use

- (10) The permitted anchorage and moorage use is only permitted in conjunction with a permitted upland residential use.
- (11) Docks shall not be located such that they physically divide a beach identified on Schedule D of the Official Community Plan.
- (12) Structures associated with anchorage and moorage:
 - (a) shall be located such that they will not negatively impact eelgrass meadows, kelp beds, or shellfish beds;
 - (b) made of newly treated wood shall bear the BMP certification mark ensuring that appropriate treatment and post-treatment measures have been employed in producing the preserved wood;
 - (c) shall not restrict the movement of aquatic life requiring shallow water.
- (13) The placement of structures associated with anchorage and moorage shall not involve the excavation or filling of the seabed, intertidal foreshore or adjacent upland.
- (14) Bulkheads for docks shall not be located on the foreshore.
- (15) Lights on docks that shine into a lot not served by the dock are not permitted.

Information Note: Some words and phrases are defined in Part 1.

A chart at the end of the Bylaw provides approximate imperial equivalents.

Appendix C

Galiano Island - Shoreline DPA

BL219

2. Development Permit Area 2 – Shoreline and Marine DPA

2.1 Designation

Development Permit Area 2 includes all land 15 m upland of the natural boundary of the sea, and seaward to the boundary of the area of bylaw application.

2.2 Authority

The Shoreline and Marine 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)(f) for establishment of objectives for the form and character of commercial, industrial or multi-family residential development.

2.3 Special Conditions and Objectives that Justify the Designation

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

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

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

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

- the protection of sensitive coastal areas;
- the planning for and regulation of development in coastal regions to protect natural coastal processes;
- opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways; and

- the compatibility of the location, size and nature of marinas with the ecosystems and character of their local planning area.

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

The Objectives of the development permit area are:

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

2.4 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.

2.5 Applicability

This Development Permit Area applies to all development proposed within the Shoreline and Marine DPA. 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.

2.6 Exemptions

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

- a) Repair, maintenance, alteration or reconstruction of existing lawful buildings, structures or utilities, including those that are lawfully non-conforming, provided there is no alteration of undisturbed land or vegetation (a building permit may still be required).
- b) The placement of impermanent structures such as benches, tables and garden ornaments.
- c) Development on land that is subject to a conservation covenant under section 219(4) of the *Land Title Act* in relation to natural, environmental, wildlife or plant life value relating to the land, granted to the Local Trust Committee or a covenantee designated under section 219(3)(c) of the *Land Title Act*.
- d) Repair and maintenance of existing roads, driveways, paths and trails, provided there is no expansion of the width or length of the road, driveway, path or trail, and no creation of additional impervious surfacing, including paving asphaltting or similar surfacing.
- e) The removal of trees that have been examined by an arborist and certified to pose an immediate threat to life or property.
- f) Removal of invasive plants or noxious weeds on a small scale within the Development Permit Area.
- g) Farm operations as defined in the *Farm Practices Protection (Right to Farm) Act* and farm uses as defined in Section 2(2), (3), (4) and (5) of the Agricultural Land Reserve Use, Subdivision, and Procedure Regulation.
- h) Forest management activities, as defined in the *Private Managed Forest Land Regulation*, on land classified as managed forest land under the *Private Managed Forest Land Act*.
- i) Construction of a fence so long as no native trees are removed and the disturbance of native vegetation is restricted to 0.5 metres on either side of the fence;
- j) Gardening and yard maintenance activities within an existing landscaped area, such as lawn mowing, tree and shrub pruning, vegetation planting and minor soil disturbance that do not alter the general contours of the land.
- k) The pruning or limbing of trees provided it cannot reasonably be expected to result in the death or removal of the tree.
- l) The construction of a small accessory structure such as a pump house, gazebo, garden shed or play house if all the following apply:
 - The structure is located within an existing landscaped area;
 - No native trees are removed;
 - The structure is located a minimum of 7.5 metres from the natural boundary of sea or, where the bank has a slope greater than 3:1 at any point, 7.5 m from the top of the bank, whichever is further; and
 - The accessory structure does not cover an area greater than 10 m².
- m) Emergency actions required to prevent, control or reduce an immediate threat to human life, the natural environment or public or private property including:
 - Forest fire, flood and erosion protection works;
 - Protection, repair or replacement of public facilities;

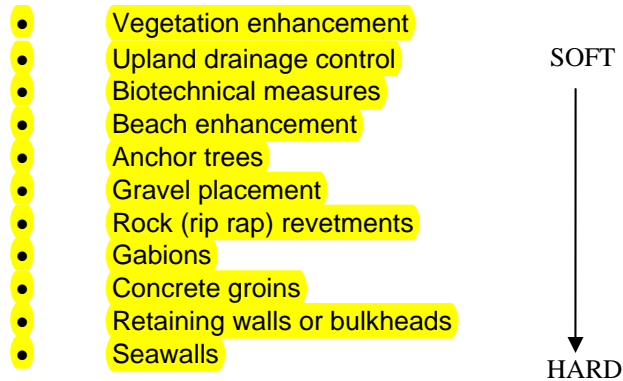
- Clearing of an obstruction from a bridge, culvert, dock wharf or stream; or
 - Bridge repairs.
- n) The installation of mooring buoys.
- o) Works undertaken by a local government or a body established by a local government.

2.7 Guidelines

General Guidelines:

1. In general, development of the shoreline area should be limited, should minimize negative impacts on the ecological health of the immediate area, and should not impede public access.
2. Shoreline protection measures should be limited to those necessary to prevent damage to existing structures or established uses on the adjacent upland. Softer shore protection measures should be considered first, and only if all options to locate and design without the need for shore protection works are exhausted should such works be considered.
3. Sea level rise, storm surges, and other anticipated effects of climate change should be addressed in all applications.
4. The Local Trust Committee may consider variances to subdivision or building and structure siting or size regulations to meet the objectives of the development permit area.
5. New upland structures or additions to existing structures should be located and designed to avoid the need for shore protection works.
6. When required, shore protection measures should:
 - a. Apply the 'softest' possible shore protection measure that will still provide satisfactory protection; and
 - b. Limit the size of shore protection works to the minimum necessary.

Shore Protection Measures are modifications to the shoreline, or adjacent seaward or landward areas, for the purpose of protection against erosion. Structural protection measures are often referred to as 'hard' and 'soft'. 'Hard' measures refer to those with solid, hard surfaces, such as concrete bulkheads, while 'soft' structural measures rely on less rigid materials such as biotechnical vegetation measures (biotechnical measures are the specialized use of woody plant materials to stabilize soil) or beach enhancement. There is a range of measures varying from soft to hard that include:



In general, the harder the construction measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions.

7. 'Hard' structural shore protection measures (e.g. concrete walls, lock block, stacked rock) may be considered in support of existing development only when a geotechnical and biophysical analysis demonstrates that:
 - a. an existing structure is at immediate risk from shoreline erosion caused by tidal action, currents, or waves. Evidence of normal sloughing, erosion or steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not sufficient demonstration of need;
 - b. the erosion is not being caused by upland conditions, such as the loss of vegetation and uncontrolled drainage. The geotechnical analysis should evaluate on-site drainage problems and investigate drainage solutions away from the shoreline edge before considering structural shoreline stabilization;
 - c. non-structural measures, such as locating new buildings and structures further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or sufficient to address the stabilization issues; and
 - d. unavoidable damage to shoreline ecological function is mitigated as much as feasible and restoration is undertaken when feasible.
8. All structural shore protection measures should be installed within the property line or upland of the natural boundary of the sea, whichever is further inland. 'Soft' shoreline protection measures that provide restoration of previously damaged ecological functions may be permitted seaward of the natural boundary subject to obtaining necessary approvals from the provincial and federal governments.
9. New development on steep slopes or bluffs shall be set back sufficiently from the top of the bluff to ensure that shore protection measures will not become necessary during the life of the structure, as demonstrated by a geotechnical assessment of the site.
10. Shore protection measures that are likely to cause erosion or other physical damage to adjacent or down-current properties shall not be supported.
11. Shore protection measures should not be considered for solely the purpose of providing a sufficient setback to meet other land use bylaw requirements.

12. New driveways and sewage disposal systems should not be located in the development permit area. If such a location cannot be avoided, the encroachment into the development permit area must be minimized, and the development permit may require that the assessment, design and construction of the road or sewage disposal system be supervised by a qualified professional to ensure that the objectives and guidelines of the development permit area are met.
13. Where this development permit area includes native plant species or plant communities dependent on a marine shoreline habitat that are identified locally, provincially, or federally as sensitive, rare, threatened or endangered, or have been identified by a qualified professional as worthy of particular protection, their habitat areas should be left undisturbed. If disturbance cannot be entirely avoided, development and mitigation / compensation measures shall be undertaken only under the supervisions of a qualified professional with advice from provincial and federal environmental agencies.
14. Shore protection measures should not be allowed for the purpose of extending lawns or gardens, or to provide space for additions to existing structures or new outbuildings.
15. Existing shore protection works may be replaced if the existing works can no longer adequately serve their purpose provided that:
 - a. The replacement shore protection works are of the same size and footprint as the existing works, unless required to prevent shoreline erosion as determined by a qualified professional;
 - b. The replacement shore protection works are designed, located, sized, and constructed to mitigate the loss of ecological functions, and include habitat restoration measures when feasible;
 - c. Replacement walls or bulkheads do not encroach seaward of the natural boundary or the seaward limit of the existing shore protection works unless there are significant safety or environmental concerns that could only be addressed via such an encroachment. In such cases, the replacement of shore protection works should utilize the 'softest' approach possible and should abut the existing shore protection works; and
 - d. Where impacts to critical marine habitats would occur by leaving the existing works in place, they can be removed as part of the replacement measure.

Guidelines for Subdivisions:

16. All lots in a proposed subdivision must be configured to have sufficient area for permitted principal and accessory uses without encroaching into land use bylaw setbacks, the Development Permit Area, or creating a likelihood of shoreline protection measures for the permitted level of development.

Guidelines for Commercial and Industrial Development:

17. Boat maintenance and repair facilities shall be designed and sited in a manner that minimizes the potential for the discharge of toxic materials from boats (e.g. fuels, oils, maintenance by-products).
18. Lighting of commercial and industrial developments built over the water surface should be kept to the minimum necessary for safety and visibility.

Light fixtures on such sites should focus light on the area to be illuminated and avoid spillage of light into other areas. Fixtures should not result in glare when viewed from areas that overlook the sea. Low-glare fixtures with a high-cut off angle should be used. Full-spectrum fixtures are preferred. Neon lighting should not be used outside buildings.

19. Signs on commercial and industrial developments built over the water surface should not move or be audible and should not incorporate lighting that moves or flashes or gives the impression of doing so.
20. Offshore log storage should be located such that natural flushing and water circulation will disperse waste materials, and log dumping facilities should be designed and operated to prevent bark and other debris from accumulating on the sea bed.

Guidelines for Specific Shoreline Types:

21. Because of their extreme sensitivity to disturbance and slow rate of recovery, dredging or filling of estuaries should not be permitted, sea walls and rip rap embankments should not be permitted in estuaries, and when shore protection measures are necessary “beach nourishment” designs are preferred, which add appropriately sized material to the upper beach, creating a natural beach slope and beach armour.
22. New structures on steep slopes or bluffs shall be set back sufficiently from the top of the bluff to ensure that shore protection measures will not become necessary during the life of the structure, as demonstrated by a geotechnical analysis for the structure.
23. Removal of trees or other vegetation from steep slopes or bluffs should only be allowed where necessary and where replacement vegetation / erosion control measures are established. If possible, stumps should be left in place to provide some soil stabilizing influence until replacement vegetation is established. Plans delineating extent of vegetation / tree removal (location, species and diameter of trees) and location of proposed construction, excavation and / or blasting, may be required.

Guidelines for Construction Practices:

Erosion Control:

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

Monitoring:

25. 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.

Guidelines for Vegetation Management, Restoration and Enhancement:

26. Existing, native vegetation should be retained wherever possible to minimize disruption to habitat and to protect against erosion and slope failure.
27. Existing trees and shrubs to be retained should be clearly marked prior to development, and temporary fencing installed at the drip line to protect them during clearing, grading and other development activities.
28. 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. Areas of undisturbed bedrock exposed to the surface or natural sparsely vegetated areas should not require planting.

29. 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.
30. All replanting should be maintained by the property owner for a minimum of 2 years from the date of completion of the planting to ensure survival. This may require removal of invasive, non-native weeds (e.g., Himalayan blackberry, Scotch broom, English ivy) and irrigation. Unhealthy, dying or dead stock should be replaced at the owner's expense in the next regular planting season. Permits may include, as a condition, the provision of security to guarantee the performance of terms of the permit.

Guidelines for Shore Protection Measures Design:

31. Materials used for shoreline stabilization should be inert. Stabilization materials should not consist of debris or contaminated material that could result in pollution of tidal water.
32. Revetments (rip rap slopes) and bulkheads (retaining walls) should only be constructed if no other alternative exists.
33. Where revetments are proposed:
 - a. They should not result in the loss of shoreline vegetation or fish habitat;
 - b. The size and quantity of materials used should be limited to that necessary to withstand the estimated energy of the location's hydraulic action and prevent collapse; and
 - c. Filter cloth should be used to aid drainage.
34. Where bulkheads are proposed:
 - a. They should not be located where geomorphic and hydrologic processes are critical to shoreline conservation. Feeder bluffs, marshes, wetlands, spits and hooks should be avoided;
 - b. They should be located parallel to and landward of the natural boundary of the sea, as close to any natural bank as possible;
 - c. They should allow the passage of surface or groundwater without causing ponding or saturation; and
 - d. They should be constructed of stable, non-erodible materials that preserve natural shoreline characteristics. Adequate toe protection including proper footings and retention mesh should be included. Beach materials should not be used for fill behind bulkheads.

Guidelines for Beach Nourishment and Fill:

35. Fill upland of the natural boundary greater than 10 cubic metres in volume should be considered only when necessary to assist in the enhancement of the natural shoreline's stability and ecological function. Such fills should be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.

36. Fill below (seaward of) the natural boundary should be considered only when necessary to assist in the enhancement of the natural shoreline's stability and ecological function, typically as part of a beach nourishment design.
37. Fill should not be placed at or below the natural boundary for the purposes of providing a trail or walkway.
38. All upland fill and beach nourishment materials should be clean and free of debris and contaminated material. All fill and beach nourishment proposals are subject to review and approval by provincial and federal authorities having jurisdiction.

Guidelines for Shore Access and Parking:

39. Roads, driveways, trails and pathways should follow the contours of the land, appropriately manage drainage, not require retaining walls, and only use stairs as a last resort.
40. Accesses in extremely sensitive areas or hazardous areas should be restricted or prohibited.
41. Parking areas should be located away from the shore, buffered or landscaped, and constructed so as to minimize erosion and water pollution by controlling storm runoff. Structural measures such as catch basins, oil separators, filtration trenches or swales, unpaved or permeable all weather surfaces should be considered for this purpose.

Guidelines for the Construction and Replacement of Docks and Boat Launch Facilities:

42. For residential properties, preference is to be given to the placement of mooring buoys and floats instead of docks.
43. Docks and wharves should be designed to ensure that public access along the shore is maintained except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions.
44. Docks and wharves should be sited to minimize impacts on sensitive ecosystems such as eelgrass beds, fish habitat and natural processes such as currents and littoral drift.
45. Docks should be constructed in a manner that permits the free flow of water beneath. Supports should be located on a hard substrate.
46. Floating docks should not rest on the sea bed at any time and a minimal, moveable ramp rather than a fixed wharf or pier should be utilized to connect the dock with the shore.
47. Piers and pilings and floating docks are preferred over solid-core piers.
48. Docks should not use unenclosed plastic foam or other non-biodegradable materials that have the potential to degrade over time. Docks should be constructed of stable materials that will not degrade water quality. The use of creosote-treated pilings is discouraged.
49. Boat launch ramps are the least desirable of all water access structures and should be located on stable, non-erosional banks where a minimum amount of substrate disturbance or stabilization is necessary. Ramps should be kept

flush with the slope of the foreshore to minimize interruption of natural geo-hydraulic processes.

50. Construction of a private ramp on an individual residential lot or parcel is discouraged. Owners are urged to seek opportunities to use public ramps or to share existing private ramps.

51. Residential docks should be located and designed to avoid the need for shore defence works or breakwaters.

52. Residential docks should not extend from shore any further than necessary to accommodate a small pleasure craft. Residential docks should not be designed to accommodate boats with a draft greater than 2.2 metres or have floats more than 35 square metres total surface area unless more than two parcels have legal access to the dock, in which case permitted total surface area should be a multiple of the number of lots the dock serves.