

# **VILLAGE OF BELCARRA**

## **BYLAW NO. 435, 2011**

### **A bylaw to adopt the Official Community Plan**

WHEREAS the *Local Government Act* authorizes a local government to have community plans prepared or revised from time to time;

WHEREAS the *Local Government Act* authorizes a local government by bylaw to designate any community plan which has been prepared under Section 877 of the *Local Government Act* as an Official Community Plan;

NOW THEREFORE the Village of Belcarra Council in open meeting assembled enacts as follows:

- 1) This bylaw may be cited for all purposes as "Village of Belcarra Official Community Plan Bylaw No. 435, 2011".
- 2) Schedules 1, A, A1, B, C, and D attached hereto to this Bylaw form an integral part of this Bylaw.
- 3) "Village of Belcarra Official Community Plan Designation Bylaw No. 252, 1996", and all amendments thereto are repealed.
- 4) This Bylaw applies to all areas within the Village of Belcarra.
- 5) If a portion of this Bylaw is held invalid by a court of competent jurisdiction, then the invalid portion must be severed and the remainder of this bylaw is deemed to have been adopted without the severed section, subsection, paragraph, subparagraph clause or phrase.

**READ A FIRST TIME** this 30th day of May, 2011.

**READ A SECOND TIME** this 14th day of June, 2011.

**PUBLIC HEARING HELD** this 27th day of June, 2011.

**READ A THIRD TIME** this 27th day of June, 2011.

**REGIONAL CONTEXT STATEMENT** accepted by the Greater Vancouver Regional District Board of Directors this 29th day of July, 2011.

**RECONSIDERED AND FINALLY ADOPTED** this 19th day of September, 2011.

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Mayor, Ralph E. Drew

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Lynda Floyd, Chief Administrative Officer

This is certified a true copy of the "Village of Belcarra Official Community Plan Bylaw No. 435, 2011."

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Chief Administrative Officer



*SCHEDULE "1" to BYLAW 435, 2011*

## Village of Belcarra Official Community Plan Bylaw 435, 2011

Adopted: September 19, 2011

# Acknowledgements

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## **The Village would also like to thank the following agencies for their involvement:**

City of Port Moody  
Village of Anmore  
Metro Vancouver Regional District  
Port Metro Vancouver  
TransLink

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# 1.0 Introduction

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## 1.1 An Official Community Plan

In British Columbia, the *Local Government Act* states the statutory provisions for an official community plan (OCP). It describes the contents of official community plans and a process for their approval. Once adopted by bylaw, the official community plan becomes a legal document.

The OCP is the tool for a municipality to plan the nature and location of future land use, development, and services. The OCP is a guide for the collective decision making of a community - for its Council, its residents, businesses, and servicing agencies. Its vision, policies, and recommended actions should guide the future of the community. In stating the goals, objectives and policies, the OCP is intended to guide future growth, not to regulate. The Zoning Bylaw will be the primary tool to regulate development, not the OCP.

The OCP reflects community consensus, established through a consultative process, by determining a desirable framework for land use, development, and servicing. It can protect existing conditions and sensitively manage change through other processes such as capital expenditures, servicing, or zoning.

The OCP can only encourage senior levels of government to take action; it cannot force or require senior governments to act. Furthermore, although the OCP cannot commit Council to specific expenditures, Council cannot enact bylaws or undertake works that are contrary to it without amending the OCP.

Upon application, an OCP can be amended by Council by bylaw which requires holding a public hearing.

## 1.2 The Official Community Plan Update

This OCP is an update of the one that was prepared in the mid 1990's. Since that time, there have been a number of events that have occurred that render the 1996 OCP out of date, namely revised Provincial requirements for the content of official community plans, Council endorsement of such policies as the Community

Wildfire Protection Plan, the Bedwell Bay Sustainability Plan, the Corporate Strategic Plan, the 2009-2011 Corporate Plan, and the soon to be constructed Village water supply system. This OCP has taken these items and well as others into account and should be sufficient to guide the growth and development of Belcarra over the next 5 to 10 year period.

This OCP has been prepared with considerable input from a number of sources. The Village Council appointed an Official Community Plan Review Committee consisting of residents and property owners within the Village to work on the direction and scope of the Plan. The Committee met on a number of occasions with Village staff and the Planning Consultant.

The Village Council was assisted by a Planning Consultant who worked with all the interested parties to formulate the Plan.

The general public had opportunities to provide input both at Public Information Meetings and at the Public Hearing.

A number of government agencies who have interests in the area were involved in the process, including Metro Vancouver Regional Parks, Port Metro Vancouver, B.C. Hydro, Integrated Land Management Bureau, Tsleil-Waututh First Nation, City of Port Moody, and the Village of Anmore.

## 1.3 Plan Organization

After this introduction, a **planning context and vision** for Belcarra's future is outlined. Then the **policy framework** is articulated, followed by the **Greenhouse Gas Emission Strategy**. A **regional context statement** is included. The Plan concludes with an **implementation** section.

## 2.0 Context and Vision

**Understanding and acknowledging the planning context is an important element in the formulation of a community plan. This context recognizes the trends and factors both within and external to a community that will influence the manner in which a community will evolve and change over time.**

### 2.1 Planning Context

#### a) Belcarra's Corporate Plan

In March 2009, the Village Council adopted a Corporate Plan that is based upon the following two important community values:

- ❑ Belcarra is a model municipal entity that works effectively to engage and respect the diverse interests of its citizens; and
- ❑ Belcarra is a clean, green, rural and sustainable community

#### Spanning the Next 10 to 15 years

Belcarra is a proud and unique community that gains its strength through active engagement with its citizens, support for volunteerism, and a reputation for dependability.

We ensure social, environmental and economic sustainability and community autonomy through sound financial and governance decisions, which reflect the needs of our citizens.

We enhance the community's visibility and contribution in matters of regional governance as a valuable partner engaged in Metro Vancouver and Port Metro activities and implement programs and services that fit with the changing dynamics of the region. Our semi-rural setting provides a distinct perspective within the regional district, and the Village seeks to represent the interests of those in similar environments.

We value the natural setting of the community, and strive to lead with conscious environmental stewardship by developing community infrastructure that provides focal points that enhance livability, health and safety, active lifestyles and civic pride.

We utilize clear and transparent decision making processes, offering opportunities for input and guidance; embracing change while respecting tradition.

We value a safer community through enhancing road and / or water access for all emergency service providers.

We promote a healthy and safe working environment by embracing principles which facilitate staff empowerment, development and progression opportunities.

We maintain, replace and/or upgrade municipal facilities which consider the needs of the community, municipal operations and our physical environment.

We promote community engagement by embracing opportunities to use technology to reach a greater public audience including the increased use of web and integrated information systems.

The community's Mission Statement is:

**To enhance the quality of life for citizens, visitors, and future generations in our municipality and the region. We strive to live in harmony with each other and our environment while providing opportunities for the advancement of economic, physical, and social well being.**

#### b) Regional Context

Belcarra is situated within the North East Sector of Metro Vancouver (GVRD). The region as a whole and the North East Sector has experienced and will continue to experience significant growth. However given its location on the periphery of the region, Belcarra is **not** considered as one of the growth – oriented communities within the region.

#### c) Environmental Context

Located on the east shore of Indian Arm, the community is endowed with a spectacular natural landscape. It is this landscape that both attracts residents to the community, and significantly



## 2.0 Context and Vision

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shapes its character. The mountainous terrain with its creek corridors and steep slopes dictates the type of land uses that can be accommodated while respecting public safety values. Given the importance of the natural landscaped character of the Village, the natural vegetation also influences the land use pattern.

### **d) Local Government Context**

Belcarra is bounded by the City of Port Moody and to a lesser extent the Village of Anmore. Both these jurisdictions have designated the lands adjacent to Belcarra as park land in their respective OCP's.

### **e) Population Projection**

During the 1980's and 1990's, the Village issued approximately 5 permits per year on average for new house construction. Over the last decade that number has dropped to 1 or 2 a year. It is estimated that there are approximately 40 undeveloped residential lots scattered throughout the Village with approximately half being located in the Belcarra North area of the Village. However, given the terrain constraints and the challenges in obtaining approvals for septic sewage disposal systems, not all of these lots can, in fact, be developed. Therefore, the take-up of new lots for housing construction is projected to continue to be in the range of 1 – 2 per year, except if the "Camp Howdy" property in the Belcarra North area were to be developed.

## **2.2 A Vision for Belcarra**

The Official Community Plan is underpinned by the "character of the Village" as a frame of reference or lens for examining specific components involving our land use requirements and pattern. Our village character, or cultural identity, stems from long-standing traditions that encompass historical values found in all of our previous OCP documents. It has been important to examine the semi rural nature of our village, including our appreciation for the trees and greenery, our spectacular scenery, our recreational and community opportunities, and what it feels like to be a member of this special community in our small corner of the Lower Mainland.

Belcarra is a community that blends in with its natural settings, a community that values its viewsapes and open spaces, a community that promotes a friendly social spirit, and a community that prides itself in being financially sustainable.

- People who live in Belcarra do so because of the natural environment, viewsapes and opportunities to enjoy the outdoors. Protection of the area's natural amenities, watershed, and views is essential for maintaining the quality of life for its residents.
- Belcarra is a proud and unique community that gains its strength through active engagement with its citizens, encouraging and supporting residents who offer their skills as volunteers for the benefit of Belcarra and all its residents.
- We reflect the needs of our citizens by ensuring social, environmental and economic sustainability, and community autonomy through sound fiscal and governance decisions.

All attempts are made to maintain the Village as a unique semi-rural waterfront "Village" and avoid the character of a typical "suburb."

## **2.3 Strategies to Achieve the Vision**

Specific critical strategy objectives that work together towards maintaining the character of the Village of Belcarra fall into four main categories:

### **a) Environmentally sensitive growth and development**

The fundamental thrust of this Official Community Plan is to maintain the character of the Village by limiting the location and type of new development. No new areas will be opened up for residential development other than the former Camp Howdy lands, and no new roads will be constructed except for the possibility that a new access road could be provided for Belcarra North (Farrer Cove). The existing residential areas (Belcarra Bay, Bedwell Bay,

## 2.0 Context and Vision

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and Belcarra North) will continue to be in-filled, and as such the Village will grow at a very modest pace.

Land and water within the Village of Belcarra are used in a manner that is compatible with the semi-rural atmosphere of the Village. Municipal lands policy continues to value the natural setting of the community, and strives to lead with conscious environmental stewardship by developing community infrastructure that provides focal points that enhance livability, health and safety, active lifestyles and civic pride.

### **b) Maintain natural environment of Belcarra**

The Village of Belcarra is fortunate to have Bedwell Bay as a major focal point for our waterfront community. This amenity draws residents and visitors to socialize and enjoy the natural setting of Indian Arm. As with any other popular waterfront recreation area, there is always a need to incorporate sound environmental management and planning to sustain a healthy balance with social and recreational demands. The Village recognizes that there are a variety of stakeholders who have an interest in the sustainability of Bedwell Bay. Accordingly, a *Sustainability Plan* has been developed to accommodate the varied needs of the stakeholders.

There is a realization in the Village that trees, forests, and views are of more than aesthetic and recreational value. People in Belcarra value their forests and natural views as a key component of their health and well being. As the village ages, it is important to protect the natural semi rural surroundings while at the same time protecting well established view corridors from the growth of trees that encroach over time.

### **c) Compatible Village infrastructure**

Vehicular / pedestrian circulation networks and municipal services will be provided in a safe, efficient and economic manner.

The Bedwell Bay and Belcarra Bay areas will be served by a sustainable potable water supply through the construction and

operation of a municipal water system in order to facilitate the transition from well water to the municipal water utility system.

The community's carbon footprint will be reduced through the implementation of GHG emission reduction initiatives and the achievement of the climate change goals outlined in the Climate Action Charter.

### **d) Providing Alternative Housing Opportunities**

Throughout its existence, Belcarra has been fortunate to have many of its residents step forward to volunteer, collaborate, and contribute to the common benefit of the larger community. These efforts are valued and it is recognized that continued local engagement is a necessity for future Village sustainability. Looking ahead, it is crucial that this culture of volunteerism renew itself with younger residents and families; people anxious to plant roots in Belcarra and contribute to the greater good.

Since 1979, Belcarra has transformed itself from a series of accessible smaller homes and summertime cottages into a community of increasingly large, expensive residences. This creates a serious challenge for long-term residents wanting to downsize and remain in the Village and for younger families seeking to join the community. This trend of narrowing economic demographics does not bode well for community sustainability. Therefore this OCP explores the idea of introducing some broader housing opportunities within the Village.

## 3.0 Policies and Actions

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**Policy development must be based on an understanding of Village values and issues. Implementation through action is closely linked to the Village's purpose. Plan policies are the criteria for evaluating new development proposals, rezonings, subdivisions, capital works, and other municipal decisions and community initiatives. This will ensure that change is compatible with long term community values and objectives. The spatial implications of these policies are shown on the *Land Use Map* described in Section 4.0.**

### 3.1 LAND USE POLICIES

#### 3.1.1 Residential

- a) Residential development will be limited to those areas designated Residential (R) on Schedule A - Generalized Land Use Map.
- b) For the purpose of new subdivision activity, within the Zoning Bylaw the minimum lot size regulations for single family lots shall be 0.5 acres (0.2 ha). For areas where there is no public road access (Farrer Cove, Twin Islands, and Cosy Cove), the minimum lot size shall be 1 acre (0.4 ha) for water access only subdivisions.
- c) Alternative housing opportunities such as:
  - i) stand alone accessory suites within an accessory building;
  - ii) up to four small houses on 1 acre (0.4 ha) lot; and
  - iii) duplexesshall be explored and potentially accommodated within the Zoning Bylaw. Council will require applicants to submit rezoning applications for any development that would involve a greater density than that permitted within the conventional residential zones and will consider them on a case by case basis. All such applications shall be the subject of a community consultation process including the holding of a public hearing.

To provide greater clarity with respect to how these alternative forms of housing might be accommodated and to ensure that this housing preserves Belcarra's character and not transform the community, Council will work towards preparing a series of design and development guidelines. Future applications will be expected to meet these guidelines so that any new homes blend tastefully into the existing neighbourhood.

- d) Notwithstanding Sections 3.1.1(b), residential development on the "Camp Howdy" lands within the Belcarra North area will be considered provided that improved and alternative road access is provided to the area. A maximum of 80 residential units consisting of a mix of single family lots and low density attached housing such as townhouses would be accommodated on the approximately 30 ha. (75 acre) property. A Comprehensive Development Zone (CD) would be created to accommodate the proposed development of the Camp Howdy lands. In drafting the CD zone and related restrictive covenants, the Village will ensure that the development is undertaken in an environmentally sensitive and aesthetically pleasing manner, retaining as much tree cover as possible, utilizing sustainability principles. The Village will be expecting to secure land along the shoreline for a waterfront park as a community amenity in conjunction with a rezoning application; the location and amount to be determined as part of the process.
- e) Notwithstanding Sections 3.1.1 (b), in cases where a new Belcarra North access road traverses a property within the Farrer Cove (South) area and in so doing would render the size of a lot in a future subdivision to be less than 0.5 acres (0.2.ha), the Council will consider a rezoning application to accommodate the creation of such a lot.

#### 3.1.2 Commercial / Industrial

- a) No commercial or industrial activities will be developed in the Village during the time period of this Plan.

## 3.0 Policies and Actions

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- b) Notwithstanding Policy 3.1.2(a):
  - i) home occupations shall be accommodated subject to specific regulations and will require a business license from the Village; and
  - ii) bed and breakfast operations may be permitted subject to amendments to the Zoning Bylaw.

### 3.1.3 Civic Institutional

- a) Within the time frame of the Plan, it is unlikely that significant additional land for new municipal institutional facilities will be required. The existing facilities, with minor expansion, can be accommodated within those areas designated Civic Institutional (CI) on Schedule A.
- b) The local recreation area on the north side of Bedwell Bay Road just west of West Road will continue to be leased from Metro Vancouver and be subject to development guidelines.
- c) Given the limited growth potential of the Village, no land has been identified as a future school site.
- d) No major upgrading of BC Hydro's transmission lines are anticipated during the time frame of this Plan.

### 3.1.4 Regional and Local Parks

- a) The Village shall continue to support the establishment of the Regional Park boundaries and the land use pattern of the park as indicated within Schedule A1 – Detailed Land Use – Belcarra Regional Park. The conditions, as specified within a Village / Metro Vancouver Agreement, must be met in the development of the Park.
- b) In the Cosy Cove area, Metro Vancouver has expressed an interest to acquire land for regional park use, but for various reasons has yet to secure such land, and therefore a firm regional park boundary has not been established. In this case, a working boundary approach will be utilized. A working

boundary may be defined as an interim boundary delineating areas which Metro Vancouver intends to acquire in the future.

The Regional Park boundary in the Cosy Cove area will be generally based upon the determination of the height of land. The boundary is intended to protect the areal extent of the watershed for the water sources of the existing Cosy Cove residents, as well as provide a buffer for the park trail. Once the boundary has been determined, then the land on the west side of the line will be excluded from the Regional Park and designated LIMITED USE on Schedule A – Generalized Land Use Map. The land on the east side of the line will be designated REGIONAL PARK on Schedule A and BUFFER and NATURAL PARK AREA on Schedule A1 – Detailed Land Use Map.

- c) Within Belcarra Regional Park, no commercial uses shall be permitted except those typically related to and compatible with the character of a passive recreational experience, such as canoe and kayak rentals. This matter shall be addressed in the Village's Zoning Bylaw.
- d) The portion of Belcarra Regional Park within Belcarra North shall be designated Regional Park on the Land Use Plan. Use of the land within this portion of Belcarra Regional Park shall be restricted to passive recreational pursuits such as hiking trails.
- e) Pursuant to Section 941 of the *Local Government Act*, the Village will require money to be deposited with the Village for future park land acquisition in lieu of the 5% land requirement, as a condition of subdivision approval, other than for the subdivision of the "Camp Howdy" land in which the dedication of park land may be required.
- f) Within the time frame of the Plan, it is not expected that local park development will be undertaken by the Village.

## 3.0 Policies and Actions

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### 3.2 WATER USE POLICIES

#### 3.2.1 Bedwell Bay Sustainability Plan

- a) Recreational use of the upland, foreshore and water surface in Bedwell Bay shall take place in accordance with the *Bedwell Bay Sustainability Plan* attached to this OCP as Schedule D. The Plan outlines a long term vision for Bedwell Bay and addresses the following strategic initiatives areas:
- i) residential moorage
  - ii) car top boat launch – West Road
  - iii) anchorage discouraged zone
  - iv) no-shore landing of motorized watercraft
  - v) community wharf zone
  - vi) no sewage discharge area
  - vii) riparian area crossings
  - viii) number and location of new residential moorage facilities
  - ix) group wharfage associations
  - x) new residential moorage facilities in Area 1
  - xi) existing residential moorage facilities
  - xii) environmental assessment reports
  - xiii) new residential moorage facility construction
  - xiv) Marine Avenue riparian zones management
  - xv) Bedwell Bay stewardship committee.
- b) No trailer boat launching facilities shall be permitted in Bedwell Bay, however launching of non-trailer vessels such as kayaks shall be accommodated.

#### 3.2.2 Water Access

All existing road ends which currently provide, and in the future may provide, access to the beach will be retained. Such road ends may be constructed as trails and non-trailer vessel launches to accommodate pedestrian access to the foreshore, while at the same time recognizing the sensitive natural environment of the intertidal zone.

#### 3.2.3 Use of Foreshore

- a) Within the area designated Open Harbour on Schedule A (Generalized Land Use Map), the Village will entertain proposals for the use of the foreshore for private individual recreational wharves in accordance with Council's Private Wharfage Foreshore Lease Policy and a community wharf. Marinas and related uses shall not be supported within the Open Harbour designated area.
- b) Within the area designated Civic Natural Shore Area on Schedule A (Generalized Land Use Map), the Village will entertain proposals for the use of the foreshore for Group Wharfage Facilities in accordance with Council's Group Wharfage Facility Foreshore Lease Policy.
- c) Within the area designated Civic Natural Shore Area on Schedule A (Generalized Land Use Map), the Village will not entertain proposals for the use of the foreshore for private individual recreational wharves.
- d) Within Belcarra North, in cases where more than one dwelling unit is developed on a lot, the Village will encourage shared wharves.

#### 3.2.4 Residential Moorage

The use of Bedwell Bay for residential moorage shall not be permitted.

#### 3.2.5 Bedwell Bay Livability

The Village will engage in a dialogue with Port Metro Vancouver and the RCMP to consider instituting regulations that would address issues affecting the residents of Bedwell Bay related to excessive noise and wakes caused by recreational boaters.

## 3.0 Policies and Actions

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### 3.2.6 Port Metro Vancouver

Recognizing that all physical works in the foreshore require the approval of Port Metro Vancouver, the Village shall request the Port Metro Vancouver to respect the policies and regulations of the Village when granting licenses, and to refer all applications to the Village in situations where the Village is the upland owner.

## 3.3 TRANSPORTATION POLICIES

### 3.3.1 Road Network

- a) The roads system as shown on Schedule B - Circulation System Map, will function as the road network that is required to handle vehicular traffic over the next 5 to 10 year period.
- b) Bedwell Bay Road will continue to function as the major collector route for Village residents.
- c) Tum-tumay-whueton Drive will continue as the major access road for Belcarra Regional Park picnic and staging area.
- d) Other than minor upgrading and improvements of the existing road system, no new roads will be developed by the Village within the time frame of this Plan.
- e) The Village supports new public road access to the southern portion of Farrer Cove within Belcarra North, recognizing that the existing road through Belcarra Regional Park will continue as the access for this area until a new road is constructed. The general alignment of a new road is conceptually identified on Schedule B.  
  
Since a portion of this road passes through Belcarra Regional Park and the City of Port Moody, the Village acknowledges that the road will not be constructed until agreements are entered into amongst the Village, Metro Vancouver, Port Moody and the Crown that address such issues as: road alignment, road design, ownership, and operation and maintenance.

The capital costs to develop a new road to municipal standards, including the potential upgrading of the bridge across Windermere Creek and the potential upgrading of the Senkler Road / Bedwell Bay Road intersection, will not be borne by the Village but by other third parties such as the owners and developers of Belcarra North properties.

The design of the new Farrer Cove Road and its connection with Senkler Road will be undertaken so as to minimize impact on the existing residents along Senkler Road.

- f) The existing access road from White Pine Beach to Camp Howdy will be retained in its existing gravel surface condition, its primary use for access by emergency and service vehicles.
- g) Use of municipal road allowances by private individuals shall be subject to Council Policy.

### 3.3.2 Path Network

- a) Pedestrian and bike paths may be constructed on undeveloped rights-of-way or on new roads to provide for safe and alternative pedestrian and bike movements throughout the Village and to help reduce greenhouse gas emissions subject to their need for other municipal purposes.
- b) Rights-of-way within or adjacent to Belcarra Regional Park will only be developed for trails with the mutual agreement of the Village and Metro Vancouver.
- c) The two parts of Marine Avenue will continue to be joined by footpath at Young Road.
- d) Council will aim to see the path system through the headlands of Bedwell Bay integrated into the general path system.



## 3.0 Policies and Actions

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### 3.3.3 Water Access Only Areas

- a) The existing location used for the launching of small boats to access the Farrer Cove north area will remain available for this purpose, recognizing that the boat launch is not a public entity nor is it sited on public land.
- b) For the purpose of subdivision approval, the Village will request the Approving Officer to favourably consider legal access by water in cases where conventional public road access may not be possible to provide.

### 3.3.4 Regional Greenways Network

The Village supports the completion of the Regional Greenways Network where appropriate.

### 3.3.5 Transit

The Village continues to support TransLink providing transit service to the community.

## 3.4 MUNICIPAL SERVICES POLICIES

### 3.4.1 Water Supply

- a) A community water system will be developed and will serve the Bedwell Bay and Belcarra Bay area of the Village as indicated on Schedule C.
- b) The Village will implement the Water Conservation Plan and bylaw to guide conservation and use of water supplied by the community water system.
- c) For areas not serviced with municipal water, private community water systems will be permitted to serve small groups of lots with ground water deficiencies, subject to the approval of the Ministry of Health and the Ministry of Environment. The capital

cost and maintenance of such systems will not be borne by the Village.

- d) The Village does not support use of surface water (streams) as a source for potable water supply for new subdivisions.

### 3.4.2 Sewage Disposal

- a) Sewage disposal shall be provided by private systems to service development.
- b) A community sewer system will not be provided by the Village within the effective Plan period.
- c) The Village does not support ocean outfall for sewage disposal systems.

## 3.5 ENVIRONMENTAL POLICIES

### 3.5.1 Watersheds

- a) The Village will ensure to the extent of its authority that watersheds will be protected when land is subdivided and/or developed. This can be accomplished by minimizing the use and development of lands above an intake/reservoir and implemented through the use of restrictive covenants.
- b) The Belcarra Peninsula Watershed and the GVRD owned portions of the Ray Creek Watershed have been designated REGIONAL PARK on Section A – Generalized Land Use Map and WATERSHED on Schedule A1 – Detailed Land Use Map. The use restrictions of these two watersheds are subject to regulations contained within the Zoning Bylaw. The boundary of the watershed designated areas on Schedule A and A1 that do not coincide with legal survey lines are intended to delineate, in general manner, the watershed's natural drainage area. As a result, the actual areal extent of the watersheds may differ from the areas delineated on the Official Community Plan maps.

## 3.0 Policies and Actions

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- c) The Belcarra Peninsula Watershed will continue to be subject to the restrictive use policies until such time as the Village, in consultation with Metro Vancouver, Belcarra Water Users' Community, and other users of the Belcarra Peninsula Watershed, decide that these restrictions are no longer required.
- d) The restrictive use policies for the Belcarra Peninsula Watershed will be applied until such time as the Village or the residents relying on Dutchman's Creek and Bridger Brook for domestic water supply secure a reliable alternative supply acceptable to the existing Dutchman's Creek and Bridger Brook users. If, however, Council determines that an economic alternative water supply is available which is sufficient to service the domestic water supply needs, then Council will consider amending the designation on Schedule A1 – Detailed Land Use Map, from WATERSHED to PARK NATURAL AREA, after a trial period has been completed which will be used to assess the adequacy of the alternative water supply. If an alternative supply is provided, then as part of the Village/GVRD Agreement Package to reopen the watershed, a clause must be inserted to the effect that if the alternative water supply proves to be unreliable during the trial period, the extent of which will be determined at the time of amending the Agreement Package, then the restrictive use policies of the watershed will be reinstated.
- e) The Village will ensure to the extent of its authority the protection of existing and potential domestic water sources that serve or may serve residential properties within Indian Arm Provincial Park.

### 3.5.2 Head of Bedwell Bay

The head of Bedwell Bay has been designated Natural Tidal (NT) on Schedule A in order to protect the environmentally sensitive tidal flats.

### 3.5.3 Creeks

- a) The Village supports the protection of the Streamside Protection and Enhancement Areas (SPEA) adjacent to natural watercourses in accordance with the Provincial *Streamside Protection Regulations* and will require all development proposals to be the subject of a Riparian Area Regulation assessment in order to minimize disruption of the SPEA.
- b) The Village will protect the riparian areas of creeks by continuing to establish building setback requirements in the Zoning Bylaw.
- c) During the subdivision approval process, the Approving Officer is encouraged to require developers to enter into a non-disturbance restrictive covenant prohibiting vegetation disturbance and removal within a specified distance from the creek.
- d) The Village will encourage property owners/developers through incentives to protect and enhance creek corridors that are accessible to the public. Stream enhancement techniques that preserve, enhance, and protect riparian areas should be explored as part of a development or building project.

### 3.5.4 Trees and Vegetation

- a) The Village supports the retention of the treed forested character within Belcarra Regional Park and Indian Arm Provincial Park.
- b) The Village will strive to strike a balance between tree retention and view retention with regard to its policy pertaining to tree management on public land.
- c) The Village supports the eradication of alien invasive species within the Village and encourages cooperation among external agencies such as Metro Vancouver Parks.



## 3.0 Policies and Actions

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### 3.5.5 Archaeological Sites

New development proposed in proximity to a Heritage and Archaeological Site will be required to be subject to an archaeological study prepared by a qualified professional archaeologist.

## 3.6 HAZARD MANAGEMENT POLICIES

### 3.6.1 Flood Hazard Protection

- a) Where possible, the Village will encourage new development to be located outside of the 200 year floodplain for Indian Arm and for the various creeks that feed into the Arm. Should development be located within the floodplain, flood protection measures shall be required.
- b) All subdivision of land that may be subject to flooding from Indian Arm or any of the creeks shall be the subject of flood hazard studies conducted by professional consultants.

### 3.6.2 Wildland Fire Hazard Protection

- a) The Village will support the *Wildland Interface Fire Management Plan* (2005) and will pursue the implementation of its strategic initiatives.
- b) The Village encourages residents to pursue fire suppression actions identified in the *Wildland Interface Fire Management Plan*.
- c) The preparation of a Wildland Interface Protection Plan will be required for major developments. The Plan shall address forest fire protection measures such as: non-combustible roofing and siding material, green spaces and landscape vegetation, perimeter protection buffers, evacuation routes and water supplies. Zoning Bylaws and / or restrictive covenants will establish specific requirements for building within Wildland Interface areas and will be implemented during the subdivision and/or building permit approval process.

- d) The Village will require new development to adhere to relevant FireSmart Building Guidelines that apply to a temperate rain forest in a coastal environment.
- e) The Village will implement and maintain a wildfire fuel reduction program.
- f) The Village will encourage Metro Vancouver Parks to pursue the implementation of fire protection measures within Belcarra Regional Park, including the installation of water lines and hydrants along Tum-tumay-whueton Drive.

### 3.6.3 Geotechnical Hazard Protection

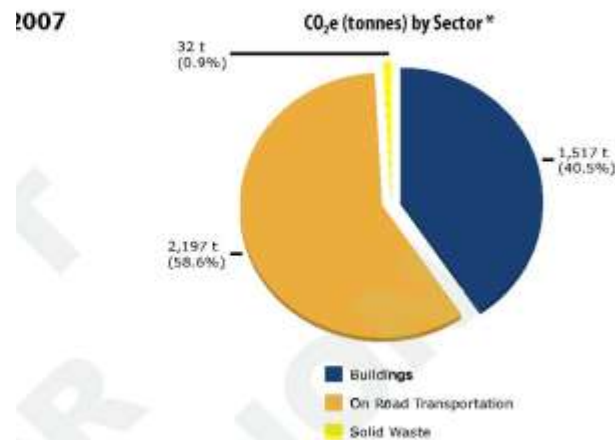
During the subdivision and/or building permit approval process, technical studies may be required for lands that may be subject to soil instability, rock fall, debris flows, etc. as determined by the Approving Officer and/or Building Inspector.

## 4.0 Greenhouse Gas Emission Reduction Strategy

**Pursuant to Section 877(3) of the *Local Government Act*, local governments are required to incorporate within their official community plans targets, policies, and actions for the reduction of greenhouse gas emissions.**

### 4.1 Targets

The Village of Belcarra, being a semi rural community at the periphery of the region's urban area, is within close proximity to communities with urban amenities. According to the *Community Energy and Emissions Inventory* (CEEI) report prepared by the Province for Belcarra, the community's CO<sub>2</sub> emissions in 2007 consisted of 58% from transportation, 41% from buildings, and 1% from solid waste. With respect to the buildings that were inventoried, although 58% of them were heated with electricity, the other 42% using natural gas generated approximately 92% of the total CO<sub>2</sub> allocated to buildings. Regarding transportation, light trucks, vans, and SUV's generated approximately 50% of transportation related CO<sub>2</sub>, but only consisted of 36% of total vehicles.



As a benchmark, the Province has set an overall GHG target reduction of 33% by 2020 and 80% by 2050. That being said, the Village has established the following Greenhouse Gas (GHG) emission **reduction**

targets with 2007 being the base year. These targets have been set on the basis of reducing the community's carbon footprint while respecting the community's vision of retaining the Village's semi rural character:

**By 2020:**      **33% - buildings**  
                     **16.5% - transportation**

**By 2050:**      **80% - buildings**  
                     **40% - transportation**

The Village recognizes that it has a role to play in leading the community to meet these targets. That being said, the attainment of these targets is also conditional upon the Province pursuing various initiatives such as changing the BC Building Code to require the incorporation of green building technology for new buildings and renovations, and enabling the creation of new, alternative, fuel efficient, and renewable energy sources to power our vehicles and heat our homes. Without the provincial initiatives and advances in technology, the achievement of these targets will be most challenging.

### 4.2 Policies

To work towards achieving these targets, the Village of Belcarra will pursue the following **land use / building and transportation policies**:

#### 4.2.1 Building / Land Use

- Support alternative energy sources such as solar and geothermal heating by providing incentives to builders when applying for building permits.
- Provide incentives to builders and property owners to construct more energy efficient homes and install smart meters.

## 4.0 Greenhouse Gas Emission Reduction Strategy

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- c) Consider requiring new homes within new subdivisions that are the subject of rezoning applications to meet Built Green standards or a similar program and to install smart meters.
- d) Continue to support home based businesses pursuant to Policy 3.1.2(b).
- e) Continue to permit accessory suites within the Zoning Bylaw.
- f) Support the provision of electrical power to areas currently not serviced with electricity in order to reduce or eliminate the use of generators.
- g) Support potential community garden sites on Village lands and raise awareness about the value of purchasing locally-produced food and supporting programs that build a robust local food network.

### 4.2.2 Transportation

- a) Work towards improving transit ridership levels for commuters by collaborating with TransLink to reduce the barriers that may be impeding increased transit usage.
- b) Work towards improving transit ridership for recreational visitors to Belcarra Regional Park by collaborating with TransLink and Metro Vancouver Parks.
- c) Support the Evergreen extension of Skytrain to provide Belcarra residents with a greater incentive to utilize transit.
- d) Support car pooling, ride share, and car sharing co-operative programs.
- e) Enhance the trail network within the Village in order to encourage pedestrian and cyclist mobility.
- f) Examine ways to make the roads safer for pedestrians and cyclists.

### 4.2.3 Solid Waste

- a) Support Metro Vancouver's Zero Waste objectives.
- b) Examine options to reduce quantities of waste.
- c) Continue to support recycling initiatives.
- d) Support Village-wide composting initiatives.

### 4.3 Actions

As a means of implementing these policies, the Village of Belcarra will consider pursuing the following **specific actions**:

- a) Review the Zoning Bylaw and the Building Bylaw to identify any significant barriers to achieving GHG reduction.
- b) Create a citizens based working group to create a Climate Change Action Plan and provide recommendations to Council.
- c) Develop and promote educational programs about climate change and a tool-kit for residents to promote energy efficiency at home, especially if using gas / oil for heating.
- d) Adopt and enforce an Anti - Idling Bylaw.
- e) Investigate measures for the Village to provide incentives for residents to conduct energy audits and to undertake energy retrofits.
- f) Request the Province to provide the Village with the tools and resources to monitor and measure the GHG reduction levels.

## 5.0 Regional Context Statement

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Section 866 of the *Local Government Act* requires an OCP to include a regional context statement. For Belcarra, the purpose of the regional context statement is to demonstrate the ways that the OCP supports the fundamental strategies of the Regional Growth Strategy (RGS). This is Metro Vancouver's regional growth plan. It has five fundamental goals:

- a) create a compact urban area;
- b) support a sustainable economy;
- c) protect the region's environment and respond to climate change impacts and natural hazard risks;
- d) develop complete communities; and
- e) support sustainable transportation choices.

Because of its small size and limited opportunities for growth, the Village has a limited ability to influence the attainment of regional objectives. Nevertheless, Belcarra's OCP does take steps that are consistent with the fundamental regional strategies.

At time of OCP introduction, the *Livable Strategic Plan* (1996) is in legal effect. However adoption procedures for the Regional Growth Strategy (*Metro Vancouver 2040: Shaping Our Future* Bylaw 1136, 2011) have been initiated. Given the near simultaneous timing of both the Village's OCP and the Regional Growth Strategy, this Regional Context Statement has been structured according to the directions of the proposed *Metro Vancouver 2040: Shaping Our Future* (Bylaw 1136, 2011). This has been done on the understanding that the municipal requirements laid out in Bylaw 1136, 2011 are more comprehensive and detailed than those of the *Livable Strategic Plan* (1996), and that municipal consistency with the 2011 proposed Regional Growth Strategy will also mean the Village meets the requirements expected under the *Livable Strategic Plan* (1996) in the event that the 1996 Plan remains in effect.

### 5.1 Create a Compact Urban Area

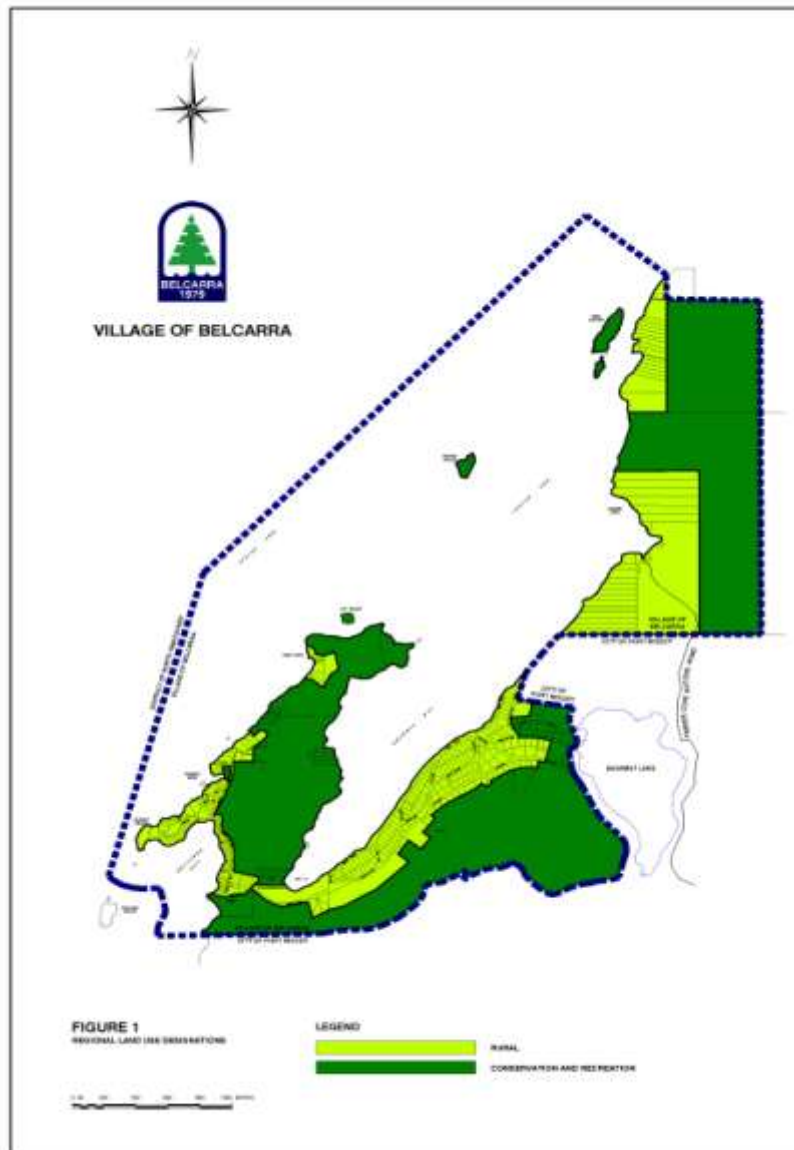
The RGS is intended to concentrate growth in compact communities that provide for a variety of housing choices and offer good access to employment opportunities, amenities, and services. Due to its isolated location and lack of available infrastructure, Belcarra does not offer these opportunities, and as such, other than the regional and provincial park areas, it has been designated **RURAL** in the RGS as is indicated in Figure 1 – Regional Land Use Designations Map. Therefore, this particular goal of the RGS while supported by the Village is not particularly relevant to Belcarra.

Consistent with the **RURAL** land use policies in the RGS, the Village's residential areas will not be connected to the region's sewer system. Densities will be limited to a scale and form that are compatible with the Village's semi rural character. Pursuant to Policy 3.1.1, densities could range from 1 unit per 0.5 acre – 1.0 acre. The potential development of the "Camp Howdy" land would be in the 1 unit per 1 acre range which is at a lower density than the Village's established residential areas.

In 2006, Belcarra had 676 people in 296 private homes. Because of existing conditions and severe constraints in its land base and topography, there are limitations to growth. The RGS anticipates that by 2041 the population would reach approximately 1000. Over the next 5 to 10 year time frame, the number of additional households in Belcarra is projected to increase at 1 - 2 per year. If however the Camp Howdy land is developed, this annual increase would be higher depending upon market absorption and project timing. As such, the OCP accommodates very little growth and is therefore consistent with that regional population estimate.

According to the 2006 Census, there were about 410 people in the labour force, only 10% of which work within the community, most of whom are engaged in home businesses. Policy 3.1.2(b) supports home based businesses.

## 5.0 Regional Context Statement



### 5.2 Support a Sustainable Economy

The RGS protects the land base and transportation corridors needed to foster a vibrant regional economy. Industrial and agricultural areas are protected and commerce is directed towards the Urban Centers. Again due to its isolated location in the region, Belcarra is not in a position to contribute to a flourishing regional economy but does support the general direction of the RGS. Policy 3.1.2(b) speaks to supporting home based businesses.

### 5.3 Protecting the Region's Environment

This particular goal focuses on the region's conservation and recreational land including providing connectivity. It also is intended to encourage a land use and transportation pattern that reduces energy consumption and greenhouse gases and is able to withstand climate change impacts and the risk of natural hazards.

Within the Village of Belcarra, Figure 1 identifies the following areas designated **Conservation and Recreation** on the Regional Land Use Map:

- a) Belcarra Regional Park; and
- b) Indian Arm Provincial Park

Within the Official Community Plan, the following land use designations have been applied to these areas to reflect the **Conservation and Recreation** land use designation:

- a) Belcarra Regional Park – Regional Park (RP); and
- b) Indian Arm Provincial Park – Provincial Park (PP).

Policy 3.1.4 supports the Belcarra Regional Park Detailed Land Use Plan which is a detailed set of land use policies for the major portions of Belcarra Regional Park.

Policy 3.3.1(e) supports new public road access through a portion of Belcarra Regional Park, but recognizes that the road will not be constructed until agreements are entered into amongst the Village, Metro Vancouver, Port Moody and the Crown that address such

## 5.0 Regional Context Statement

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issues as: road alignment, road design, ownership, and operation and maintenance.

Policies 3.5 and 3.6 speak to environmental protection and hazard land management. While mapping has not been completed, the policy framework requires new development to address these matters.

Section 4 specifically addresses greenhouse gas emission reduction and identifies a number of initiatives that Belcarra can pursue in an attempt to reduce energy consumption and emissions.

### 5.4 Develop Complete Communities

The RGS encourages municipalities to increase community diversity, create opportunities for residents to live and work in the same community, provide for a wide range of housing types, create social, cultural and commercial opportunities for its residents, and promote mixed use activity centers.

Given the relative isolated geographic location of Belcarra, its desire to remain as a semi-rural community, and its lack of available infrastructure, the Official Community Plan does not provide the creation of a complete community as envisioned by the RGS.

However, the Official Community Plan does speak to a different type of complete community for Belcarra, being a community that blends in with its natural settings, a community that values its views and open spaces, a community that promotes a friendly social spirit and volunteerism, and a community that prides itself in being financially sustainable.

### 5.5 Increasing Transportation Choice

The RGS seeks to co-ordinate land use and transportation that will result in the efficient movement of people and goods and will encourage transit, cycling, and walking.

Given the Village's isolated location, these principles are not fully applicable, and therefore alternative forms of transportation are not a key element of the Official Community Plan. That being said, Policy 3.3.2 speaks to bicycle and path networks, Policy 3.3.5 supports continued transit use, and Section 4.2.2 speaks to improving transit ridership, and encouraging car pooling and car sharing co-operatives.

## 6.0 Implementation

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### 6.1 Bylaws

Review Zoning and Subdivision Bylaws to ensure consistency with the Official Community Plan.

### 6.2 Agency Liaison

- a) Liaise with all government agencies with regards to implementing regulatory bylaws and procedures.
- b) Continue to maintain liaison with the Vancouver Port Corporation regarding all matters related to the sustainability of the Bedwell Bay.
- c) Continue to maintain an ongoing liaison with Metro Vancouver regarding the development of Belcarra Regional Park.

### 6.3 Belcarra North Road Access

Facilitate discussions with the appropriate parties with respect to exploring mechanisms to secure long term legal road access to Farrer Cove (South).

### 6.4 Trail Committee

Form a committee of residents to assist the Village in enhancing the trail network within the community.

### 6.5 Municipal Lands Tree Policy

Review the *Tree Management Policy – Public Lands* with the intent of striking a balance between tree retention and view retention.

### 6.6 Alternative Housing Design Guidelines

Prepare a series of guidelines that demonstrate Council's intentions regarding the alternative housing proposals referenced in Policy 3.1.1(c).

### 6.7 Monitoring

Monitor development activity and community changes within the Village to determine whether the OCP policies and designations are still relevant or require change. The plan should be subject to a major review every 5 - 10 years.



## Schedules

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**SCHEDULE A – GENERALIZED LAND USE MAP**

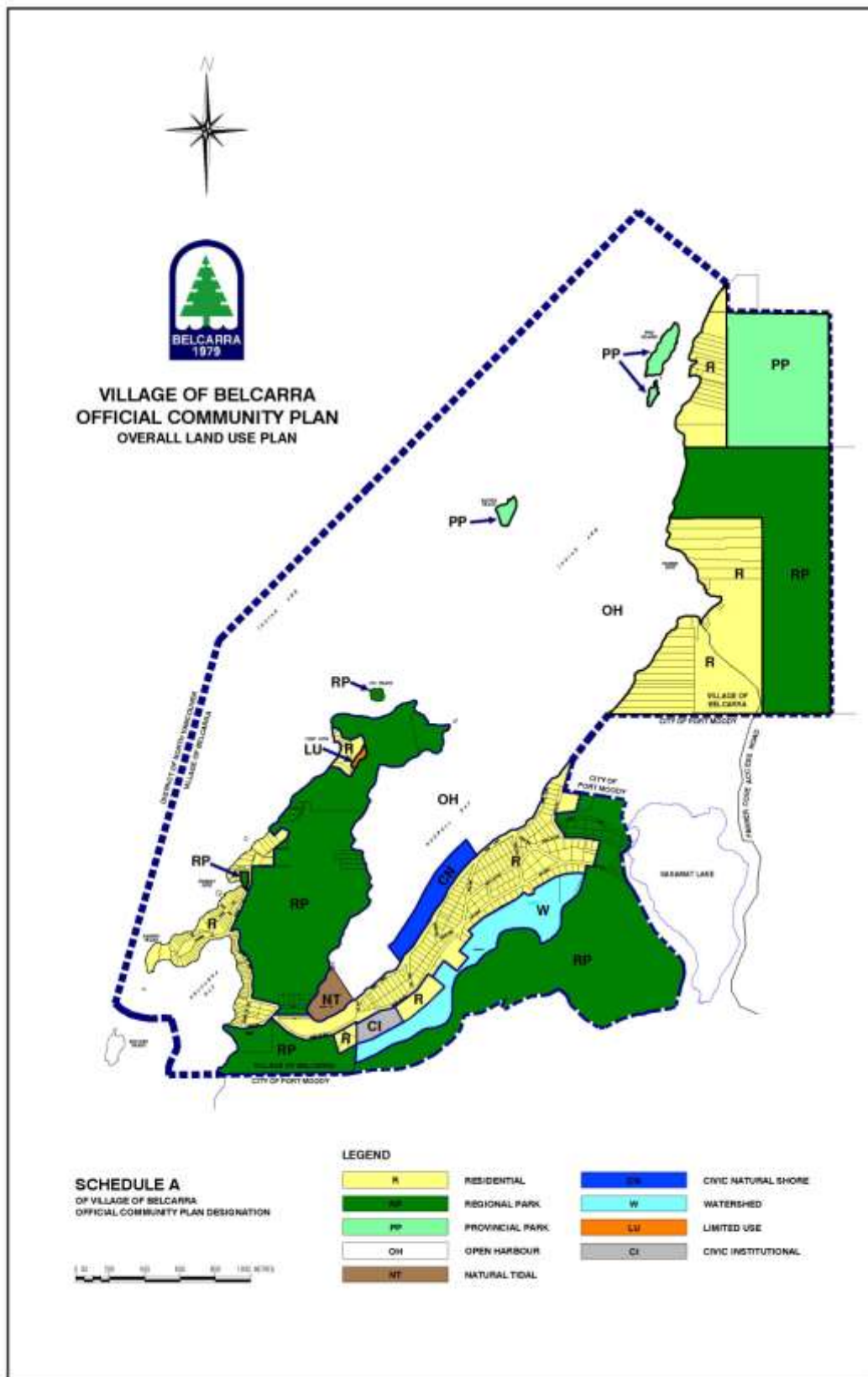
**SCHEDULE A1 – DETAILED LAND USE MAP – BELCARRA REGIONAL PARK**

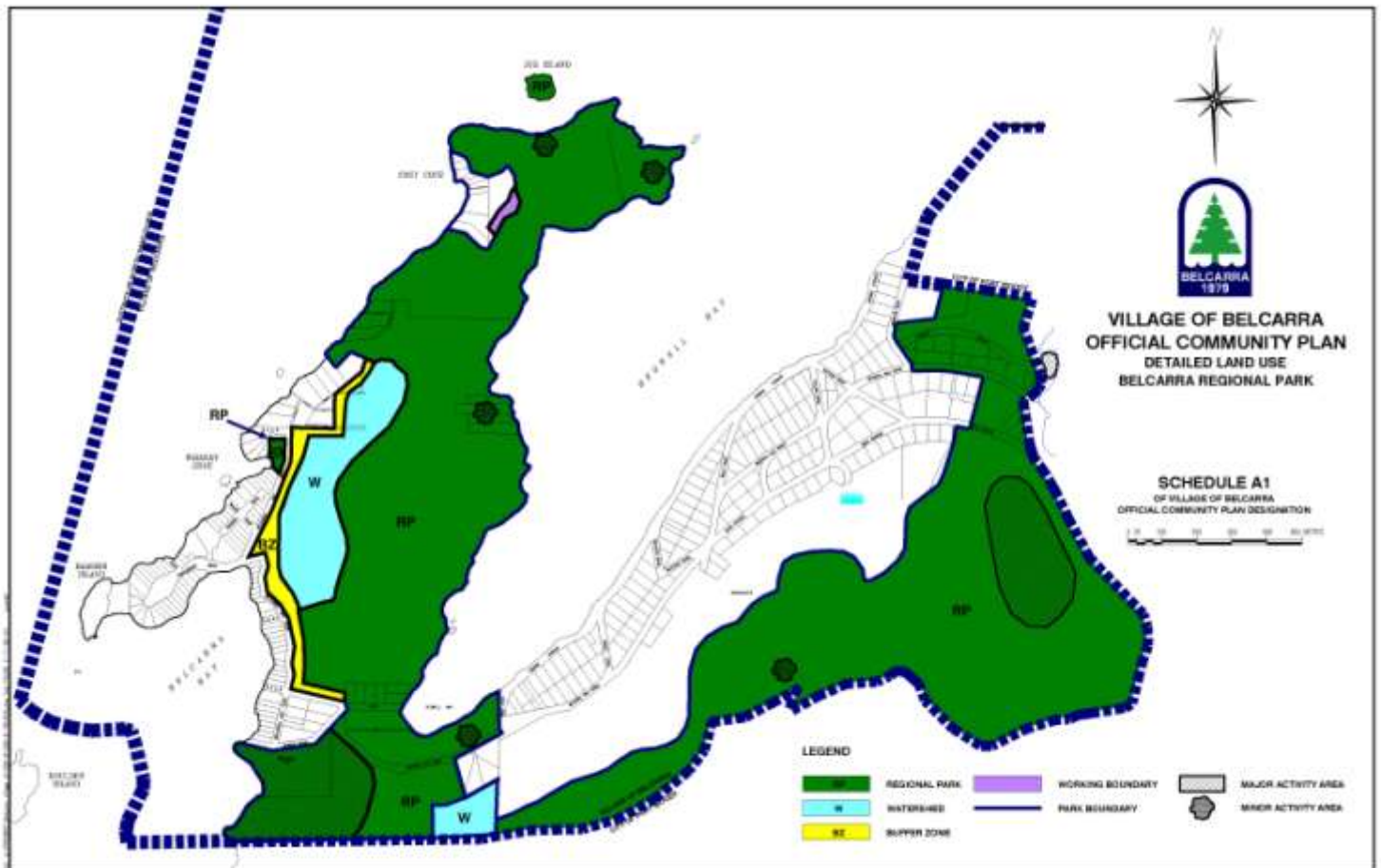
**SCHEDULE B – CIRCULATION SYSTEM MAP**

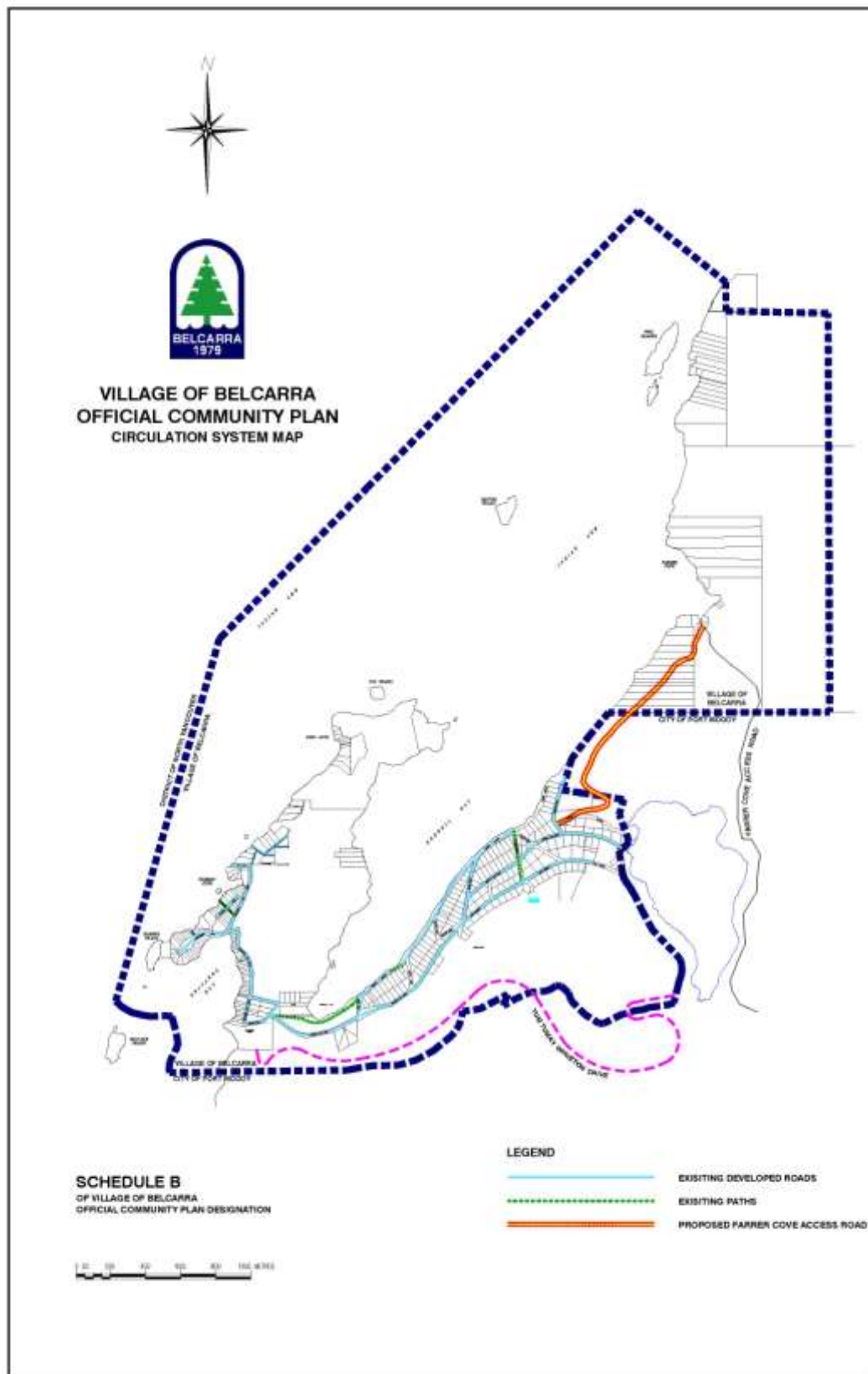
**SCHEDULE C – WATER SYSTEM MAP**

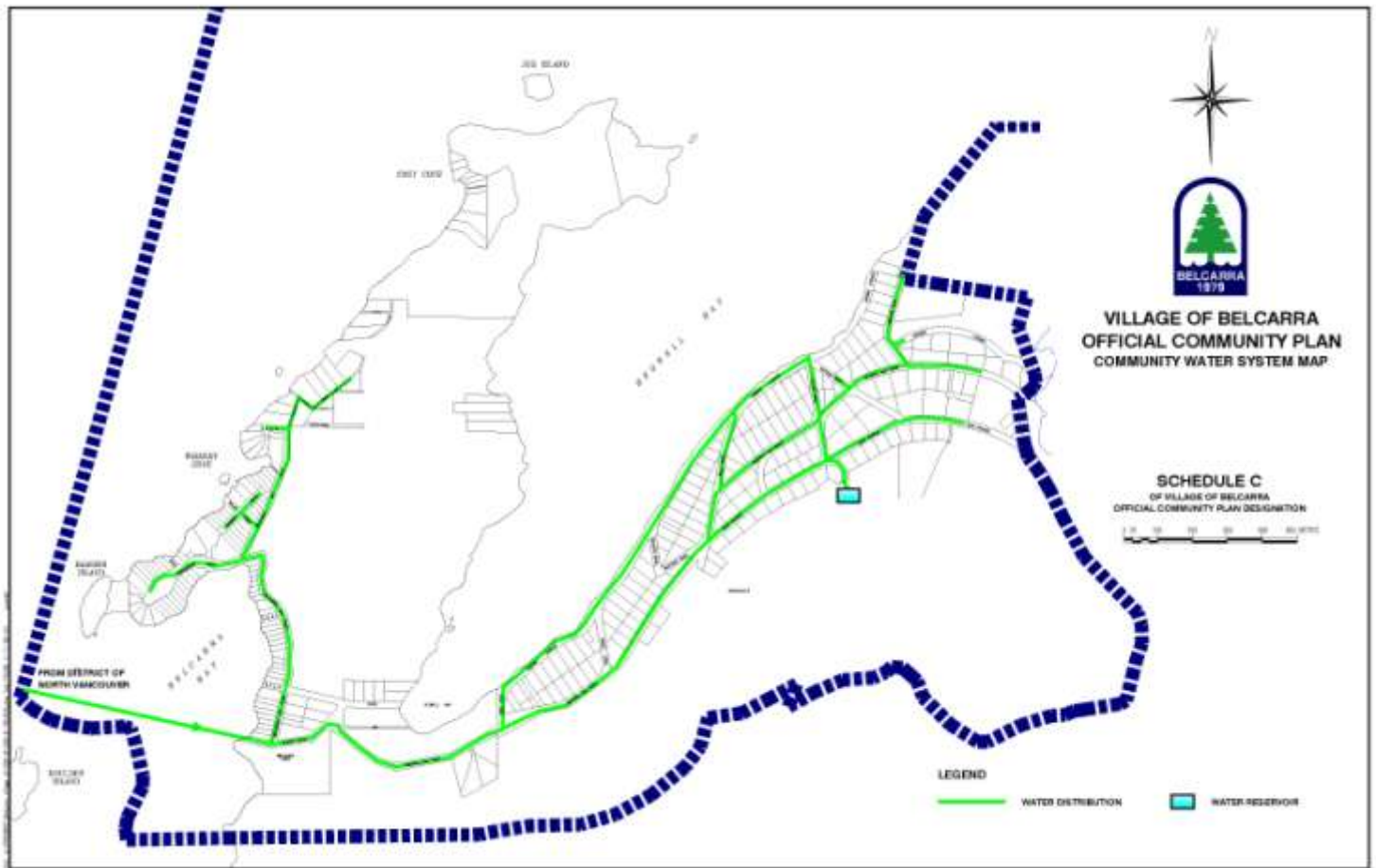
**SCHEDULE D – BEDWELL BAY SUSTAINABILITY PLAN**











**SCHEDULE D**  
**BEDWELL BAY SUSTAINABILITY PLAN**



# BEDWELL BAY SUSTAINABILITY PLAN

## A SUSTAINABLE APPROACH TO THE MANAGEMENT OF RESIDENTIAL MOORAGE IN BEDWELL BAY

Prepared by:  
Village of Belcarra

October 2007

ADOPTED BY COUNCIL October 15, 2007

## 1.0 Introduction

One of Belcarra's major focal points as a waterfront community is Bedwell Bay; an amenity that draws residents and visitors to recreate, socialize, and enjoy the natural setting of Indian Arm. As with any other popular waterfront recreation area, there is always a need to incorporate sound environmental management and planning to sustain a healthy balance with social and recreational demands. As part of a continued effort to effectively manage these competing values, the *Village of Belcarra* has prepared a plan to manage residential moorage development in Bedwell Bay that has sustainability as its foundation and balances economic, social, and environmental values. This plan has been prepared in consultation with the Vancouver Port Authority (VPA) and Burrard Environmental Review Committee (BERC).

Historically, Bedwell Bay has been affected by a variety of land uses and marine activities. As a result, it has not been maintained as a pristine area. Industrial logging around Bedwell Bay continued throughout the first half of the 20<sup>th</sup> century, and included at least two log dumps at the head of the Bay (one at West Road) and designated log booming areas in the mid-zone of the Bay. Up until the 1960s, Bedwell Bay was also designated as a "Ships Graveyard" and was frequently used for the disposal of derelict vessels. In 1981, the *National Harbours Board* (NHB) permitted Bedwell Bay to be used as the salvage operations site for the barge *Kokohead*. Salvage activities left behind a substantial volume of debris in the shallow waters near the head of the Bay. Prior to the incorporation of Belcarra in 1979, neither Bedwell Bay nor its riparian habitat was adequately preserved or "respected". However, the municipality has been proactive in pursuing protective policies, and as a result, the last 25 years of sound management have brought considerable improvements to the Bedwell Bay marine and riparian habitats.

Protecting the environmental sensitivity of Bedwell Bay is not a new initiative for Belcarra. The municipality's existing *Official Community Plan* (OCP) has a number of policy statements regarding environmental protection, not the least of which is designation of the head of Bedwell Bay for protection as a "natural tidal" area. In addition, a group wharfage facility approach was instituted as a means of controlling the number of individual docks within Bedwell Bay. Another important initiative that the municipality has actively pursued over the years is to have Bedwell Bay designated as a pleasurecraft *no sewage discharge zone*. The Federal Government has supported the initiative, and in May 2007, Bedwell Bay was so designated.

The *Village of Belcarra* is a low-density residential area consisting primarily of ½-acre lots. It should be recognized that there is minimal potential for additional residential development within the Village as a whole, and within the Bedwell Bay residential area (Woodhaven Subdivision) in particular, as the build-out of residential properties is nearly complete, and there are virtually no opportunities for further subdivision to take place. As of June 2004, it is estimated that there are only about 20 undeveloped properties remaining within the municipality (~10 properties within the Woodhaven Subdivision).

The Village recognizes that there are a variety of stakeholders who have an interest in the sustainability of Bedwell Bay. Accordingly, this *Sustainability Plan* is intended to:

- Work towards meeting the expectations of the *Burrard Environmental Review Committee* (BERC) and the *Vancouver Port Authority* (VPA);
- Provide direction for the preparation of a *Best Practices Guide* to maintain sustainable coexistence of natural and public values; and
- Be the catalyst for the creation of a community-based *Stewardship Committee* that includes representatives from VPA, BERC, Council, and residents of Belcarra.

## 2.0 Jurisdictional Responsibilities

The Bedwell Bay area falls under the proprietary jurisdiction of the VPA which includes all those federally-owned parcels of land together with the foreshore and land covered by water of Burrard Inlet and Indian Arm, the boundary of which is generally defined by the legal High Water Mark.

Given the presence of Marine Avenue along the majority of the developed portion of the east side of Bedwell Bay, a municipal road, the *Village of Belcarra* is considered the upland owner. Consequently, it is VPA's practice to grant licenses to the *Village of Belcarra* for the purpose of operating non-commercial moorage facilities in Belcarra, including Bedwell Bay. In turn, VPA has agreed that the rights granted to the Village by the license may be sub-licensed to a third party for a non-commercial moorage facility. In Bedwell Bay, sublicenses exist for single user, group and shared facilities.

The Village includes in this Plan, as well as its overall OCP and Zoning Bylaw, policies related to the management of the Bedwell Bay foreshore and water area. VPA acknowledges that these policies and bylaws provide development guidelines for the Village, however the use of lands and water under VPA jurisdiction are ultimately at the discretion of VPA.

In VPA's March 2005 "Port Plan", Bedwell Bay falls under Planning Area 7 - Indian Arm. The intent of this planning area is for continued use for public marine recreational, vessel anchorage, residential waterfront moorage and marine commercial uses, where appropriate. Given this, the long-term use of Bedwell Bay for residential waterfront moorage is supported by VPA.



The VPA has established *Building Guidelines for Residential Waterfront Facilities* that govern marine development within its jurisdiction for non-commercial waterfront use. These guidelines include an application, review and approval process. All proposed new residential moorage facilities require a Residential Waterfront License, and VPA and BERC approval. All proposed improvements, alterations or renovations to existing structures within an existing License Area, require VPA, BERC member agencies, and Village approval.

As the license holder, the Village leads the application review process for Residential Waterfront Licenses. All applications related to new and upgrading existing facilities require prior review by the Village and then are referred to VPA. The Village reviews applications in accordance with its OCP and its bylaws, and the VPA in accordance with the *Building Guidelines for Residential Waterfront Facilities*. In the event that there are differences between Village and VPA policies and guidelines, the more stringent prevail.

This Management Plan is a combined effort of the Village, VPA and BERC. All parties will utilize this Plan for guidance when reviewing applications for new residential moorage facilities in Bedwell Bay.

### **3.0 Site Conditions**

The intertidal zone was examined from the West Road beach access point to Kelly Road. The head of Bedwell Bay is designated a protected zone and is part of the GVRD parks system. Riparian vegetation from West Road to Lower Windermere Creek is largely intact, however a number of locations exist where the characteristics or lack of vegetation are such that a riparian crossing could be considered with having a minimal impact. Of concern though are a number of dinghies and other watercraft stored above the high water mark in or under trees. Where these craft are routinely launched, the intertidal zone has been smoothed from the high to the low water mark by the removal of rocks. Several artificially created groynes have resulted from rocks being placed off to each side of the launch paths. Storage of the watercraft in the riparian zone has resulted in broken branches, smothered shrubs, grass and forbs, and the creation of pedestrian paths on the slope up to the road or house above. Storage and path locations have resulted in localized erosion.

The riparian zone is fragmented along the shoreline, both by beach accesses and wharf catwalks, and by slumping, due to unstable fill slopes along the Marine Avenue right-of-way, which was an historic skid road, built on uncompacted, locally available rock and other stripped materials. One section of the road will be moved inland about 1 metre where the edge is slumping, rather than trying to compensate for encroachment into the riparian/intertidal zone, which would be required in order to stabilize the existing oversteepened slope. Where bedrock is exposed and/or overlaid with organic material, large cedars and typical understorey (*i.e.*, huckleberry, fern, salmonberry, salal, *etc.*) are intact.

Most property owners have abided by the local regulations and have not pruned or removed trees, and have built their access points so as to avoid damage to existing vegetation and large trees. Consequently, the riparian integrity has been maintained along stretches of the waterfront and the canopy completely encloses the access points (also desirable from the users' perspective as shade). Most beach accesses are wooden staircases, supported above the bedrock or overburden by wooden pilings, which allows vegetative growth under and around the access points.

From a marine flora and fauna habitat perspective, within the intertidal zone there were no differences noted under or to either side of the catwalks connecting the beach access points to the offshore floats. Rockweed was more prolific and denser in growth in some areas where some shading from decks and vegetation apparently reduced desiccation without limiting growth through significant sunlight reduction. Pilings, used to support the catwalks above the higher high water mark, offered additional surface area for the attachment of mussels and other sessile organisms, especially on the eastern side, which was shaded by the riparian trees, thus reducing exposure to direct sunlight and better heat regulation. As a consequence to the increased structural density caused by a deck, municipal zoning regulations now prohibit any structures, other than a stair or landing less than 2 meters in width, to cross the riparian zone.

Eelgrass grows most densely and abundantly in the shallow subtidal zone from the 0 tide elevation to about -2 m (tide and chart). A few scattered fronds can be seen in depths up to -3 m. This band is relatively continuous along the waterfront and into the head of the bay (the northwest side of the bay was not assessed as it is outside the purview of the *Village of Belcarra* with respect to wharf developments), where the shallow subtidal bench offers the best environment for eelgrass growth. The shallowness of the eelgrass band within Bedwell Bay is apparently due to the turbidity of the water that restricts light penetration, and thus reduces the depth distribution to no more than -4 m (based on assessments done for recent wharf applications). Where the sea bottom drops off more rapidly towards the northern end of the Belcarra waterfront, eelgrass is very limited and scattered, or non-existent. There were no apparent differences in the density or width of the eelgrass band between the developed waterfront and the head of the bay. The distribution of eelgrass is probably affected by a number of factors, including shading from floats, localized substrate conditions, depth contouring and propeller wash. The Plan should include a requirement that negatively impacted sites be corrected through the regulatory cycle of renewing a waterlot licence.

#### 4.0 Long Term Vision for Bedwell Bay

The broad long-term vision for Bedwell Bay is that it will serve the recreational interests of both the community and the region in a manner that respects its environmental features. Bedwell Bay will continue to provide community residents with residential moorage opportunities developed in a controlled manner; however, some previously contemplated residential moorage may be prohibited as a result of site specific conditions including those that identify an unacceptable loss of habitat. Anchorage for boaters who will also seek Bedwell Bay as a destination point will be restricted, and the dumping of sewage from boats will be prohibited. Either avoiding development wherever possible, or mitigating its impacts, will protect areas with sensitive environmental attributes such as the eelgrass habitat.

#### 5.0 Belcarra's Strategic Initiatives

To work towards achieving the vision for Bedwell Bay, the *Village of Belcarra* will pursue the following strategic initiatives. A number of these initiatives are illustrated on the attached map:

- 1) Residential Moorage  
Remove the "Residential Moorage" (mooring bouys) designation within Bedwell Bay, presently in the *Official Community Plan*, recognizing that boat anchoring has the greatest potential for damage to eelgrass habitat.
- 2) Car Top Boat Launch – West Road  
Eliminate the potential "Cartop Boat Launch" facility from the proposed list of uses within the GVRD lease area adjacent to West Road, recognizing that such a use would necessitate alteration of the foreshore inter-tidal zone.
- 3) Anchorage Discouraged Zone  
Create a "Sensitive Habitat Area - Anchorage Discouraged Zone" within the shallow subtidal zone (high water to -4m) as identified in Schedule A - *Bedwell Bay Residential Moorage Development and Restrictions Plan*, in order to avoid dragging and dislodging of eelgrass roots, recognizing that while mariners have a right to anchor, boat anchoring (dragging of anchors) has the greatest potential for damage to eelgrass habitat. (This would necessitate collaborating with DFO, BERC and GVRD Parks to establish criteria and restricted zones.)
- 4) No-Shore Landing Of Motorized Watercraft  
Establish a "No-Shore Landing Of Motorized Watercraft" policy, the intent of which is to avoid inadvertent damage to all intertidal marine flora and fauna. The launching and landing of non-motorized watercraft such as kayaks, dinghies, and rowboats will be accommodated, and will be encouraged to utilize three specific locations – Tatlow Trail fronting 3424

Marine Avenue, the divers' access fronting 3641 Marine Avenue, and the public stair access fronting 4152 Marine Avenue. In the future, the Village in consultation with residents may identify other locations.

- 5) Community Wharf Zone  
Create a "Community Wharf Zone" in Bedwell Bay to provide a community wharf to meet the needs of "water access only" residents; for example, Belcarra's Twin Islands property owners.
- 6) No Sewage Discharge Area  
Designate Bedwell Bay within the *Official Community Plan* and *Zoning Bylaws* as a "No Sewage Discharge Area".
- 7) Riparian Area Crossings  
Prohibit the development of new residential moorage facilities and riparian area crossings in areas designated No Development Zone on Schedule A - *Bedwell Bay Residential Moorage Development and Restrictions Plan* due to their high habitat value, environmental sensitivity, and municipal requirements.

Restrict riparian area crossings for new residential moorage facilities to situations where there is either an existing crossing or to a shared crossing. In cases where these conditions are not practical, then a new riparian area crossing may be permitted provided that the environmental impact is minimized and the remainder of the riparian area, considered as important fish and wildlife habitat, is enhanced.

- 8) Number and Location of New Residential Moorage Facilities  
Restrict the number and location of new residential moorage facilities (structures below the high water mark not including the riparian area crossing) in accordance with the attached Schedule A - *Bedwell Bay Residential Moorage Development and Restrictions Plan* as follows:
  - ❑ Area 1 - between West Road and Young Road – 3;
  - ❑ Area 2 - between Young Road and Kelly Road – 3;
  - ❑ Area 3 - between Kelly Road and Windermere Creek – 4; and
  - ❑ Area 4 - between Windermere Creek and the Village boundary – 4.This may result in an increase in a potential maximum of 14 new residential moorage facilities which would mean a maximum total build out of 44 single, shared, and group facilities. It should be noted that wharf development at the potential sites will still require full environmental reviews, including assessments of impacts to eel grass and other fish habitat, shoreside vegetation and other environmental impact factors as well as construction feasibility. This is particularly relevant for those facilities that lie within or adjacent to the Sasamat / Lower Windermere Creek fan.

- 9) Group Wharfage Associations  
Create a new policy that encourages existing *Group Wharfage Moorage Associations* to increase their membership, albeit to a maximum of six upland owners, to accommodate community needs.
- 10) New Residential Moorage Facilities within Area 1  
Revise the Zoning Bylaw such that new residential moorage facilities within Area 1 shall be group wharves.
- 11) Existing Residential Moorage Facilities  
Support the maintenance or replacement of existing residential moorage facilities that would comply with all VPA, Village, and all other appropriate legislation and regulations, and *Best Management Practices*.  
Encourage owners of existing residential moorage facilities that do not conform to current VPA or Village requirements to upgrade their facilities to comply. (Note: When the sub licensees for existing facilities are up for renewal, VPA will require the facility to be upgraded to current standards as a condition of renewal of the sub licensing agreement.)
- 12) Environmental Assessment Reports  
Assess all applications for new docks and dock upgrades within Bedwell Bay on a case-by-case basis that will necessitate an applicant to obtain an *Environmental Assessment Report* prepared by qualified experts.
- 13) New Residential Moorage Facility Construction  
Require all new residential moorage facility construction, including replacement or upgrading, to comply with:
  - a) VPA, Village, and all other appropriate legislation and regulations, and *Best Management Practices*;
  - b) the *Building Guidelines for Residential Waterfront Facilities*, a set of guidelines established by VPA for new construction below the high water mark. (Please see Implementation Measure 8); and
  - c) a new *Best Management Practices Guide* that will address construction activity in the context of environmental issues to be prepared by the Village in consultation with VPA and BERC. The *Best Management Practices Guide* would address the following issues:
    - i) placement of wharf floats and boat moorings to avoid shading effects;
    - ii) orientation of structures;
    - iii) elevation of catwalks above the high water mark;
    - iv) light penetration through floats and catwalks;
    - v) size of floats; and
    - vi) alternatives to anchor chains.

14) Marine Avenue Riparian Zone Management Policies

Incorporate a series of existing and new *Marine Avenue Riparian Zone Management Policies* within the *Official Community Plan*. Items that would be addressed include:

- a) informing all users of the foreshore along Bedwell Bay of the value of native vegetation along the waterfront in terms of its supply of food and nutrients to the marine habitat, shade for temperature regulation, and protection from desiccation for intertidal organisms, stormwater run-off control, and general water and air quality improvement;
- b) the *Village of Belcarra* undertaking an invasive species control program, replanting with native species appropriate to the coastal area;
- c) pursuing habitat enhancement opportunities, such as boulder clusters and cobble beds for habitat complexity,
- d) considering the identification of 'no-go' zones for specific environmentally sensitive areas in order to minimize disturbance of foreshore intertidal communities and shallow subtidal eelgrass or kelp beds by dogwalkers, seadoos, kayakers, hikers, *etc*; and
- e) signing of designated waterfront/beach accesses, the intent of which is to discourage access in locations that would be subject to erosion and vegetation loss.

15) Bedwell Bay Stewardship Committee

Establish a *Bedwell Bay Stewardship Committee* in conjunction with VPA and BERC. The *Stewardship Committee* would consist of not only members of the community, but could include representatives from GVRD Parks and the *Vancouver Water Ski Club*. The *Stewardship Committee* could take charge of habitat enhancement and/or restoration opportunities, not only within the intertidal zone, but also freshwater streams and riparian buffer zones. By encouraging community involvement, the individual members will take ownership of the environment and will take pride in protecting the marine and terrestrial habitat in the area.

## 6.0 Implementation Measures

To achieve the vision for Bedwell Bay, and to implement Belcarra's aforementioned strategic initiatives, the municipality will pursue the following course of action:

- 1) Commence the process of initiating amendments to the *Official Community Plan*, Zoning Bylaw, and the *Village / GVRD Agreement Package*.
- 2) Prepare the *Marine Avenue Riparian Area Management Policies* in consultation with VPA and BERC.
- 3) Continue approaching the Federal and Provincial Governments with respect to establishing sewage disposal regulations for pleasurecraft (recreational boaters) within Bedwell Bay.
- 4) Revisit the *Group Wharfage Association* policies and procedures for new residential moorage facilities.
- 5) Prepare a *Best Management Practices Guide* for new dock construction, including the required content of environmental assessment reports.
- 6) Establish the *Terms of Reference* for a *Bedwell Bay Stewardship Committee* in conjunction with VPA and BERC.
- 7) Seek commitments from VPA and BERC with respect to ensuring Village involvement regarding the processing of residential moorage applications.
- 8) Collaborate with VPA by providing input into the revision of VPA's *Building Guidelines for Residential Waterfront Facilities* for non-conforming structures so that they include a procedure to bring those facilities into compliance with applicable current regulations and policies.

## Aerial Photographs - Bedwell Bay - 27 April 2005





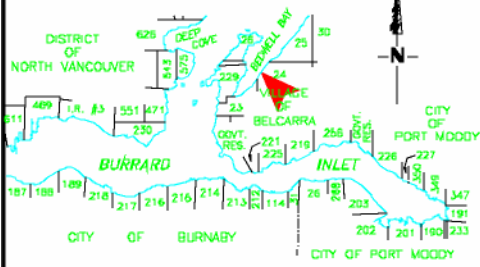
NOTES:  
- DATE OF PHOTOGRAPHY:  
APRIL 27, 2005

[illegible]

DATE PLOTTED: 2006/03/17



# KEY MAP



REFERENCES: - VPA PLAN S2006-060

## NOTES:

- DATE OF PHOTOGRAPHY:  
APRIL 27, 2005



DATE PLOTTED: 2008/03/17



VANCOUVER PORT AUTHORITY  
ENGINEERING DEPARTMENT

DESIGN BY

DRAWN BY vavt

APPROVED

DATE Mar 17/06

SCALE 1:5,000

VPA SITE 116

BEDWELL BAY  
NORTHERN PORTION  
2005 ORTHOPHOTOGRAPHY  
Village of Belcarra

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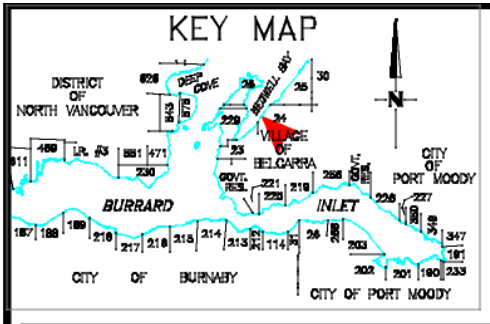
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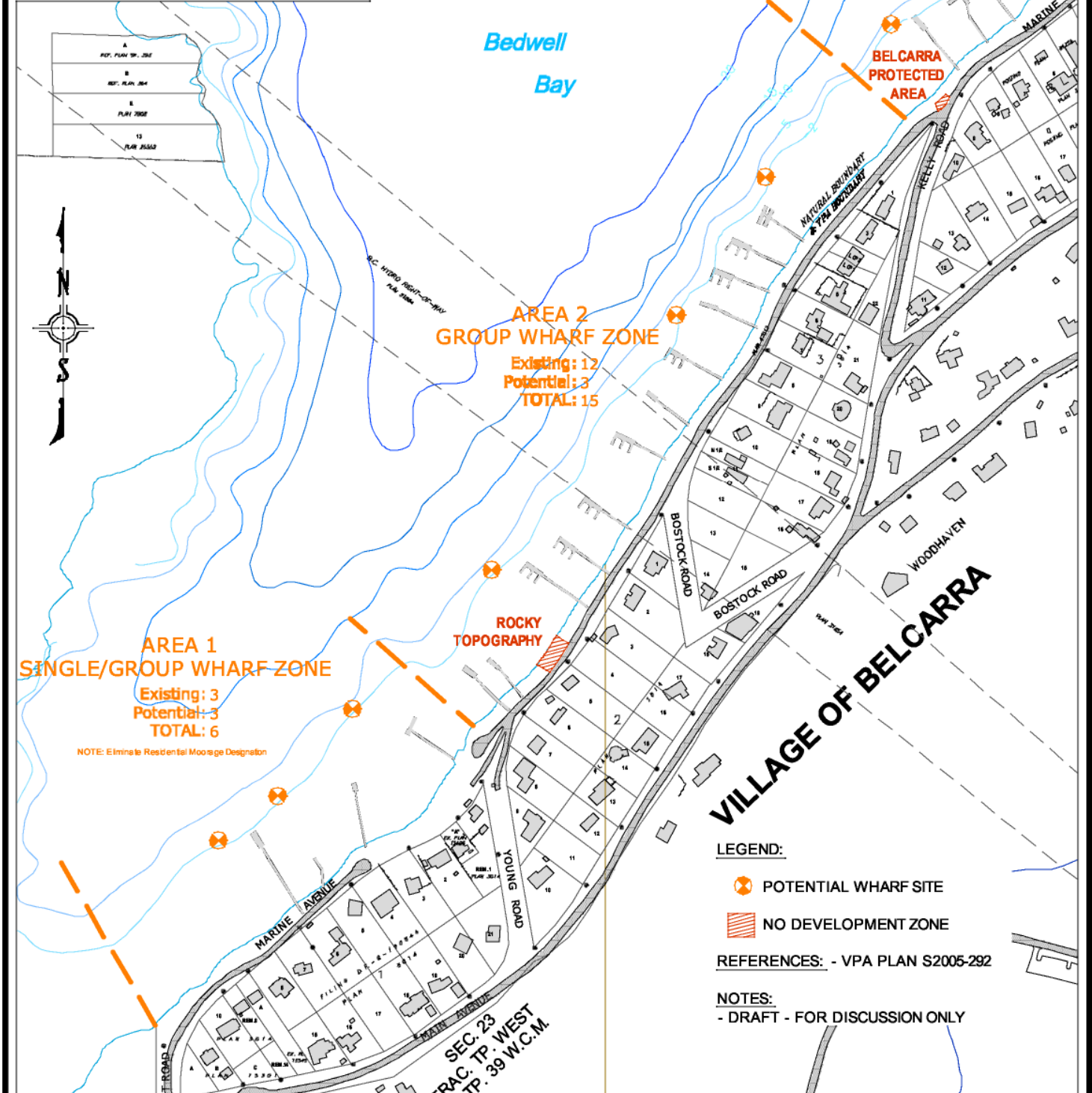
## **Schedule A**

Proposed Bedwell Bay Residential Moorage Development and Restrictions Plan





WHARF DEVELOPMENT AT THE POTENTIAL SITES WILL STILL REQUIRE FULL ENVIRONMENTAL AND CONSTRUCTION FEASIBILITY REVIEWS. INDICATION OF DEVELOPMENT POTENTIAL DOES NOT GUARANTEE APPROVAL



DATE PLOTTED: 2008/04/07



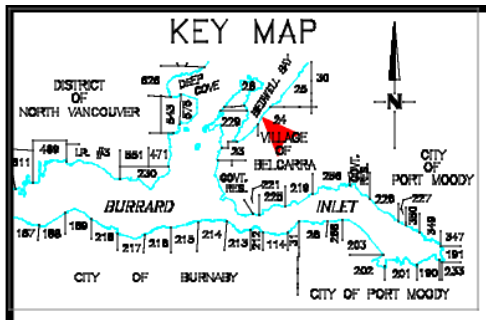
**Village of Belcarra**  
*Between Forest and Sea*



**DRAWN BY** vawt  
**DATE** Mar 16/06  
**REVISED** Apr 7/06  
**SCALE** 1:5,000

**BEDWELL BAY**  
**SCHEDULE A-1: PROPOSED WHARFAGE**  
**DEVELOPMENT AND RESTRICTIONS**

VPA Reference: SKETCH PLAN S2005-060



WHARF DEVELOPMENT AT THE POTENTIAL SITES WILL STILL REQUIRE FULL ENVIRONMENTAL AND CONSTRUCTION FEASIBILITY REVIEWS. INDICATION OF DEVELOPMENT POTENTIAL DOES NOT GUARANTEE APPROVAL

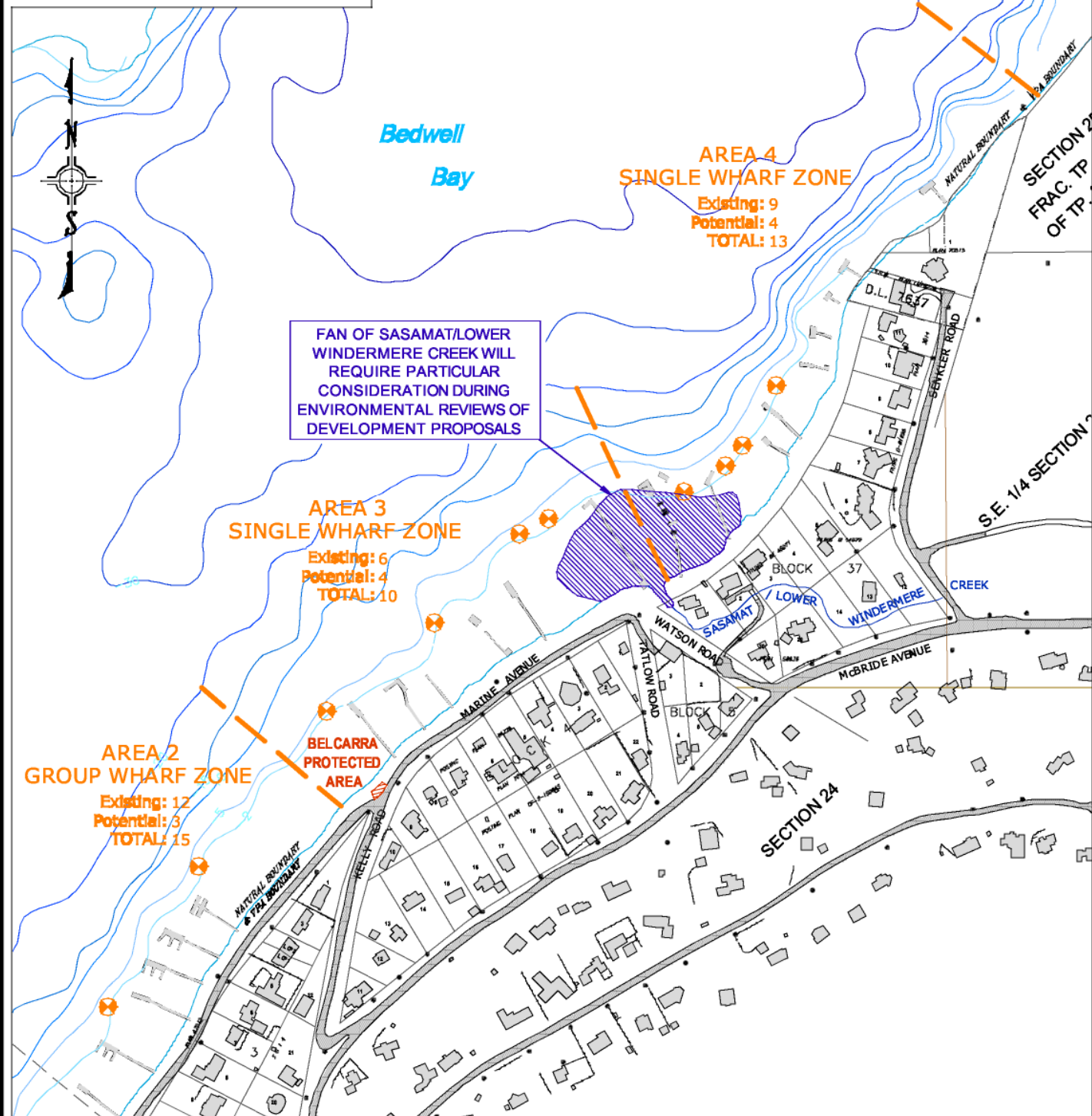
#### LEGEND:

- POTENTIAL WHARF SITE
- NO DEVELOPMENT ZONE

REFERENCES: - VPA PLAN S2005-292

#### NOTES:

- DRAFT - FOR DISCUSSION ONLY



**Village of Belcarra**  
*Between Forest and Sea*



DRAWN BY vavt  
DATE Mar 16/06  
REVISED Apr 7/06  
SCALE 1:5,000

**BEDWELL BAY**  
**SCHEDULE A-2: PROPOSED WHARFAGE**  
**DEVELOPMENT AND RESTRICTIONS**

VPA Reference: SKETCH PLAN S2005-090