Gambier Island Local Trust Committee

Gambier Island Official Community Plan and Land Use Bylaw Targeted Review Project

SHORELINE PROTECTION DISCUSSION PAPER - DRAFT

July 2022



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Summary

The Gambier Island Local Trust Committee (LTC) is engaged in a targeted review of the Official Community Plan and Land Use Bylaw in the Gambier Island Local Trust Area. As a mechanism for providing background and context, staff have prepared a discussion paper on shoreline policies and regulations on Gambier Island. The purpose of this discussion paper is to provide analysis, technical information and recommend options in order to inform discussion and deliberation as the project progresses.

1. Background

A review of Gambier's OCP was identified as Top Priority project in 2015. As a result, the Gambier Island LTC is embarking on a review of Gambier Island's land use policies and regulations, with a specific focus on three topic areas:

- forest ecosystem protection;
- shoreline protection and access to public docks and;
- archaeological and cultural site protection.

The purpose of these discussion papers is to inform discussion and deliberations for the Gambier Island Official Community Plan (OCP) and Land Use Bylaw (LUB) Targeted Review. The focus of this discussion paper is shoreline protection and public docks.

The concerns are understood to include environmental impacts, particularly on eelgrass or forage fish spawning areas; continued public access to the New Brighton dock and boat ramp; and impacts on public access to the foreshore for residents and visitors of the Island.

A high concentration of archaeological values, including an estimated 80% of known archaeological sites, are found near the foreshore. Increasingly, First Nations are expressing concerns about the proliferation of shoreline development, which may impact their ability to engage in traditional food gathering activities, and other cultural impacts, as well as generating rights and title implications.

In addition to community concerns, a review and update to policies and regulations for Gambier Island has not been done since the adoption of the Gambier Island Official Community Plan (OCP) Bylaw No. 73, 2001 and the Gambier Island Use Bylaw No. 86, 2004 (LUB). It is generally considered good practice to review OCPs every 5 to 10 years.

The overall objectives of the project are to amend the Gambier OCP and LUB with regards to:

- First Nations Perspectives;
- Archaeological and cultural site protection;
- Forest Ecosystem Protection;
- Shoreline Protection;
- Public docks; and
- Technical amendments.

This discussion paper has been prepared to present an overview of existing Gambier Island regulations and policies, provide a comparison of other Local Trust Area's regulations, and present potential regulatory options for proceeding.

2. Limitations

This discussion paper has several limitations. An overarching goal of this portion of the targeted review is to strengthen opportunities for protection of archaeological resources, sensitive ecosystems, shoreline integrity and maintain access to a public dock on Gambier Island.

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

It is recognized that Gambier Island is accessible by boat only, and that many properties are water access only, having no access to a developed road. Options for access include private boat, water taxi from Gibsons or Horseshoe Bay or a passenger ferry service from Langdale. Public docks are an incredibly important and unique amenity on Gambier Island.

There have been ongoing community concerns raised about the future of the New Brighton dock; however, Islands Trust does not have jurisdiction over public dock tenure. Islands Trust can ensure the zoning allows a public dock and passenger ferry access, but the ownership, maintenance and access is out of scope.

3. Gambier Island's Shoreline

Gambier Island's shoreline is broadly divided into three regions.

Foreshore (intertidal): the intertidal zone or the foreshore, is the area of land between the high and low water marks of the sea (in other words, the area within the tidal range). This area can include several types of habitats with various species of life.

nearshore (non-tidal marine areas): The nearshore is the area that encompasses the foreshore (intertidal from the highest high tide to the lowest low tide) and subtidal zones.

backshore (upland): The part of the beach lying between the beach face and the front dune, cliff base, vegetation line or coastal protection structure. The backshore is dry under normal conditions; it is often characterised by berms. Vegetation is generally sparse or even absent. The backshore is only exposed to waves under extreme events with high tide and storm surge.

The Gambier Island shoreline is largely bedrock with a few sand and shell pocket beaches. The map below illustrates the distribution of shoreline types on Gambier Island.



4. Issues and Concerns

This section will be developed and expanded as community engagement gets underway.

Concerns may include:

- Size of accessory buildings (particularly, boathouses) located within the setback to the natural boundary of the sea;
- Tree removal along the shoreline; and
- Tramways for transporting goods from the beach up steep embankments to private residences.

5. Existing Islands Trust Policies

1.1. Islands Trust Policy Statement (ITPS)

The Islands Trust Council is currently undertaking a process to amend the Policy Statement which has not been substantively updated since 1994. This discussion paper will look at the policies in the current Policy Statement.

The Policy Statement guides land use planning and development through the preserve and protect mandate of the Islands Trust. It includes goals and policies that reflect the values and concerns for the future of the entire Trust Area. Local trust committee official community plans and land use bylaws must comply with the Policy Statement. There are a number of policies in the current ITPS which speak

broadly for shoreline protection, and more specifically for the implementation, regulation and use of foreshore development, as follows in the table below:

Table 1. ITPS Policies

ITPS Policies										
3.4.4	4 Local trust committees and island municipalities shall, in their official community plans and regulate bylaws, address the protection of sensitive coastal areas.									
3.4.5	Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address the planning for and regulation of development in coastal regions to protect natura coastal processes.									
4.5.9	Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address the compatibility of the location, size and nature of marinas with the ecosystems and character of their local planning areas.									
4.5.10	Local trust committees and island municipalities shall, in their official community plans and regulate bylaws, address the location of buildings and structures so as to protect public access to, from a along the marine shoreline and minimize impacts on sensitive coastal environments.									
4.5.11	Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways.									
5.5.4	 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address: the location and type of recreational facilities so as not to degrade environmentally sensitive areas, and the designation of locations for marinas, boat launches, docks and anchorages so as not to degrade sensitive marine or coastal areas. 									
5.5.5	 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address: the identification of sites providing safe public access to beaches, the identification and designation of areas of recreational significance, and the designation of locations for community and public boat launches, docks and anchorages. 									

Refer to the <u>Islands Trust Policy Statement</u> for a comprehensive list of policies.

1.2. Gambier Island Official Community Plan

There are several policies in the current Gambier Island Official Community Plan (OCP) Bylaw No. 73, 2001 which speak to protecting coastal and/or foreshore areas:

- **P 3.5** Future development should only be permitted to occur at a scale and rate of growth that is respectful of:
 - *i. community-held values pertaining to the environment;*
 - *ii.* the planning area's rural qualities;
 - *iii. consideration of water-only access;*
 - *iv.* the local trust area's limited infrastructure; and

the requirements of the applicable regulatory land use bylaws.

- **P 3.7** The zoning regulations should establish setbacks for buildings and structures, in accordance with good planning practices, from:
 - iii. the sea:
 - to protect buildings and structures from floodwaters or coastal erosion;

• to protect marine and riparian habitat and water quality; and to maintain a view of the coastline that is rural in character and relatively pristine in appearance.

The following policies pertain to commercial marine uses:

- **P 5.7** The community plan makes no provision for the designation of any site(s) for a commercial marine use but consideration for such use can be addressed in response to an application for amendment to this plan.
- **P 5.8** The following guidelines should be considered in any review of a proposed commercial marine use:
 - *i. public access to the foreshore or an adjacent public recreation site is not reduced;*
 - *ii.* proposed development is small in scale, of local and not provincial (or regional) significance and is developed in a manner which is sensitive to the character of surrounding properties;
 - *iii.* existing trails and important natural features on the upland portion of any site and public use of the trails are maintained;
 - *iv.* the site does not provide any negative environmental impact nor lead to the planning area's marine waters being polluted; and
 - v. there are no gasoline sales or water motorsport rentals.
- **P 5.9** As an alternative to commercial marinas to serve the needs of planning area residents, the provision of wharves and other forms of moorage which are publicly-owned, community-owned or operated on a cooperative basis can be considered.

The following policies pertain specifically to marina and foreshore areas:

- **P 7.32** Except as specifically provided for, the marine and foreshore areas as designated on Schedule B in the Gambier Island Planning Area should be zoned to allow:
 - i. Cooperatively owned or operated docks to provide marine access to residential areas as a means of minimizing the need for upland road links between residential communities and to limit the need for multiple dock development along the shoreline;
 - *ii.* boat moorage, where cooperatively owned docks are not feasible, to serve the needs of residents in the immediate area, provided such moorage does not restrict navigation;
 - *iii.* public parks and ecological reserves, and
 - iv. marine navigational aids and publicly funded and operated boat launching facilities.

The land use bylaw should include provision for zones for each of the following foreshore use categories:

- *i.* log storage, sorting and dumping associated with the planning area's forestry requirements;
- *ii. marine transportation, and yachting outstations where ecologically sound;*
- *iii.* dock, moorage and swimming facilities for the non profit camps;
- iv. marine conservation in shallow estuaries such as Cotton Bay (Mannion Creek), Douglas Bay, West Bay (Whispering Creek), Brigade Bay, MacDonald Creek/Sir Thomas Lipton Park, Halkett Bay, Long Bay and in fragile inter-tidal or foreshore areas and all other foreshore areas not otherwise alienated for specific uses; and aballfish asymptotic in West Provided that 19
- v. shellfish aquaculture in West Bay provided that:8
 - the new sites are identified by BC Fisheries to be of medium or good capability for shellfish aquaculture;
 - the proposals for aquaculture are being advanced through a rezoning process;
 - the aquaculture uses do not preclude the traditional enjoyment of the shoreline by the public or upland owners and the recreational activities traditionally enjoyed by people in the Howe Sound area;
 - public access to beaches and natural marine resources are retained by the introduction of suitable regulation for locating floating objects and structures.
 - establishment of public shellfish reserve areas can be considered in the aquaculture development in the area;.
 - The proposed aquaculture sites do not displace local vessels from traditional year round moorage areas; and
 - monitoring of impact on other marine resources and the implementation of remedial action should be part of any management plan for an aquaculture site.

P 7.34

A Marine Conservation Zone should be established in the land use bylaw in biologically significant marine and foreshore areas identified on Schedule C and in any other marine and foreshore area identified through further study as being biologically significant.

P 7.35

The area of marine waters used by the existing yachting outstations in the Gambier Island Planning Area should be zoned for yachting outstation purposes.

P 7.36

A marine transportation zone should be established, where suitable, to recognize existing public and community wharves and docks.

P 7.37

In foreshore locations where commercial and industrial uses are permitted, adequate provision should be made for public access to the foreshore.

P 7.38

Foreshore and marine areas surrounding Gambier Island which have significant environmental or marine resource values are generally shown on Schedule C.

P 7.39

In a marine conservation area, the biological impacts of any land uses should be considered as part of any rezoning proposal.

P 7.40

Development permit designations should be required for commercial and industrial sites adjacent to the natural boundary of the sea to regulate form and character and for protection of the natural environment, its ecosystem and biological diversity.

- Natural coastal processes should be left undisturbed to the maximum extent possible.
- **P 8.1** Environmentally sensitive areas shall include: productive intertidal areas; shallow estuaries; lakes; forests; wetlands; streams and riparian areas; bluffs and herbaceous areas and areas of unique features that meet the Qualitative Criteria for Environmentally Sensitive Areas as outlined on Schedule G.
- **P 8.9** Zoning regulations should establish a minimum building setback from wetlands, watercourses and the sea.
- P 8.10 The retention of existing 20 metre (66 ft.) wide strips of land as Crown Reserve along the coast of Gambier Island is supported where it protects sensitive natural features of the Island's coastline or where it is suitable to provide for park and conservation opportunities. In all other instances the transfer of Crown Reserves to obtain park or conservation opportunities elsewhere on Gambier Island may be considered.

There are additional OCP policies that support dock or wharf development, specifically for water-access only lots, and that encourage sharing of docks through joint ownership or agreements between neighbours:

- P 4.5 In new subdivisions, located in areas outside of the planning area's existing public road network, access by water (from the sea) to upland parcels should only be considered in locations where a public road right of-way may be constructed to provide each upland lot with access to a location fronting on navigable water which is able to reasonably accommodate a site for boat moorage.
- **P 9.16** Existing publicly owned wharves in the planning area, approved for transfer to the Sunshine Coast Regional District by referendum on Oct. 21, 2000, should be maintained as public facilities or facilities open and accessible to public use.
- **P 9.17** A car ferry service to Gambier Island is not supported as it is inconsistent with the island's rural character and low population density.

Public boat and barge ramps are supported as a means of transporting supplies, equipment **P 9.18** and vehicles to the planning area.

Wharves, docks, floats, barge loading ramps and boat launch ramps should be sited toP 9.19 minimize their impact on the natural environment and allow public access to the foreshore.

Refer to Gambier Island OCP Bylaw No. 73 for a comprehensive list of policies.

1.3. Gambier Island Land Use Bylaw

9

P 7.41

For clarity the LUB provides the following definitions:

Accessory	in relation to a use, building or structure, incidental, secondary and exclusively
····· /	devoted to a principal use, building or structure expressly permitted by this Bylaw
	on the same lot or, if the accessory use, building or structure is located on the
	common property in a bare land strata plan, on a strata lot in that strata plan.
Dock	Means a marine-based structure, usually comprised of a ramp and float or pier.
High Water Mark	means the point at which the presence and action of the water are so common
5	and usual, and so long continued in all ordinary years, as to mark on the soil or
	rock of the bed of the watercourse or the soil of the wetland a character distinct
	from that of its banks or the adjacent land in the case of a wetland, in vegetation
	as well as in the nature of the soil itself.
Moorage	means the tying of a boat or vessel to a wharf, dock or float, or to a mooring
	buoy that is in turn anchored to the seabed.
Natural Boundary	means the visible high water mark of any lake, river, stream, or other body of
	water where the presence and action of the water are so common and usual, and
	so long continued in all ordinary years, as to mark upon the soil of the bed of the
	body of water a character distinct from that of its banks, in vegetation, as well as
	in the nature of the soil itself; and in the case of a legal surveyed boundary, that
	boundary must be deemed to be the natural boundary provided the legal
	surveyed boundary is land-ward of the natural boundary.
Neighbourhood	means a dock that provides access to two or more lots.
Dock	
Public Wharf	means a wharf servicing the general public for the purpose of loading and
	unloading people, goods and material, and may include moorage.
Seasonal Float	means a temporary floating raft not exceeding 50 square metres in surface area
	for marine access from an upland lot that may be accessed by a ramp attached
	to the upland
Structure	means anything that is constructed or erected and that is fixed to, supported by
	or sunk into land or water, excluding fences, surfaced areas of gravel, concrete or
	other similar material comprising driveways, uncovered patios, uncovered
	parking areas.
Wharf	means a marine-based structure, usually comprised of a pier, ramp and floats.

Permitted Uses

The Gambier Island Land Use Bylaw (LUB) permits private non-commercial moorage and non-commercial anchorage in the following zones:

- Recreation Service (S3) Zone
- Marine Park and Recreation (P3) Zone
- Provincial Park (PP) Zone (for public access)
- Marine General (W1) Zone (The permitted anchorage and moorage use is only permitted in conjunction with a permitted upland residential use.)
- Marine Transportation (W2) Zone
- Marine Log Storage (W3) Zone (accessory to residential use or accessory to log storage and log transport operations)

• Water Brigade Bay (WBB) Zone

Permitted Structures

<u>Docks</u>

The LUB provides regulations for private docks and floats within the marine-based area of the following zones:

- Community Nature Park (P1) Zone (for public access)
- Marine Park and Recreation (P3) Zone (for public access)
- Provincial Park (PP) Zone (only permitted in conjunction with a principal permitted use)
- Marine General (W1) Zone (The permitted anchorage and moorage use is only permitted in conjunction with a permitted upland residential use.)
- Marine Log Storage (W3) Zone (accessory to residential use or accessory to log storage and log transport operations)
- Water Brigade Bay (WBB) Zone

Map below shows all Marine Zones on Gambier Island.



Public Wharves

Public commercial moorage is permitted in the Marine Transportation (W2) Zone (includes temporary mooring use for passenger ferry, charter vessels, water taxis, pleasure craft, fishing boats and sea planes).

5.17.3 Structures are limited to:

- a) one public wharf including approach, wharfhead, floats, gangway;
- b) one crane;
- c) one barge ramp.

Siting and size varies depending on location.

5.17.4 The maximum total area of dock floats at a public wharf is:

- a. 385 square metres in the W2 (a) Zone (New Brighton L5087)
- b. 154 square metres in the W2 (b) Zone (Gambier Harbour L6373);
- c. 44 square metres in the W2 (c) Zone (Port Graves L.7929);
- d. 82.5 square metres in the W2 (d) Zone (Fircom Bay L6122);
- e. 66 square metres in the W2 (e) Zone (West Bay DL5085).

Map below shows all W2 zones highlighted in green.



Setbacks

Natural Boundary of the Sea

The LUB provides the following regulations for siting of buildings and structures in relation to the natural boundary of the sea:

3.3.1 No building or structure shall be sited within 15 metres of the natural boundary of the sea, lake, wetland or watercourse, or constructed with the underside of any floor system or the top of any pad supporting any space or room that is used for dwelling purposes, business or the storage of goods less than 1.5 metres above the natural boundary of the sea, lake or watercourse unless otherwise provided for in this Bylaw.

(a) Despite regulation 3.3(1), the minimum setback for animal enclosures, pens, feeding troughs, animal runs, or manure piles is 40 metres from the natural boundary of the sea, lake, wetland or watercourse

3.4.2 Retaining walls not exceeding a vertical dimension of 2 metres measured from grade at any point may be sited on any portion of a lot except within the setback from the natural boundary of the sea.

3.4.5 Where a building is used exclusively as a pump/utility house, it may be sited on any portion of a lot except within the setback from the natural boundary of the sea.

3.4.6 Boat houses, stairs, or walkways required for access to the foreshore or a permitted ramp associated with a dock may be sited within 15 metres of the natural boundary of the sea.

3.8.3 Non-agricultural use fences not exceeding a vertical dimension of 2.5 metres measured from grade at any point may be sited on any portion of a lot except within the setback from the natural boundary of the sea.

DPA No. 2 Brigade Bay

The area designated as Development Permit Area No. 2 (Brigade Bay Area) is a DPA for protection of the natural environment, its ecosystems and biological diversity.

The DPA includes an area 15 metres upland of the natural boundary of the sea and an area 30 metres seaward of the natural boundary of the sea that represent an area that is important for fish habitat or is within an area of potential impact on such habitat. The objectives of the designation are:

- 1. to conserve biological diversity and habitat values of marine ecosystems;
- 2. to ensure no net loss in fisheries values; and
- 3. to ensure that any development in the upland portion of the development permit area has no impacts on adjacent fisheries values.

Maintenance of vegetation in upland areas can minimize siltation of shoreline zones and assist in preventing erosion of existing shoreline. Eelgrass beds, rocky shoreline and variable substrate can provide opportunity for fish habitat and protection from predators.

The management of the shoreline and immediate upland area in the vicinity of areas of fish habitat is important to maintain the integrity of the habitat and allows for the ongoing maintenance of the fishery resource.

Guidelines

- a) Shoreline areas should not be filled.
- b) Structures should not be located over shellfish, kelp or eel grass beds.
- c) Structures should be located and designed to avoid the need for dredging, shore defense works or breakwaters. Bulkheads for docks should not be located on the foreshore.
- *d)* Structures should not restrict the movement of aquatic life requiring shallow water and should allow for thorough flushing of enclosed marine areas.
- e) Structures should be constructed of materials that will not impair water quality and should not be treated with preservative chemicals that are toxic or harmful to aquatic life.
- *f)* The number of pilings used to stabilize structures should be minimized, with preference given to large spans over additional pilings.
- g) Docks should include features to prevent floats from resting on the foreshore at low water levels and ramps should have a minimum clearance of 0.5 metres above the natural boundary of the sea.
- h) Disturbance of areas upland of the natural boundary of the sea should be kept to a minimum and design of structures and the access to them should be of a manner that prevents any increase in erosion or instability of the shoreline or movement of silt onto the foreshore.
- *i)* Structures or works should not create any impacts that contravene the Federal Fisheries Act and nothing in the issue of the development permit by the Local Trust Committee shall remove any liability on the part of the owner arising from any contravention of the Fisheries Act.

Exemptions

- 1. The following land use activities are exempt from the development permit requirement:
 - a. Construction or reconstruction of gear lockers located on a permitted neighbourhood dock.

1.4. Other Local Trust Area Regulations

Policies and regulations related to shorelines differ from island to island in the Trust Area, as each island has taken a variety of approaches to address shoreline development and protection. Since each LTA has its own Land Use Bylaw (LUB) and Official Community Plan (OCP), each island has taken an approach consistent with its own individual culture, history, and intensity of use. The main tools available to the LTAs under the *Islands Trust Act* are modifications to the OCP and associated LUBs to include shoreline-specific provisions. Within the LUBs, this generally takes the form of increasing setbacks from the natural boundary of the sea and limiting buildings and structures within the setback area and in marine areas.

Table 2 provides a brief overview of how the LTAs in the Islands Trust regulate the shoreline area.

Table 2: Summary of Other LTA Regulations

Table 2: Summary of Other LTA Regulations									
2. Shoreline Regulation Overview Table	Private Docks permitted (zone specific)	Setback from Natural Boundary of the Sea	Permits Structures in Setback from NB	Exemptions to Setback from NB	Shoreline (or Marine) Development Permit Area				
Ballenas-Winchelsea	\checkmark	15 m	-	\checkmark	\checkmark				
Bowyer and Passage Islands (Gambier LTA)	~	7.6 m	Property specific min. setbacks based on historical buildings and structures	~	-				
Denman	✓	15 m	✓	-	-				
Gabriola	\checkmark	15 m**	\checkmark	-	√ ***				
Galiano	\checkmark	7.5 m	\checkmark	-	\checkmark				
Gambier	\checkmark	15 m	✓	\checkmark	\checkmark				
Gambier Associated Islands	✓	7.5 m	\checkmark	-	-				
Hornby	-	15 m	-	~	-				
Lasqueti	√ *	15 m**	\checkmark	-	-				
Mayne	\checkmark	7.5 m	\checkmark	\checkmark	-				
North Pender	\checkmark	15 m	\checkmark	\checkmark	\checkmark				
North Pender Associated Islands	✓	15 m	-	-	\checkmark				
Salt Spring	~	15 m**	\checkmark	✓ (zone specific)	\checkmark				
Saturna	\checkmark	7.6 m	\checkmark	-	-				
South Pender	\checkmark	7.6 m	~	\checkmark	-				
Thetis	\checkmark	7.6 m	\checkmark	\checkmark	-				
Thetis Associated Islands	\checkmark	10 m	\checkmark	-	-				

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

**May be reduced with engineer certification.

*** DPA in some shoreline areas

1.5 Islands Trust Shoreline Protection Model Bylaw Report

In March 2021 consultants were hired by Islands Trust to complete a report to:

- Review all existing Official Community Plans and Land Use Bylaws in the Islands Trust Area on foreshore and nearshore policies and regulations, and a selection of other BC coastal jurisdictions and San Juan County.
- Review Provincial guidelines on mitigation and adaptation to sea level rise.
- Review Islands Trust Policy Statement for compliance of any proposed policies and regulations.

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

The report looks at heritage and cultural considerations, green shores, mitigation and adaptation to sea level rise, BC Marine Coastal Shorelines jurisdiction and legislative framework for shoreline protection strategies and provides some recommendations on how to move forward with a model bylaw. This report is Appendix 1 of this discussion paper.

6. Options

As outlined in Section 1.3, the Gambier Island LUB currently regulates docks and other foreshore development through a combination of general and zone-specific regulations. Outlined below is a brief discussion of potential options that could be considered by the LTC for enhancing shoreline protection further through its regulatory and policy framework on Gambier Island.

6.1. Establish an Expanded Shoreline Development Permit Area

Authorized by the *Local Government Act* (LGA), development permit areas (DPA) are one regulatory option available to the LTC for managing development on private land. Under Section 488 of the LGA, DPAs may be designated within an official community plan for a number of purposes, including "protection of the natural environment, its ecosystems and biological diversity" and "protection of development from hazardous conditions". DPAs are established over specific land or areas and include development guidelines to address DPA objectives. Examples of objectives that may be relevant to Gambier Island include:

- To preserve and protect the ecological values of shorelines and associated foreshore and upland areas;
- To protect and/or minimize disruption of important natural features and processes;
- To protect fish or wildlife habitat;
- To prevent erosion;
- To adapt to anticipated effects from climate change.

The guidelines may prescribe how applicable development activity occurs within that DPA. Examples include guidelines for retaining walls and other shoreline stabilization works; dock construction regarding density, size and materials; protecting eelgrass and other plant or tree species; setbacks from the natural boundary; requirements for professional reports (i.e. engineer, biologist, etc.); and restoration or enhancement measures.

Gambier Island has established DPA No. 2 (Brigade Bay Area).

The Gambier Island Land Use Bylaw prohibits the siting of buildings and structures within 15 metres of the natural boundary of the sea, and the construction of only minor structures is permitted under the bylaw throughout most of the shoreline. However, there are specific guidelines for development permit applications in the DPA No. 2.

There are several LTAs that have established Shoreline DPAs, which guide development within a specified area upland of the natural boundary of the sea, and in some cases, seaward to the boundary of the area of bylaw application.

- Ballenas-Winchelsea Islands designates all land 30 metres upland of the natural boundary of the sea within its Shoreline DPA, for the protection of the natural environment and to protect development from hazardous conditions. The DPA applies to all construction and land alteration within the Shoreline DPA, and includes general guidelines, shoreline specific guidelines for steep slopes and bluffs, and guidelines for boat launch facilities.
- Salt Spring Island designates all land covered by water between the natural boundary of the sea and a parallel line draw 300 metres seaward of the natural boundary of the sea within its Shoreline DPA. It also encloses upland areas measured 10 metres from the natural boundary of the sea in areas where the marine environment has been identified as particularly sensitive to development impacts. Guidelines include addressing water quality, residential dock float size, shoreline stabilization works, lighting over the water and reducing impact on kelp or eelgrass beds.

Considerations:

Pros

- Furthers the Islands Trust's "preserve and protect" mandate;
- Guides development, does not preclude development;
- Certain development activities may be exempted from the requirement for a development permit;
- Specifies natural or hazardous areas that must remain free of development, except in accordance with the conditions of the permit;
- May require measures to preserve, protect, restore or enhance specified natural features or areas;
- May incorporate recommended sea level rise and flood protection measures;
- Opportunity to incorporate recommendations in the Islands Trust Coastal Douglas-fir Zone Ecosystem Protection Toolkit and Islands Trust Conservancy Regional Conservation Plan;
- Opportunity to incorporate Green Shores or "soft shore" alternative approaches to shoreline and flood protection;
- No public notification required for an application for a Development Permit. Public consultation is done at the time of the DPA's establishment within the OCP and LUB.

Cons

- Amendments to OCP and LUB required, including mapping updates;
- Limited discretion for LTC. Issuance of DP is in accordance with DPA guidelines;
- Bylaw infraction enforcement can be costly;
- Misunderstanding of DPAs can lead to difficulty gaining public acceptance;
- Property owners concern for additional costs and regulations.

6.2. Flood Protection Bylaw

Section 524 of the LGA enables local governments to develop flood hazard area bylaws. Gambier Island does not currently have an applicable flood hazard bylaw. When adopting these bylaws, local governments are required to consider the Province's "Flood Hazard Area Land Use Management Guidelines" (the Provincial Guidelines). Amended in 2018, the Provincial Guidelines incorporate sea level rise (SLR) into land use planning and future development, and require that local governments adjust setbacks according to the Year 2100 Global SLR prediction of 1.0 metre, with adjustments made for regional uplift and subsidence. Using the Year 2100 SLR prediction of 1.0 metre as the minimum elevation, local governments can regulate flood construction levels (FCL) of buildings and structures, including docks.

The Provincial Guidelines require a setback of 15 metres from the future estimated natural boundary of the sea at Year 2100, or landward of the location where the natural ground elevation contour is equivalent to the Year 2100. It is noted that where sea frontage is protected from natural bedrock formation, setback requirements may be adjusted as recommended by a qualified Professional Engineer experienced in coastal engineering. Conversely, the recommended setback may be increased based on the site specific conditions, for example in low-lying areas or areas of known erosion hazard.

The current Gambier LUB already requires a 15 metres setback from the natural boundary of the sea for buildings and structures. One option would be to amend the LUB to refer to the flood protection bylaw for setbacks from the natural boundary of the sea. This would align with the existing Provincial Guidelines, and with any future amendments to the setbacks to the sea as required by the Province.

For historic development that does not meet the Provincial Guidelines, the province recommends that redevelopment be regulated by requiring a restrictive covenant stipulating that any future development must meet the FCL and setback requirements in force at the time of redevelopment.

Considerations:

Pros

- Aligns with provincial direction;
- Designed to prevent injury or loss of human life, and to minimize property damage resulting from flood events; and
- Potentially an Islands Trust-wide option.

Cons

- Only address flood construction levels; do not address most aspects of dock or retaining wall density, design or setbacks, or environmental protection beyond flood construction levels;
- Coastal floodplain mapping and data is costly, Islands Trust relies on Regional Districts and the Province for this information;
- Flood hazard assessment reports by qualified professional engineer may be out of reach for some property owners;

6.3. Establish Heritage Conservation Areas

In accordance with Section 614 of the LGA, Heritage Conservation Areas (HCA) are designated within an OCP. Gambier Island does not currently have any designated Heritage Conservation Areas. Similar to DPAs, where a Development Permit application must be "in accordance with" DPA guidelines, a Heritage Alteration Permit (HAP) must act in accordance with the HCA "purpose". While DPAs may be designated for a number of purposes, a HCA is designated for the purpose of "heritage conservation". The LGA provides the following definition:

conservation includes, in relation to heritage, any activity undertaken to protect preserve or enhance the heritage value or heritage character of heritage property or an area;

Further definitions are provided within the LGA for "heritage value", "heritage character", and "heritage property". While heritage conservation is often thought of from a historical or architectural perspective (i.e. heritage buildings), HCAs can apply to cultural areas, land or natural features of importance. In this way, staff surmise that this option may also further the <u>Reconciliation Action Plan 2019-2022</u> adopted by the Islands Trust Council in 2019, by exploring opportunities for collaboration and knowledge sharing with local First Nations. HCAs could recognize important cultural or historical areas or features of importance on Gambier, and facilitate understanding of property owners on First Nations concerns.

Existing Gambier OCP policies that address heritage conservation are broad and seek to identify, protect, preserve and enhance important cultural and historical resources. Establishing a HCA is an opportunity to strengthen heritage conservation on Gambier Island.

HCAs are a relatively underused regulatory tool in the Islands Trust. Staff are aware of one HCA on Salt Spring Island, the HCA 1 – Ganges Village Core. While the Ganges Village Core is a designated HCA that protects a number of heritage buildings, it also protects heritage trees – in Centennial Park, on the grounds of the elementary school, mature trees with a trunk diameter greater than 20 cm and fruit trees over 50 years old, as decided by a certified arborist.

An important note when considering the establishment of HCAs, is that they may not be used to prevent a land use that is permitted within the LUB, and may not conserve natural landscapes or undeveloped land, except as noted in Section 588(1) of the LGA:

588 (1) This Part must not be used to conserve natural landscapes or undeveloped land except

(a) to the extent that the exercise of power under this Part in respect of natural landscape or undeveloped land is, in the opinion of the local government, necessary for the conservation of adjacent or proximate real property that is protected heritage property,

(b) with respect to a site that has heritage value or heritage character related to human occupation or use, or

(c) with respect to individual landmarks and other natural features that have cultural or historical value.

Considerations:

Pros

- Strengthens the protection of important heritage areas, properties and/or features;
- Provides long-term protection;
- Can apply to a historical, cultural, aesthetic, scientific or educational value;
- Can protect identified natural features and characteristics; and
- No public notification required for an application for a HAP. Public consultation is done at the time of the HCA's establishment within the OCP and LUB.

Cons

- Does not address regulations or guidelines associated with docks or retaining walls;
- Generally underused, may be unfamiliar to many;
- Limited discretion for LTC. Issuance of HAP is in accordance with HCA purpose;
- Enforcement can be costly; and
- Could potentially be a slow process to establish a HCA planning and research, consultation, etc.

6.4. No Change

This option would be to opt for the status quo with respect to the current policy and regulatory regime and to not pursue changes related to shoreline protection. Choosing this option would represent an acknowledgement that the current system, while not perfect, is functioning well enough to leave alone. The choice of this option should also include a clear understanding of the number and nature of complaints that have been received with respect to foreshore development.

Considerations:

Pros

- Current policies and regulations are familiar to the community;
- Does not introduce additional regulations; and
- Maintains status quo.

Cons

- Outdated policies and regulations;
- Does not align with provincial direction and provincial best practices;
- Shoreline protection measures are not strengthened;
- Does not address ongoing concerns and issues;
- Does not address cumulative impacts of foreshore development; and
- Ongoing bylaw enforcement issues.

7. Conclusion

8. Appendix 1 – Shoreline Protection Model Bylaw Report