



COLLABORATION FOR PROTECTING EELGRASS

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Prepared for:

Tsleil-Waututh Nation

Prepared by:

Deborah Curran and Patrick Canning, Supervising Lawyers

Megan Walwyn, Environmental Law Centre Clinic Student

Adele DesBrisay, Co-op student

Chad Wilkinson, Articling Student

Cover photos: Provided by Tsleil-Waututh Nation

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DISCLAIMER AND CAVEAT

The recommendations outlined in this submission are intended to assist and promote an active and ongoing process of deliberation and action between the Village of Belcarra and Tsleil-Waututh Nation regarding protection of the Bedwell Bay eelgrass bed. If Tsleil-Waututh Nation makes alternative recommendations that conflict with this submission, this report defers to their expertise. Nothing in this report should be interpreted against the interest of any of TWN's rights and title, or against any other Indigenous rights-holder.

This document was drafted for Tsleil-Waututh Nation from the information and documentary record that is publicly available, and the research was largely limited to resources available online. The authors of this document are not embedded in the day-to-day operations of the Village of Belcarra, and discussion or implementation of the recommendations within this report may already be happening within the municipality. We hope that this is the case, and that the discussion contained herein will be considered fully and in the spirit of seeking understanding and engagement.

This submission does not address the more fundamental Coast Salish legal order, Aboriginal rights, title, and collaborative governance that underlie the exercise of municipal authority.

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The opinions expressed within this report are those of the authors, and any errors or omissions are the responsibility of the authors alone.

ACKNOWLEDGEMENT OF AUTHORITY

The authors of this document acknowledge that the Tsleil-Waututh legal order has always existed, and continues to exist, within this territory. This document discusses remedies within the colonial legal order, specifically municipal law remedies, to address the lack of acknowledgement of authority and involvement of Tsleil-Waututh people. The fact that these remedies are directed at municipal laws should not be construed as support for this colonial legal order as the sole authority in these matters. Rather, the authors acknowledge the authority of the Coast Salish legal order over these matters and encourage the abdication, sharing, or adjustment of colonial decision-making authority to facilitate the adoption and/or acceptance of the authority of Tsleil-Waututh Nation laws and decision-making fora.

Nothing in this document should be construed or interpreted as a cession or against the interest of any of the rights and title of the Tsleil-Waututh Nation, or any other Indigenous rights holder.

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EXECUTIVE SUMMARY

CONTEXT

Since time immemorial, the Tsleil-Waututh Nation (“TWN”) has occupied the lands and waters of Burrard Inlet and Indian Arm. Generations of TWN members have used marine and intertidal resources for food harvesting and other cultural practices.¹ TWN has sacred legal obligations to protect and defend the water, land, air, fish, birds, animals, and other natural and spiritual entities located on their territory.²

Urban development and industrial activities have dramatically altered the Burrard Inlet and Indian Arm coastal and marine ecosystems. In particular, the extent and abundance of eelgrass beds have been greatly reduced. As habitats for a variety of fish and invertebrates, eelgrass beds serve critical ecological functions. They are also significant to the cultural and spiritual well-being of TWN and are a food source for TWN members. The loss of eelgrass beds has prevented TWN members from exercising their harvesting rights, and there are concerns that the reduction of eelgrass habitat may exacerbate the decline in salmon populations. The TWN has been leading efforts to protect the remaining healthy eelgrass beds through restoration and transplant projects.

SIGNIFICANCE OF THE BEDWELL BAY EELGRASS BED

As part of TWN’s traditional territory, Bedwell Bay has the only eelgrass bed in Burrard Inlet deemed sufficiently robust to provide donor stock for small scale restoration projects.³ However, there are currently no legal protections for the bed, and marine uses, water contamination and a lack of jurisdictional clarity threaten its existence.

¹ Tsleil-Waututh Nation, “Assessment of the Trans Mountain Pipeline and Tanker Expansion Proposal” (2016), online as pdf: <https://twnsacredtrust.ca/wp-content/uploads/TWN_assessment_final_med-res_v2.pdf> at 3 [TWN 2016].

² Tsleil-Waututh Nation, Tsleil-Waututh Nation and Kerr Wood Leidal, *Burrard Inlet Action Plan: A Tsleil-Waututh Perspective, Public Review Draft* (January 2016), online as pdf: <<https://twnsacredtrust.ca/wp-content/uploads/2023/01/TWN-Burrard-Inlet-Action-Plan-Draft-Report.pdf>> at 4 [Burrard Inlet Action Plan Summary].

³ Interview of Lindsey Ogston by Megan Walwyn (22 September 2022) [Ogston].

SUMMARY OF RECOMMENDED TOOLS FOR PROTECTION OF LANDS AND ECOSYSTEMS

The Village of Belcarra can have a significant impact on protecting the Bedwell Bay eelgrass bed through its broad planning, land use management, and service powers. A collaborative management approach with TWN can lead to a strengthened relationship and serve as a model for protecting the long-term health of the Burrard Inlet's marine and intertidal ecosystems.

Specifically, recommendations for Belcarra include:

- Initiate a collaborative governance process with TWN to facilitate meaningful collaboration on issues of shared interest and formalize consultation processes;
- Further update the Official Community Plan to reflect the values of TWN, the history of colonization in the area, and the municipality's obligations to TWN as a key affected government;
- Either designate the Bedwell Bay foreshore, including the eelgrass bed, as an Environmental Development Permit Area ("EDPA"), or designate the municipality of Belcarra as an EDPA and designate the eelgrass bed as a marine development permit area;
- Implement zoning and land use restrictions around Bedwell Bay and amend bylaws to expand principal uses in conservation and habitat protection;
- In partnership with TWN and the Vancouver Fraser Port Authority and/or Transport Canada, develop a monitoring program to track abandoned vessels in Bedwell Bay and designate it as a priority area for the removal of derelict vessels;
- In collaboration with TWN, adopt a whole-of-watershed approach to stormwater management;
- Adopt a comprehensive Watercourse Protection Bylaw;
- Work collaboratively with TWN and other government and non-government organizations to explore obtaining a Licence of Occupation for Bedwell Bay to establish a voluntary no-anchor zone around the eelgrass bed;
- Create a co-governed marine park in Bedwell Bay with TWN;
- Work collaboratively with TWN, the Vancouver Fraser Port Authority, the Province of British Columbia, and other agencies to explore the option of restricting the use of motorized vessels in nearshore areas with eelgrass beds by implementing Vessel Operations Restriction Regulations through Transport Canada.

1. INTRODUCTION

This project sets out recommendations to the Village of Belcarra, informed by Tsleil-Waututh Nation, for bylaw reform to facilitate the protection of the Bedwell Bay eelgrass beds, adjacent to Belcarra. Belcarra is a municipality located on the eastern shore of Indian Arm, 1.5 kilometers north of Burrard Inlet, within the traditional territory of TWN. The submission focuses on Belcarra's current bylaws that have an impact on Bedwell Bay, and outlines bylaw and policy reform options.

Currently, Belcarra's newest bylaws, for example the 2024 Official Community Plan (OCP), indicate an intention to engage with TWN priorities, continuing to build relationships, and move towards the goal of collaboratively managing the long-term health of the eelgrass beds in Bedwell Bay.

[Part 2](#) of this report provides background on the role of eelgrass in coastal ecosystems. [Part 3](#) outlines the current land use and decision-making context in Belcarra (with respect to TWN, municipal, provincial, and federal jurisdiction), focusing on Bedwell Bay. [Part 4](#) of the report outlines the municipal context for bylaw reform and presents legal and policy rationale in support of reform. [Part 5](#) reviews Belcarra's current policies and bylaws and identifies recommendations to Belcarra for policy and bylaw reform. The recommendations focus on establishing collaborative governance processes between Belcarra and TWN; land use planning (with respect to environmental development permit areas, zoning, and derelict vessels); stormwater management; establishing a voluntary no anchor zone; creating a marine park; and implementing Vessel Operations Restriction Regulations in Bedwell Bay.

2. BACKGROUND

Eelgrass (*Zostera marina*) is a type of seagrass found in the shallow subtidal zone along Canada's Pacific, Atlantic, and Arctic coastlines.⁴ Eelgrass beds are of significant importance to coastal ecosystems. Eelgrass beds provide habitat for a variety of fish and invertebrates;⁵ stabilize sediment, resulting in decreased coastal erosion;⁶ mitigate ocean acidification;⁷ improve water quality;⁸ and are one of the most efficient carbon sinks on earth, storing 'blue carbon' in their roots and sediments over centuries or millennia.⁹ Seagrass meadows cover less than 0.2% of the global ocean, but account for 10% of the yearly total of carbon stored in the ocean.¹⁰ Upon destruction of eelgrass beds, the carbon they store is released back into the ocean, shifting the beds from a carbon sink to a carbon source; the stored carbon then reacts with the water, resulting in increased greenhouse gas emissions (from carbon dioxide and methane) and ocean acidification (from resulting carbonic acid).¹¹ Eelgrass beds also serve as nurseries for young fish. Significantly, all species of salmon depend on eelgrass beds at some point in their life cycle.¹² Further, eelgrass plays an important role in the cultural and spiritual heritage of coastal First Nations, who harvest eelgrass for food, ceremony, cooking, and more.¹³ From an economic perspective, eelgrass meadows around the Lower Mainland provide \$80,929 in ecosystem services per hectare per year.¹⁴ Fisheries and Oceans Canada has designated eelgrass as an "Ecologically Significant Species" due to its high value to ecological functioning of ecosystems, and its contribution to fishery values.¹⁵

⁴ Grace Murphy *et al*, "From coast to coast to coast: ecology and management of seagrass ecosystems across Canada" (2021) 6 *Facets* 1 at 139, online: <<https://www.facetsjournal.com/doi/10.1139/facets-2020-0020>>.

⁵ *Ibid* at 140.

⁶ *Ibid*.

⁷ *Ibid*.

⁸ Eero Asmala *et al*, "Role of Eelgrass in the Coastal Filter of Contrasting Baltic Sea Environments" (2019) 42 *Estuaries and Coasts*, online: <<https://doi.org/10.1007/s12237-019-00615-0>> at 1883.

⁹ Aimee McGowan *et al*, "Eelgrass: A Climate Hero" (2020), online as pdf: *Climate Change Stewardship Education Program* <<https://islandstrust.bc.ca/document/eelgrass-a-climate-hero/>> at 11.

¹⁰ *Ibid* at 12.

¹¹ Trisha Atwood *et al*, "Global Patterns in Marine Sediment Carbon Stocks" (2020) 7 *Frontiers* 165 at 1, online: <<https://www.frontiersin.org/articles/10.3389/fmars.2020.00165/full>>. See also The Ocean Portal Team (reviewed by Jennifer Bennet NOAA), "Ocean Acidification" (April 2018), online: <<https://ocean.si.edu/ocean-life/invertebrates/ocean-acidification>>.

¹² Islands Trust, "Ecosystem Inventories" (last visited November 2022), online: <<https://islandstrust.bc.ca/programs/ecosystem-inventories/>>.

¹³ Nikki Wright, "Eelgrass" (2016), online as pdf: <<https://oceanwatch.ca/howesound/wp-content/uploads/sites/2/2016/12/OceanWatch-HoweSoundReport-Eelgrass.pdf>> at 110.

¹⁴ Michelle Molnar *et al*, "Valuing the Aquatic Benefits of British Columbia's Lower Mainland: Nearshore Natural Capital Valuation" (2012), online as pdf: <<https://davidssuzuki.org/wp-content/uploads/2012/11/nearshore-natural-capital-valuation-aquatic-benefits-british-columbia-lower-mainland.pdf>> at 68.

¹⁵ Fisheries and Oceans Canada, "Does eelgrass (*Zostera marina*) meet the criteria as an ecologically significant species?" (2009) Canadian Science Advisory Secretariat Report 2009/18, online as pdf: <<https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/337549.pdf>>.

Burrard Inlet and Indian Arm are part of the Salish Sea, named for the Coast Salish First Nations who have lived around the sea since time immemorial, and is one of the largest and most biologically rich inland marine ecosystems in the world.¹⁶ Importantly, the Salish Sea is the primary rearing area for salmon that migrate out of many of British Columbia and Washington's coastal rivers, including the Fraser River.¹⁷ Of the seven million people that live within the Salish Sea's drainage basin, 1.1 million live in the municipalities that border Burrard Inlet as of 2017; this figure is likely higher today. This includes seven municipalities: the City of Vancouver, City of Burnaby, City of Port Moody, Village of Belcarra, District of North Vancouver, City of North Vancouver, and District of West Vancouver.¹⁸

Although eelgrass is widespread, its abundance in Burrard Inlet has declined since the early 1900s.¹⁹ Various anthropogenic stressors, including residential and port developments, dredging, marine transport, and log storage in Burrard Inlet and Indian Arm have resulted in changes to coastal and marine areas, including losses of important eelgrass beds.²⁰ Eelgrass meadows remain under threat from a number of sources:

- **Sea level rise:** Rising water levels in Burrard Inlet will reduce the amount of shallow water habitat available in Burrard Inlet. Eelgrass is sensitive to the amount of light reaching the ocean floor and available for photosynthesis. As sea levels rise, eelgrass will be forced to migrate inland in order to obtain adequate light.²¹ This is not possible at most locations where eelgrass is found, due to extensive shoreline hardening, a phenomenon called "coastal squeeze";²²
- **Non-point source pollution:** Pollution from non-point sources can increase nutrient levels, turbidity, and contaminant levels in eelgrass habitats. Increased nutrient input can cause algal blooms which smother eelgrass. Turbidity reduces light availability for eelgrass. Contaminants in sediments such as metals and persistent organic pollutants can impact the eelgrass fauna, including shellfish, fish species, and invertebrates, altering food web dynamics;²³
- **Recreational and other boating:** Recreational boating poses a continued threat to eelgrass as boat traffic increases water turbidity and reduces light levels. Boat propellers can physically disturb eelgrass beds, as can anchoring and mooring. Sites with eelgrass often also have large

¹⁶ Tsleil-Waututh Nation, "Burrard Inlet Action Plan" (2017), online: <<https://twnsacredtrust.ca/burrard-inlet-action-plan/>> at 3 [Burrard Inlet Action Plan].

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ *Ibid* at 42.

²⁰ SeaChange Marine Conservation Society and Tsleil-Waututh Nation, "2015 Summary Report: Burrard Inlet-Indian Arm Eelgrass Mapping" (2015), online as pdf: <<https://seagrassconservation.org/wp-content/uploads/2016/05/Burrard-Inlet-Indian-Arm-site-report.pdf>> [SeaChange and TWN] at 2.

²¹ Burrard Inlet Action Plan, *supra* note 16 at 43.

²² Charles Lester and Mary Matella, "Managing the Coastal Squeeze: Resilience Planning for Shoreline Residential Development" (2016) 36 Stanford Environmental LJ 23 at 23.

²³ Burrard Inlet Action Plan, *supra* note 16 at 43; see also Nikki Wright, "Salish Sea Nearshore Conservation Project 2013-2015 Final Report" (2015), online as pdf: <<https://seagrassconservation.org/wp-content/uploads/2015/11/Salish-Sea-Final-Report-2013-2015.pdf>> at 29 [Nikki Wright].

amounts of boat traffic (i.e., Port Moody Arm, Bedwell Bay, Deep Cove).²⁴ Associated structures such as docks also shade out eelgrass beds;

- **Shoreline and upland development:** The development (including hardening) of shorelines physically destroys habitat, alters circulation and sedimentation patterns, increases wave energy and erosion, and can shade eelgrass beds.²⁵ Eelgrass is sensitive to the amount of light reaching the ocean floor and available for photosynthesis, which is affected by the development of overwater structures such as docks and wharves.²⁶ Overwater structures also alter light patterns along shorelines and can cause disorientation, dispersal, and break-up of schools of juvenile salmon, which can result in changes in migration routes to deeper water where predation risk is higher;²⁷

With proposed increases in port activity, including proposals to significantly expand oil transport, it has become especially important to identify, restore and protect the remaining eelgrass habitat in Burrard Inlet and Indian Arm.²⁸ Pursuant to this, between 2015 and 2021 TWN mapped the eelgrass beds in parts of their traditional territory, and areas of suitable eelgrass substrate and depth in which eelgrass is absent.²⁹ This project showed reductions in eelgrass beds relative to their historic extent, resulting from the industrialization of Burrard Inlet.³⁰ Previously continuous beds have been diminished to patches; this is especially detrimental to juvenile salmonids, who use the beds as ‘highways’ to the ocean to escape predators.³¹ All seven species of North American Pacific salmonids (including anadromous trout) use Burrard Inlet’s rivers and creeks for spawning, and salmon use the entire inlet in the early stages of their life cycle and during migration.³²

For many years, TWN has been working on protecting the few healthy eelgrass beds left in their traditional territory and restoring historic beds through transplanting projects. The Bedwell Bay eelgrass bed is currently the only bed in Burrard Inlet deemed sufficiently robust to consider as donor stock for small scale restoration projects.³³ However, marine uses, lack of protections, water contamination, and lack of jurisdictional clarity threaten its continued persistence.

Bedwell Bay is one of Belcarra’s major focal points as a waterfront community, and draws residents and visitors to recreate, socialize, and enjoy the natural setting of Indian Arm.³⁴ Protecting the environmental sensitivity of Bedwell Bay is not a new initiative for Belcarra; for example, a group wharfage facility approach was instituted as a means of controlling the number

²⁴ TWN 2017, *supra* note 16 at 43; see also Nikki Wright, *ibid* at 30.

²⁵ Nikki Wright, *ibid* at 30.

²⁶ Burrard Inlet Action Plan, *supra* note 16 at 43.

²⁷ *Ibid* at 46.

²⁸ SeaChange and TWN, *supra* note 20 at 2.

²⁹ *Ibid* at 18–26; Tsleil-Waututh Nation, unpublished data

³⁰ *Ibid* at 12, 14.

³¹ Ogston, *supra* note 3.

³² Burrard Inlet Action Plan, *supra* note 16 at 10.

³³ Ogston, *supra* note 3.

³⁴ Village of Belcarra, “Bedwell Bay Sustainability Plan” (2007), online as pdf: https://belcarra.ca/assets/media/2019/05/Bedwell_Bay_Sustainability_Plan.pdf at 1 [Bedwell Bay Sustainability Plan].

of individual docks within Bedwell Bay, and the municipality successfully designated the Bay as a no sewage discharge zone.³⁵

There is considerable policy and legislation that touches on marine health in British Columbia. For example, OCP, policies and bylaws, federal and provincial agreements and policies, Indigenous laws, port authority regulations and policies, and the *Fisheries Act* all discuss marine and coastal protection.³⁶ However, it is important to note that there is no modern overarching 'coastal' law for British Columbia, whether provincial, federal, or Indigenous. As a result, the cumulative effects of human activities in coastal ecosystems in the Lower Mainland and throughout British Columbia receive little attention, and there have been no significant, coordinated efforts at coastal ecosystem protection and restoration by federal or provincial governments.

Currently, there is no legal protection for eelgrass in British Columbia. Significant jurisdictional complexity over the Bedwell Bay foreshore and subtidal area has resulted in uncertainty over which jurisdiction or Crown entity has the power to protect Bedwell Bay and its important eelgrass bed. Therefore, apart from TWN, no other government or Crown entity has taken responsibility to preserve this critical ecosystem.

Specific to the Village of Belcarra, there has not been meaningful legal action to protect eelgrass owing to uncertainty on the applicability or utility of Belcarra bylaws to protect the Bedwell Bay eelgrass bed.

³⁵ *Ibid.*

³⁶ See e.g., Haida Nation *et al*, "Reconciliation Framework Agreement for Bioregional Oceans Management and Protection" (2021), online as pdf: <<https://perma.cc/P9LZ-UEV3>>.

3. CURRENT LAND USE AND DECISION-MAKING CONTEXT

All levels of government – Indigenous, municipal, provincial and federal – have some jurisdiction over coastal and marine planning, protection, management and enforcement.³⁷ In terms of state government, the *Constitution Act, 1867*³⁸ frames the federal and provincial division of powers into spheres of exclusive jurisdiction, but responsibility for environmental issues is not clearly divided. As concern for environmental issues emerged, courts interpreted the *Constitution Act, 1867* to assign jurisdictional authority related to the environment to one or both levels of government. This has resulted in often complex and overlapping shared jurisdiction over the environment.³⁹

3.1. TWN JURISDICTION AND LEGAL OBLIGATIONS: OVERVIEW

Belcarra is located on TWN's traditional territory of Burrard Inlet, and prior to colonization, served a winter village site for the ancestors of present-day TWN.⁴⁰ Bedwell Bay is also a known shellfish gathering site for TWN; however, bivalve shellfish harvesting has been closed in the area due to contamination concerns following urbanization and industrialization.⁴¹

TWN are known as the "People of the Inlet," and are a distinct Coast Salish First Nation whose traditional territory includes Burrard Inlet.⁴² TWN occupied, governed, and acted as stewards of Burrard Inlet prior to contact, at contact (in 1792), at the British Crown's assertion of sovereignty (in 1846), and continue to do so today.⁴³ Ancestors of present-day TWN intensively used the natural resources of Burrard Inlet, especially the marine and intertidal resources.⁴⁴

TWN has a long-held sacred, legal obligation to protect, defend and steward the water, land, air, and resources in Burrard Inlet.⁴⁵ This stewardship obligation, handed down from their ancestors, includes the responsibility to protect or restore conditions that provide the environmental,

³⁷ Stephanie Hewson *et al*, "Guide to Coastal and Ocean Protection Law in British Columbia" (2020), online as pdf: *West Coast Environmental Law*, <<https://www.wcel.org/sites/default/files/publications/wcel-guidetocoastaloceanprotectionlawinbc-2020-web.pdf>> at 15 [Hewson].

³⁸ *Constitution Act, 1867* (UK), 30 & 31 Vict, c 3.

³⁹ Penny Becklumb, "Federal and Provincial Jurisdiction to Regulate Environmental Issues Background Paper" (2013), online: <https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/201386E#a3> at 9.

⁴⁰ Tseil-Waututh Nation and Metro Vancouver, "Belcarra Regional Park Cultural Planning and Co-operation Agreement" (2020), online as pdf: <<https://perma.cc/85VN-2K6B>>.

⁴¹ Burrard Inlet Action Plan, *supra* note 16 at 16.

⁴² TWN 2016, *supra*, note 1 at 3.

⁴³ *Ibid* at 3.

⁴⁴ *Ibid*.

⁴⁵ Burrard Inlet Action Plan Summary, *supra* note 2.

cultural, spiritual, and economic foundation for their community to thrive.⁴⁶ Before contact, over 90% of TWN food was from the marine environment; important food sources included clams, herring, and salmon.⁴⁷ TWN's economy also included the extensive use of land and river environments for harvesting a wide range of animals, plants, and technological resources.⁴⁸

Additionally, Indigenous nations have an inherent right to self-governance and have rights and title over their territories, recognized through section 35 of the *Constitution Act, 1982*.⁴⁹ This right to self-governance is also set out in UNDRIP Article 4, which states that "Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions."⁵⁰ In 2019 British Columbia adopted the *Declaration on the Rights of Indigenous Peoples Act* ("DRIPA"),⁵¹ and in 2021 Canada adopted the *United Nations Declaration on the Rights of Indigenous Peoples Act*⁵² with a view to making state law consistent with UNDRIP. This will be discussed further in section 4.

3.1.1 TWN LAWS AND LEGAL PRINCIPLES

TWN values and beliefs inform the following laws and legal principles:⁵³

- "TWN has a sacred obligation to protect, defend and steward the water, land, air, and resources of [TWN] territory."⁵⁴ This "obligation includes maintaining and restoring conditions in our territory that provide the environmental, cultural, spiritual and economic foundation for the following:⁵⁵
 - "Cultural transmission and training that will allow Tsleil-Waututh individuals to reach their full protection and for Tsleil-Waututh, as a people, to thrive; [...]
 - spiritual preparation and power [...];
 - harvest and consumption of safe, abundant wild foods from Tsleil-Waututh waters and lands to feed the present community, our ancestors, and other beings; [...] [and]

⁴⁶ *Ibid.*

⁴⁷ Tsleil-Waututh Nation, "New Interactive Map of Burrard Inlet" (2021), online: <<https://twnation.ca/new-interactive-map-of-burrard-inlet/>> [TWN 2021].

⁴⁸ Burrard Inlet Action Plan, *supra* note 16 at 12.

⁴⁹ *Constitution Act, 1982*, s 35, being Schedule B to the Canada Act 1982 (UK), 1982, c 11.

⁵⁰ United Nations Declaration on the Rights of Indigenous Peoples, UNGA, 61st Sess, UN Doc A/RES/61/295 (2007) GA Res 61/295, Art 4.

⁵¹ *Declaration on the Rights of Indigenous Peoples Act*, SBC 2019, c 44 [DRIPA].

⁵² *United Nations Declaration on the Rights of Indigenous Peoples Act*, SC 2021, c 14.

⁵³ The authors recognize that there may be other Tsleil-Waututh legal principles and laws that are applicable to the protection of the eelgrass bed at Bedwell Bay. They represent the legal principles included in TWN 2016, *supra* note 1.

⁵⁴ *Ibid* at 51.

⁵⁵ *Ibid* at 54.

- control over and sharing of resources according to Tsleil-Waututh and Coast Salish protocols [...].”⁵⁶
- “Failure to be “highly responsible” in one’s actions toward the people, the earth, the ancestors, and all beings has serious consequences, which may include the following:
 - Loss of physical sustenance [...];
 - loss of access to resources or social status [...]; [and]
 - loss of the tools and training that allow Tsleil-Waututh individuals to reach their full potential and the related social and cultural impacts of this loss [...].”⁵⁷

3.1.2 APPLICATION OF TWN LAW TO BEDWELL BAY MANAGEMENT

TWN’s legal and sacred stewardship obligations apply to managing Bedwell Bay. Protecting the Bedwell Bay eelgrass is important to holistic ecosystem-based management.

Today, urban, industrial and port development, pollution, and resource exploitation around Burrard Inlet have impaired its health and reduced the opportunity for TWN and other local First Nations to use the waters and beaches of Burrard Inlet for traditional food harvesting and other cultural practices.⁵⁸ TWN members continue to fish and exercise community activities throughout their territory. However, TWN peoples can no longer harvest clams due to water contamination, herring has been largely absent for over a century after a dynamite fishery destroyed populations in the late 1800s, and salmon populations are collapsing across the coast.⁵⁹ In the Burrard Inlet watershed, many streams have been buried or altered, and the shoreline has been drastically changed.⁶⁰

The cumulative environmental effects of urban, industrial, and port development exceed what is allowable under TWN law, as most elements of the TWN economy have been eliminated, depleted, contaminated, or otherwise made unavailable for harvest.⁶¹ Looking forward, TWN aims to improve environmental conditions to increase access to resources in Burrard Inlet and Indian Arm.⁶² Recovery of salmon populations is also an important outcome to TWN.⁶³ As part of their stewardship responsibilities, TWN is actively implementing laws, policies, and actions that aim to ensure a healthy and prosperous future of their people, water, land, air, and resources.⁶⁴ TWN has been working for several years to restore historic eelgrass beds in Burrard Inlet through transplant activities.

⁵⁶ *Ibid.*

⁵⁷ *Ibid* at 55.

⁵⁸ Burrard Inlet Action Plan, *supra* note 16 at 1.

⁵⁹ TWN 2021, *supra* note 47.

⁶⁰ Burrard Inlet Action Plan, *supra* note 16 at 4, 18, 45.

⁶¹ Burrard Inlet Action Plan Summary, *supra* note 2 at 4.

⁶² *Ibid.*

⁶³ Burrard Inlet Action Plan, *supra* note 16 at 1.

⁶⁴ *Ibid* at 12.

Bedwell Bay is also located within TWN's Consultation Area.⁶⁵ Lands and waters contained within the Consultation Area require TWN consultation to assess the potential impact of proposed land and resources policies, plans and developments on TWN interests.⁶⁶ Colonial governments have a legal obligation to consult with TWN and accommodate where there is potential for adverse impact or infringement, and in all cases, consultation with TWN should seek to achieve informed consent.⁶⁷

3.2 MUNICIPAL JURISDICTION AND POWERS

Bedwell Bay is located within the municipality of the Village of Belcarra. Belcarra, as a municipal government, derives its powers from the Province of British Columbia through its Letters Patent (its foundational creation document),⁶⁸ and from provincial legislation including the *Community Charter*⁶⁹ and the *Local Government Act* ("LGA").⁷⁰ Part 14 of the LGA provides Belcarra with broad powers for planning and land use management, including the ability to develop an OCP,⁷¹ zoning bylaws,⁷² Development Permit Areas,⁷³ and runoff control requirements.⁷⁴ These powers allow Belcarra to dictate what type of development is permitted on specific sites. Planning decisions may have profound impacts on the character and functions of lands and ecosystems, including the marine foreshore. Thus, OCPs and their associated bylaws are some of the most important tools for addressing ecological health within a municipality.

A goal identified in Belcarra's OCP is to address climate change, as the municipality is a signatory of the BC Climate Action Charter.⁷⁵ While the policies outlined in support of this goal focus more on greenhouse gas emissions than environmental protection, protection of eelgrass is also relevant for achieving this goal, as eelgrass acts as a highly effective carbon sink, as well as a buffer that dissipates wave energy and protects shorelines. As per the *Local Government Act*, all bylaws or works undertaken by Belcarra must be consistent with the OCP.⁷⁶

⁶⁵ TWN 2016, *supra* note 1 at 7.

⁶⁶ *Ibid.*

⁶⁷ *Ibid* at 6.

⁶⁸ Letters patent are considered to be the constituting documents of local government; for more information see Government of British Columbia, "Letters Patent" (last modified 10 January 2023), online:

<<https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/legislative-framework/letters-patent>>.

⁶⁹ *Community Charter*, SBC 2003, C-26.

⁷⁰ *Local Government Act*, RSBC 2015 C-1.

⁷¹ *Ibid*, s 462(1).

⁷² *Ibid*, s 479.

⁷³ *Ibid*, s 488.

⁷⁴ *Ibid*, s 523. See also *Community Charter*, ss 69–70.

⁷⁵ Village of Belcarra, *Official Community Plan*, Bylaw No 621, 2024 at 10 [Village of Belcarra OCP].

⁷⁶ *Local Government Act*, s 479.

Under the *Community Charter*, Belcarra also has the authority to make bylaws relating to public health, the protection of the natural environment, and in relation to business.⁷⁷ Importantly, bylaws pertaining to public health and the protection of the natural environment must be either established under regulation by the responsible provincial Minister, in accordance with an agreement with the responsible provincial Minister or approved by the responsible provincial Minister.⁷⁸

Local governments have the power to regulate the use of the foreshore and surface of the water out to the limit of their municipal boundaries through zoning.⁷⁹ While the federal and provincial governments have more comprehensive powers to regulate coastal and marine areas, local governments can implement coastal protection measures in their authority over land use and their ability to regulate development along the shoreline.⁸⁰ Local government boundaries often extend seaward of the natural boundary several hundred metres; in this area, local governments can exercise zoning powers over the surface of the water and foreshore, to the extent they do not interfere with provincial and federal jurisdiction.⁸¹

Belcarra's municipal boundary extends encompasses all of Bedwell Bay.⁸² Thus, Belcarra can (and does) exercise zoning powers over the surface of the water of Bedwell Bay and the foreshore, provided it does not interfere with the jurisdiction of the Province of British Columbia and/or the federal government.

3.3 PROVINCIAL JURISDICTION

The *Constitution Act, 1867* divided powers between the federal and provincial governments in sections 91 and 92. The most relevant provincial powers are “the Management and Sale of the Public Lands belonging to the Province and of the Timber and Wood thereon,”⁸³ property and civil rights,⁸⁴ and “generally all Matters of a merely local or private Nature in the Province.”⁸⁵

In coastal regions, provincial territory typically ends at the low water mark (defined in the *Oceans Act*⁸⁶), which means provincial land includes the foreshore (or intertidal zone), while the seabed

⁷⁷ *Community Charter*, ss 8-9.

⁷⁸ *Ibid.*

⁷⁹ William Buholzer, *British Columbia Planning Law and Practice*, Release 61 (LexisNexis Canada Inc., 2022) ss 7.1, 7.6 [Buholzer].

⁸⁰ Hewson, *supra* note 37 at 238.

⁸¹ Buholzer, *supra* note 79, s 7.6.

⁸² Village of Belcarra OCP, *supra* note 75 at 98, fig 3.

⁸³ *Constitution Act, 1867*, s 92(5).

⁸⁴ *Ibid.*, s 92(13).

⁸⁵ *Ibid.*, s 92(16).

⁸⁶ *Oceans Act*, SC 996, c 31 ss 7, 8, 14, 15.

up to the outer limit of the territorial sea is normally owned by Canada.⁸⁷ Provincial Crown land is regulated under the *Land Act*.⁸⁸

There are two exceptions to this rule. First, waters located “between the jaws of the land” (*inter fauces terrae*) are within provincial territory.⁸⁹ While this term lacks precise definition, it has historically been taken to mean waters that lie between two headlands, such as bays, inlets, and estuaries.⁹⁰ Second, submerged lands between Vancouver Island and the mainland are also within provincial lands, because they were part of the colony of British Columbia when it joined Confederation.⁹¹ This was clarified by the Supreme Court of Canada in 1984, in a case regarding ownership of lands between mainland British Columbia and Vancouver Island, where the court said:

*..the subject waters and submerged lands were part of the Colony of British Columbia when it entered Confederation in 1871. The boundaries of British Columbia have not changed since that date. It follows that the seabed is still within and part of British Columbia today...*⁹²

For this reason, the federal and provincial governments share jurisdiction over the waters of Bedwell Bay, but the seabed is solely within provincial jurisdiction. It is therefore within provincial authority to regulate the use of the seabed and the waters, as long as it does not interfere with federal navigation and shipping (see [section 3.4](#) for a discussion of federal authority over shipping and navigation). In practice, however, the Province of BC does not exercise its jurisdiction for the protection of Bedwell Bay because the Bay is subject to federal regulation through the Vancouver Fraser Port Authority (see next section).⁹³

Provincial powers over Provincial Crown land give the Province of British Columbia the ability to require a provincial land tenure under the *Land Act* for finfish and shellfish aquaculture. While fisheries generally fall under a federal head of power, finfish and shellfish aquaculture in Provincial Crown lands is an area of shared jurisdiction.⁹⁴ These powers also give the Province of British Columbia jurisdiction over mineral and hydrocarbon resources and marine pollution within Provincial Crown land.⁹⁵ Where marine plants are located within the geographical limits of a

⁸⁷ Hewson, *supra* note 37 at 24.

⁸⁸ *Land Act*, RSBC 1996, c 245.

⁸⁹ Hewson, *supra* note 37 at 26. This is a common law term: see *Reference re: Ownership of the Bed of the Strait of Georgia and Related Areas*, [1984] 1 SCR 388.

⁹⁰ Hewson, *supra* note 37 at 26.

⁹¹ *Reference re: Ownership of the Bed of the Strait of Georgia and Related Areas* [1984] 1 SCR 388.

⁹² *Ibid* at para. 78. Provincial ownership of the seabed has also been acknowledged in other caselaw such as *Morton v British Columbia (Agriculture and Lands)*, 2009 BCSC 136 (CanLII).

⁹³ Staff at the BC Ministry of Water, Land and Resource Stewardship, personal communication (6 June 2024) via email communicated to Client.

⁹⁴ Hewson, *supra* note 37 at 31.

⁹⁵ *Ibid*.

province, these powers also give the province jurisdiction over marine plants.⁹⁶ This authority may also allow the Province to regulate the use of anchorages within provincial Crown land (like the foreshore and the subsurface land between Vancouver Island and the southern mainland).⁹⁷ The power over municipal institutions gives the Province the ability to delegate to municipalities certain matters like land use zoning, the regulation of development, waste management and recycling, drinking water and wastewater.⁹⁸ Therefore, Bedwell Bay is provincial land, but subject to municipal land use regulation and service or infrastructure jurisdiction.

3.4 FEDERAL AND PORT JURISDICTION

There are several areas of federal legislative authority that are relevant to marine jurisdiction. These include trade and commerce;⁹⁹ national defence;¹⁰⁰ navigation and shipping;¹⁰¹ fisheries;¹⁰² and “Indians and lands reserved for Indians.”¹⁰³ Federal laws relevant to these areas apply throughout the ocean, regardless of whether the Crown title is vested in the provincial or federal government. The *Canada Marine Act*¹⁰⁴ is federal legislation pertaining to marine activities. While legislation does not generally refer to specific Constitutional heads of power, this Act can be presumed to be exercising its exclusive jurisdiction over navigation and shipping, pursuant to authority derived from s. 91(10) of the *Constitution Act, 1867*.

Vancouver Fraser Port Authority (“VFPA”) jurisdiction is limited to federal jurisdiction, within the geographical boundaries (lands and waters) to which it applies. Letters Patent created the VFPA¹⁰⁵ under s. 59.1 of the Port Authorities Management Regulations,¹⁰⁶ which are made under the *Canada Marine Act*.¹⁰⁷ On this basis VFPA has jurisdiction over all matters designated in the Letter

⁹⁶ West Coast Environmental Law, “Frequently Asked Questions: Provincial Jurisdiction of British Columbia over Coastal and Ocean Matters” (2020), online as pdf: <<https://www.wcel.org/sites/default/files/publications/2020-06-faq-provincialjurisdiction-coastal-updated.pdf>> at 2.

⁹⁷ See, for example, the regulation of anchoring in provincial marine parks. BC Parks Marine Visitor Guide, online: <https://bcparks.ca/plan-your-trip/visit-responsibly/marine-visitor-guide/>.

⁹⁸ Penny Becklumb, *Federal and Provincial Jurisdiction to Regulate Environmental Issues Background Paper* (Ottawa: Library of Parliament, 2013), online as pdf: <<https://lop.parl.ca/staticfiles/PublicWebsite/Home/ResearchPublications/BackgroundPapers/PDF/2013-86-e.pdf>> at 9 [Becklumb].

⁹⁹ *Constitution Act, 1867*, s 91(2).

¹⁰⁰ *Ibid*, s 91(7).

¹⁰¹ *Ibid*, s 91(1); *Friends of the Oldman River Society v Canada (Minister of Transport)*, (1992) 1 SCR 3 at para 68.

¹⁰² *Ibid*, s 91(12).

¹⁰³ *Ibid*, s 91(24).

¹⁰⁴ *Canada Marine Act*, SC 1998, c 10.

¹⁰⁵ Government of Canada, “Certificate of Amalgamation of Port Authorities” (2007), online as pdf: <<https://www.portvancouver.com/wp-content/uploads/2015/07/2008-Letters-Patent.pdf>>.

¹⁰⁶ *Port Authorities Management Regulations*, SOR/99-101.

¹⁰⁷ *Canada Marine Act*, s 136(1).

Patent within federal jurisdiction, which is contained within the boundaries described in their jurisdiction map.¹⁰⁸ Bedwell Bay is within the geographical boundaries of VFPA jurisdiction.

Belcarra is located within the VFPA Indian Arm planning area, which extends throughout Indian Arm on both sides of the shore to the Indian River estuary..¹⁰⁹ Given the presence of Marine Avenue along the majority of the developed portion of the east side of Bedwell Bay, a municipal road, Belcarra is considered the upland owner.¹¹⁰ Consequently, it is the VFPA's practice to grant licenses to Belcarra for the purpose of operating non-commercial moorage facilities in Belcarra, including Bedwell Bay.¹¹¹

Existing uses of the Indian Arm planning area include residential moorage facilities, marinas, and public wharves.¹¹² The VFPA requires applications for project permits and licence agreements for the construction, alteration, removal and management of recreational docks.¹¹³ The VFPA's Land Use Plan states that further port-related uses of the Indian Arm planning area will likely continue to be limited, mainly consisting of a mix of commercial, recreational, and conservation uses.¹¹⁴ The VFPA does not have any commercial port facilities in Bedwell Bay.

The VFPA also has Recreational Dock Guidelines for Burrard Inlet, which govern marine development for non-commercial waterfront use. These guidelines state that proposed recreational docks located within 15 meters of eelgrass habitat may have additional requirements for the VFPA's review (for example, an eelgrass survey).¹¹⁵ The Guidelines are not mandatory, and fail to indicate how eelgrass surveying (if required) would affect the VFPA's assessment of recreational dock applications. All proposed new residential moorage facilities require a Residential Waterfront License, and Belcarra leads the application process for these licenses, which the Village reviews before referring the applications to the VFPA.¹¹⁶

Overall, within the municipal boundaries of Belcarra, TWN has rights, title, interests and authority, British Columbia has ownership over the land and waters of Bedwell Bay, and the federal government retains regulatory jurisdiction over navigation and shipping and fisheries. Specifically, the VFPA is an arms-length entity of the federal government tasked with assessing projects

¹⁰⁸ Vancouver Fraser Port Authority, "Jurisdictional map" (last visited November 2022), online as pdf: <<https://www.portvancouver.com/port-dashboard/jurisdictional-map/>>.

¹⁰⁹ Becklumb, *supra* note 98 at 27.

¹¹⁰ Bedwell Bay Sustainability Plan, *supra* note 34 at 2.

¹¹¹ *Ibid.*

¹¹² Vancouver Fraser Port Authority, *Land Use Plan* (8 December 2020), online as pdf: <https://www.portvancouver.com/sites/default/files/2024-08/500_POV-Land-Use-Plan_FINAL-2.pdf> at 59.

¹¹³ *Ibid* at 49.

¹¹⁴ *Supra* note 112 at 59.

¹¹⁵ Vancouver Fraser Port Authority, *Project and Environmental Review Guidelines: Recreational dock guidelines for Burrard Inlet* (December 2023), online as pdf: <<https://www.portvancouver.com/sites/default/files/2024-08/2023-12-07-Recreational-dock-guideline-for-Burrard-Inlet.pdf>> at 7.

¹¹⁶ Bedwell Bay Sustainability Plan, *supra* note 34 at 3.

designated under the federal impact assessment laws.¹¹⁷ The VFPA's navigational jurisdiction extends from federal port lands throughout the waters of Burrard Inlet to include Bedwell Bay.

The municipality of Belcarra retains primary regulation over land use around Bedwell Bay and water flowing into it through its powers over zoning, development permit areas, and stormwater management.

¹¹⁷ Vancouver Fraser Port Authority, "Project permit process" (last visited 2 November 2024), online: <<https://www.portvancouver.com/about-us/fag/project-applications-and-permit-approvals/>>.

4. MUNICIPAL CONTEXT FOR BYLAW REFORM

This section sets out rationale, both legal and policy-based, to support municipal decision-makers' understanding of the legal and policy frameworks within which reconciliation and advancement of TWN interests must occur.

4.1 LEGAL RATIONALE FOR BYLAW REFORM

The underlying authority of TWN, TWN's right to consultation and accommodation under section 35 of the *Constitution Act, 1982*, UNDRIP, and UNDRIP's domestic implementation through DRIPA, each add to the framework that will require the Village of Belcarra to reform its bylaws. This section outlines each of these legal rationale for law reform.

4.1.1 UNDERLYING TWN AUTHORITY

TWN legal authority existed before the colonial State asserted authority and continues to exist. Indigenous legal orders have long been recognized by those who encountered Indigenous societies, and continue to be recognized within Canadian legal orders today.¹¹⁸ Indigenous legal scholar John Borrows has said that "European pronouncements that Indigenous peoples had no government or laws were contradicted by their practice of dealing with them through treaties and agreements,"¹¹⁹ which followed in the tradition of the first treaties in North America, which involved Indigenous laws.¹²⁰

As early as the first year of Canada's confederation, Canadian courts affirmed the existence and continuity of Indigenous legal orders.¹²¹ The Supreme Court of Canada has recognized that:

*"European settlement did not terminate the interests of aboriginal peoples arising from their historical occupation and use of the land. To the contrary, aboriginal interests and customary laws were presumed to survive the assertion of sovereignty, and were absorbed into the common law as rights. . . ."*¹²²

¹¹⁸ See the Royal Commission on Aboriginal Peoples, "Looking Forward, Looking Back" (1996) at 119–30 [RCAP 1996].

¹¹⁹ John Borrows, "Indigenous Legal Traditions in Canada" (2005) 19 Wash U J L & Pol'y 167 at 178 [Borrows 005], citing RCAP 1996 at 99-11.

¹²⁰ *Ibid.*

¹²¹ See *Connolly v Woolrich*, [1867] 17 RJRQ 75 (Quebec Sup Ct), *aff'd*, *Johnstone v Connolly*, [1869] 17 RJRQ 266 (Quebec QB); see discussion of same in Borrows 2005 at 181.

¹²² *R v Mitchell*, [2001] SCR 911, at 927.

The court went on to express that Indigenous legal traditions continued to exist in Canada unless “(1) they were incompatible with the Crown’s assertion of sovereignty, (2) they were surrendered voluntarily via the treaty process, or (3) the government extinguished them.”

TWN did not voluntarily surrender their Indigenous governing authority, nor was it extinguished by the colonial government.

4.1.2 HONOUR OF THE CROWN AND DUTY TO CONSULT

At least two foundational principles underlie Aboriginal and treaty rights in Canada: the Honour of the Crown, and the duty to consult. As a legal principle, the Honour of the Crown traces its origins to the Royal Proclamation of 1763, in which the Crown promised to protect Aboriginal peoples from exploitation.¹²³ The duty to consult is comparatively more recent, flowing both from the Honour of the Crown as well as section 35 of the *Constitution Act, 1982*, which recognizes and affirms Aboriginal and treaty rights in Canada. The Supreme Court of Canada has interpreted section 35 as including a procedural duty on state governments (federal and provincial) to consult and accommodate Indigenous groups,¹²⁴ to assess whether Aboriginal and treaty rights may be infringed by state action (primarily state approvals for development and natural resource extraction), and whether that infringement is justified.¹²⁵ The duty arises when “the Crown [has] knowledge, real or constructive, or the potential existence of the Aboriginal right or title and contemplates conduct that might adversely affect it.”¹²⁶ This is a relatively low threshold, and arguably, nearly all municipal conduct meets this standard. The duty to consult is thus an important principle in not only identifying the Aboriginal and treaty rights that s. 35 acknowledges, but in mandating interaction between state and Indigenous governments to consider development and further reconciliation.¹²⁷

In British Columbia, courts have ruled that the duty to consult pursuant to section 35 is an obligation of the federal and provincial governments (today, the “Crown”) but not municipalities, which are not considered an extension of the Crown.¹²⁸ However, the Supreme Court of Canada has yet to consider this issue, particularly in light of several important cases decided in this century, including the 2014 *Tsilhqot’in* decision on Aboriginal title.¹²⁹ The recent decision in *Yahey v British Columbia* found that cumulative impacts, including industrial and agricultural development, had infringed the Treaty 8 rights of the Blueberry River First Nation, rights which

¹²³ Felix Hoehn and Michael Stevens, “Local Governments and the Crown’s duty to consult” (2018) 55 Alta L Rev 4 at 977 [Hoehn and Stevens].

¹²⁴ *Ibid* at 978 citing *Haida Nation v British Columbia (Minister of Forests)*, 2004 SCC 73, [2004] 3 SCR 511 at para 53 [“Haida”].

¹²⁵ *Ibid*.

¹²⁶ *Haida*, *ibid* at para 53; see also *Clyde River (Hamlet) v Petroleum Geo-Services Inc*, 2017 SCC 40; *Chippewas of the Thames First Nation v Enbridge Pipelines Inc*, 2017 SCC 41.

¹²⁷ Hoehn and Stevens, *supra* note 123 at 978.

¹²⁸ Courts in BC have concluded that municipalities are not manifestations of the Crown; therefore, the duty to consult does not apply. See *Neskonlith Indian Band v Salmon Arm*, 2012 BCCA 499.

¹²⁹ *Tsilhqot’in Nation v British Columbia*, [2014] 2 SCR 7.

were in turn dependent on the existence of healthy forests, wildlife habitats, and wildlife populations.¹³⁰ *Yahey* is a significant case because it highlights the need to consider cumulative impacts on the meaningful exercise of treaty rights throughout a entire territory, rather than assessing impacts on a project-by-project basis.

While municipalities do not have a common law duty to consult, British Columbia's *LGA* imposes statutory consultation requirements for the exercise of some municipal land use powers.¹³¹ For example, a municipality must undergo consultation when developing its regional growth strategy.¹³² Consideration of consultation with First Nations,¹³³ and whether these consultation opportunities ought to be "early and ongoing,"¹³⁴ is required for development of an Official Community Plan ("OCP").¹³⁵

Outside of statutory consultation requirements, the relationship between First Nations and local governments is not defined by any specific legislative or policy framework.¹³⁶ While the Belcarra OCP was an opportunity to build the relationship between the Village and TWN and commits the municipality to developing a strong working relationship with TWN,¹³⁷ no frameworks currently exist that meaningfully integrate TWN interests into Belcarra decision-making. TWN seeks a shift in municipal practice from merely *recognizing* their Aboriginal rights in Burrard Inlet, to improving the *quality* of those existing rights; adopting a formal collaborative framework between TWN and Belcarra could help facilitate this dialogue.

4.1.3 THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES (UNDRIP)

The United Nations General Assembly adopted UNDRIP in 2007 and Canada fully endorsed it in 2017. Its implementation into provincial law is explained in further detail below.

Some local governments have taken the proactive step of committing to implement UNDRIP through council resolution. This aligns with the Truth and Reconciliation Commission's Call to Action 43, which calls on municipal governments, in addition to federal, provincial and territorial governments, to fully adopt and implement UNDRIP as the framework for reconciliation.¹³⁸ For example, TWN representatives sit on the City of Vancouver's UNDRIP Task Force, and are

¹³⁰ 2021 BCSC 1287 [*"Yahey"*] at para 437.

¹³¹ Hoehn and Stevens, *supra* note 123 at 18.

¹³² A regional growth strategy is a comprehensive planning document which spans at least 20 years; see *Local Government Act*, s 429(2).

¹³³ *Ibid*, s 475(2)(b)(iv).

¹³⁴ *Ibid*, s 475(2)(a).

¹³⁵ An OCP is a statement of objectives and policies to guide decisions on planning and land use over a period of at least five years; *ibid*, ss 471(1), 473(1)(a).

¹³⁶ Deborah Curran and Erin Gray, "Green Bylaws Toolkit for Protecting and Enhancing the Natural Environment and Green Infrastructure" (2021), online: <www.stewardshipcentrebc.ca/green-bylaws/> at 364 [Curran and Gray].

¹³⁷ Village of Belcarra OCP, *supra* note 75 at 4 and 12.

¹³⁸ Truth and Reconciliation Commission of Canada, *Calls to Action* (Winnipeg: Truth and Reconciliation Commission of Canada, 2012) at 4.

contributing to the development of a five-year action plan to implement recommendations “for actions and initiatives... to support, uphold and recognize Indigenous rights.”¹³⁹ Belcarra “supports advancing the Calls to Action under the Truth and Reconciliation Commission and affirms the United Nations Declaration on the Rights of Indigenous Peoples.”¹⁴⁰

One example of this is the Tla’amin Nation, City of Powell River, and qathet Regional District (formerly Powell River Regional District), who have co-developed collaborative decision-making agreements. In 2003, the City adopted a Community Accord partnership agreement with the Tla’amin. The Community Accord was reaffirmed and updated when the Tla’amin became self-governing in 2016. The Accord is a living document that outlines how the Nation and the City will work together at a government-to-government level.¹⁴¹ It acknowledges Tla’amin sovereignty and government structure, outlines principles of cooperation, commits to regular meetings and dialogue, and contains dispute resolution provisions.¹⁴² In 2004, the qathet Regional District adopted a Protocol Agreement for communication and cooperation with the Tla’amin Nation. The Protocol Agreement establishes a more formal and long-term government-to-government relationship, and contains principles of cooperation, a statement of shared values, and provisions for communications, consultation, and dispute resolution.¹⁴³ Both the Accord and the Protocol Agreement continue to be used to define new working relationships between the Regional District, the City, and the Tla’amin.¹⁴⁴ The success of the work that has been done is reflected in the gifting, by Tla’amin Elders, of the name qathet to the Regional District. The name means “working together,” and was formally adopted in 2018.¹⁴⁵ Each party continues to work collaboratively on regional planning initiatives and economic diversification projects. Partnerships are built and maintained through quarterly lunch meetings between officials and Chief Administrative Officers, through protocol agreements, and through monthly meetings to discuss topics of shared interest.¹⁴⁶

TWN and the District of North Vancouver have developed a *Cooperation Protocol* that builds on the cooperative relationship between the two parties to form an agreement from which to pursue initiatives of common interest.¹⁴⁷ The *Protocol* calls for the establishment of a government-to-government working relationship and ongoing dialogue at the policy and technical level, as well as

¹³⁹ City of Vancouver, “UNDRIIP Task Force” (last visited 15 August 2023), online: <<https://vancouver.ca/people-programs/undrip-task-force.aspx>>.

¹⁴⁰ Village of Belcarra OCP, *supra* note 75 at 4.

¹⁴¹ City of Powell River and Tla’amin Nation, *Community Accord* (20 July 2018), online: <<https://powellriver.civicweb.net/document/111373/>>, Art 6 [Community Accord].

¹⁴² *Ibid*, Arts 1–3, 5.

¹⁴³ Union of BC Municipalities, “Pathways to Collaboration Tla’amin Nation – City of Powell River – qathet Regional District” (last visited November 2022), online as pdf: <https://www.ubcm.ca/sites/default/files/2021-08/Tlaamin_PowellRiver_20190909.pdf>.

¹⁴⁴ *Ibid*.

¹⁴⁵ *Ibid*.

¹⁴⁶ *Ibid*.

¹⁴⁷ Tsleil-Waututh Nation and District of North Vancouver, *Co-operation Protocol Between the Tsleil-Waututh Nation (TWN) and District of North Vancouver* (2007), online as pdf: <https://s3.ca-central-1.amazonaws.com/civicinfo/public_files/First%20Nations/Cooperation_Protocol_Agreement--DNV_and_TsleilWaututh_Nation--2007.pdf>.

an effective planning and consultation process between the parties. Guided by a steering committee that meets quarterly, the *Protocol* sets out a framework for cooperative planning, information sharing related to land use management planning, and consultation procedures for decisions, public works or bylaws that may infringe an Aboriginal right of TWN.¹⁴⁸ The *Protocol* also establishes a Council-to-Council forum that meets annually or as required to monitor implementation of the *Protocol* and its initiatives.¹⁴⁹

In December 2021, the W̱SÁNEĆ Leadership Council (“WLC”) signed the ÁTOL,NEUEL (“Respecting One Another”) Memorandum of Understanding (“MOU”) with the District of Saanich. The MOU is notable for its recognition of the government-to-government relationship that exists between the WLC and the District, its grounding in W̱SÁNEĆ legal principles, its commitment to learning on the part of the District, and its clear articulation of outcomes desired by the WLC.¹⁵⁰ The MOU commits the District of Saanich, in part, to create a role in decision-making for the W̱SÁNEĆ Leadership Council and W̱SÁNEĆ representatives. This includes facilitating W̱SÁNEĆ representation on District Committees; providing funding for W̱SÁNEĆ Leadership Council participation in MOU discussions; and remediation of priority environmental features identified by the W̱SÁNEĆ Leadership Council.¹⁵¹

4.1.4 DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES ACT

In November 2019, the Province of British Columbia adopted the *Declaration on the Rights of Indigenous Peoples Act*.¹⁵² Section 3 of DRIPA requires the Province to “take all measures necessary to ensure the laws of British Columbia are consistent with UNDRIP.”¹⁵³ Bylaws are regulations under British Columbia legislation¹⁵⁴ and every act and regulation must be consistent with DRIPA.¹⁵⁵ Therefore, municipal legislation and bylaws may be scrutinized pursuant to DRIPA for consistency with UNDRIP in the future.

UNDRIP is particularly focused on recognizing Indigenous control over lands, territories, and resources.¹⁵⁶ The broad land use powers afforded to local governments mean that there is high potential for local government decision-making to impact Indigenous rights and authority within their traditional territories.¹⁵⁷ Article 19 of UNDRIP requires states to “consult and cooperate in good faith with the Indigenous peoples concerned [...] to obtain their free, prior and informed

¹⁴⁸ *Ibid*, s 7.1.

¹⁴⁹ *Ibid*, s 5.1.

¹⁵⁰ W̱SÁNEĆ Leadership Council and District of Saanich, “ÁTOL,NEUEL MOU (“Respecting One Another”) Memorandum of Understanding” (3 December 2021), online as pdf: <https://www.saanich.ca/assets/News~and~Events/Documents/ÁTOL,NEUEL%20MOU.pdf>.

¹⁵¹ *Ibid*.

¹⁵² DRIPA, *supra* note 51.

¹⁵³ *Ibid*.

¹⁵⁴ *Interpretation Act*, RSBC 1996, c 238, s 1.

¹⁵⁵ *Interpretation Act*, s 8.1.

¹⁵⁶ Curran and Gray, *supra* note 138 at 362; see also UNDRIP arts 10–12, 18, 23, 26–29, 32.

¹⁵⁷ *Ibid* at 363.

consent before adopting and implementing legislative or administrative measures that may affect them.” Clearly, local governments exercising land use authority pursuant to powers afforded to them through provincial jurisdiction impact Indigenous interests and will be implicated in the objectives of DRIPA in needing to make bylaws and bylaw processes consistent with Article 19 of UNDRIP.¹⁵⁸

While the British Columbia government has not yet amended either the *Local Government Act* or the *Community Charter* to be consistent with UNDRIP, it has released the first Declaration Act Action Plan (“DRIPA Action Plan”).¹⁵⁹ The DRIPA Action Plan sets out specific goals aimed at achieving the objectives of UNDRIP, and contains three actions that specifically target local governments:

- Action 1.11: Support inclusive regional governance by advancing First Nations participation in regional district boards. (Ministry of Municipal Affairs).¹⁶⁰
- Action 4.27: Review the principles and processes that guide the naming of municipalities and regional districts and evolve practices to foster reconciliation in local processes. (Ministry of Municipal Affairs).¹⁶¹
- Action 2.7: Collaborate with First Nations to develop and implement strategies, plans and initiatives for sustainable water management, and to identify policy or legislative reforms supporting Indigenous water stewardship, including shared decision-making. Co-develop the Watershed Security Strategy with First Nations and initiate implementation of the Strategy at a local watershed scale. (*Ministry of Land, Water and Resource Stewardship*).¹⁶²

Municipal councils should anticipate that future editions of the DRIPA Action Plan, which is set to be updated every five years, will include further actions for municipal bylaw and procedure reform. It is prudent for local governments to proactively prepare for these upcoming changes.

The current lack of a prescribed reconciliation framework at the local level creates an opportunity to develop a relationship and governance processes in ways that reflect the needs and aspirations of the TWN and Belcarra. Relations may take many forms, from informal to formal.¹⁶³ The British Columbia interim Guide to First Nation Engagement on Local Government Statutory Approvals¹⁶⁴ may be helpful when developing agreements.

¹⁵⁸ Hoehn and Stevens, *supra* note 123 at 19-20.

¹⁵⁹ The DRIPA Action Plan was released on March 30, 2022; see Government of British Columbia, “Declaration on the Rights of Indigenous Peoples Act Action Plan 2022-2027” (last visited 14 November 2022), online as pdf: <https://www2.gov.bc.ca/assets/gov/government/ministries-organizations/ministries/indigenous-relations-reconciliation/declaration_act_action_plan.pdf>.

¹⁶⁰ *Ibid* at 11.

¹⁶¹ *Ibid* at 27.

¹⁶² *Ibid* at 21.

¹⁶³ Curran and Gray, *supra* note 138 at 364.

¹⁶⁴ Government of British Columbia Ministry of Community, Sport and Cultural Development, *Guide to First Nation Engagement on Local Government Statutory Approvals (Interim), Revised: December 2014* (last visited 2 November 2024), online as pdf: <https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/governance-powers/first_nations_engagement_guide.pdf>.

4.2 POLICY RATIONALE

Beyond statutory and legal obligations, there are several policy reasons for advancing TWN interests within the municipal decision-making framework. TWN peoples have rights and interests that overlap Belcarra's boundaries. Municipalities have the authority to determine permissible land uses, establish and operate services, and make decisions that affect Aboriginal and treaty rights.¹⁶⁵ They also have detailed knowledge of local interest groups and issues. Local governments are thus well situated to contribute to reconciliation through actions that take steps to identify, and address, Indigenous concerns at the local level. Relationships based on collaboration and recognition of Indigenous peoples as rights holders and Nations, rather than consultation relationships that treat Indigenous peoples as simply "stakeholders," are more likely to lead to better outcomes.¹⁶⁶ Finally, it is sound policy to develop such frameworks given British Columbia's commitments under DRIPA.

¹⁶⁵ Hoehn and Stevens, *supra* note 123 at 20.

¹⁶⁶ *Ibid* at 21.

5. OPPORTUNITIES FOR COLLABORATION BETWEEN TWN AND BELCARRA TO PROTECT BEDWELL BAY

There is a strong legal rationale to support collaboration between Belcarra and TWN in the protection of the eelgrass in Bedwell Bay. Belcarra is situated on TWN's unceded traditional territory, and the Village's policies, bylaws and OCP have a direct impact on TWN members' ability to carry out cultural practices, harvest traditional foods, and uphold their inherited responsibilities to the territory.

This section provides a variety of legal opportunities for collaboration between Belcarra and TWN in order to facilitate the protection of the Bedwell Bay eelgrass beds. By outlining the legal context and providing tangible recommendations, this section illustrates how the municipality and the Nation can work as partners to protect this critical ecosystem and advance TWN's stewardship interests.

5.1 COLLABORATIVE GOVERNANCE PROCESSES

In 2021, TWN agreed to establish a joint TWN-Crown Burrard Inlet Environmental Science and Stewardship Secretariat that will coordinate stewardship activities and scientific research and analysis in the Inlet.¹⁶⁷ This will provide a unique forum for TWN and multiple federal departments to collaborate on environmental stewardship activities in Burrard Inlet.¹⁶⁸ This agreement supports the ongoing stewardship work that TWN has been conducting since time immemorial, and provides funding for TWN's Treaty, Lands and Resources staff to plan work based on TWN needs, priorities, and timelines.¹⁶⁹ This represents a meaningful step towards restoring TWN's rightful governance role in Burrard Inlet.¹⁷⁰

However, there remains significant room for improvement to amplify and implement TWN perspectives with respect to management of the lands and waters of Burrard Inlet, and local governments (including Belcarra) have an important role to play. TWN is prepared to take a leadership role in recovering the Burrard Inlet ecosystem, but also desires to work broadly with other groups concerned about the health of the Inlet, including municipalities.¹⁷¹ TWN seeks to

¹⁶⁷ Chief Jen Thomas, "Restoring the Health of Burrard Inlet" (2021), online: <<https://twnation.ca/restoring-the-health-of-burrard-inlet/>>.

¹⁶⁸ *Ibid.*

¹⁶⁹ Government of Canada, "Canada and the Tsleil-Waututh Nation sign Agreement on Environmental Stewardship in the Burrard Inlet" (5 August 2021), online: <<https://www.canada.ca/en/crown-indigenous-relations-northern-affairs/news/2021/08/canada-and-the-tseil-waututh-nation-sign-agreement-on-environmental-stewardship-in-the-burrard-inlet.html>>.

¹⁷⁰ *Ibid.*

¹⁷¹ Burrard Inlet Action Plan, *supra* note 16 at 93.

build strong working relationships based on trust and mutual respect.¹⁷² TWN is interested in developing a formal partnership model for Burrard Inlet Stewardship, aimed at recovering the Inlet from a whole ecosystem perspective.¹⁷³

As discussed above, current best practice is for local governments to formalize their commitment to reconciliation by establishing a co-management agreement with First Nations or developing a MOU with a detailed plan of joint action and goals. These agreements promote collaboration and communication and could result in a healthier and more sustainable relationship between Belcarra and TWN that benefits the local environment.

5.1.1 RECOMMENDATIONS: COLLABORATIVE GOVERNANCE PROCESSES

- Develop framework government-to-government agreement(s), such as a collaborative management agreement, MOU or similar formal framework, to facilitate meaningful collaboration on issues of shared concern, and advancement of TWN interests within the municipal framework.
- Recognize, at Council level, TWN priorities for Bedwell Bay.
- Develop collaborative management agreements for municipal lands.
- Implement a formal collaborative framework for decision-making with TWN regarding Bedwell Bay.
- Formalize consultation and engagement procedures for issues affecting TWN interests.
- Offer to fund and provide space for workshops with TWN members to provide education and dialogue with Council.

5.2 LAND USE PLANNING

This section identifies recommended actions to support the protection of the Bedwell Bay eelgrass bed within Belcarra land use policies and regulations. Either avoiding development wherever possible, or mitigating its impacts, will protect areas with sensitive environmental attributes such as the eelgrass habitat.¹⁷⁴ As per the *Local Government Act*, Belcarra can pursue land use planning over Bedwell Bay under its zoning powers, provided it does not interfere with federal jurisdiction over shipping and navigation.¹⁷⁵

¹⁷² *Ibid.*

¹⁷³ *Ibid* at 94.

¹⁷⁴ Bedwell Bay Sustainability Plan, *supra* note 34 at 5.

¹⁷⁵ *West Kelowna (District) v Newcomb*, 2015 BCCA 5.

5.2.1 OCP POLICIES

A municipal government's OCP describes the long-term vision of a community and includes strategic objectives and policies that set general direction for planning, development, and land use management in a community.¹⁷⁶ Community consultation is mandatory prior to OCP adoption.¹⁷⁷ Once adopted, all bylaws and works undertaken by a municipality must be consistent with the OCP.¹⁷⁸

Belcarra's OCP commits the municipality to foster and maintain a strong working relationship with TWN.¹⁷⁹ The OCP outlines several policies in furtherance of this goal, including:

- "Collaborate and partner with TWN to develop protocols for communication related to land use matters and to identify and protect places of cultural and historical significance"; and
- "Consider referral of OCP updates, major land use and development proposals to Tsleil-Waututh Nation for consultation and review."¹⁸⁰

These policies are very general in nature, and do not reflect current best practices, which are to have a MOU or co-management agreement between the First Nation and municipality with plans for joint action and goals.

Belcarra's OCP designates its eelgrass bed as an 'Environmentally Sensitive Area.'¹⁸¹ Areas are designated as Environmentally Sensitive Areas that have special environmental attributes worthy of retention, and need to be protected from direct development and the impacts of changes in land use and servicing infrastructure.¹⁸² Local governments ought to provide buffers and protection measures for Environmentally Sensitive Areas, including the management of recreational access, to protect them from adverse impacts.¹⁸³

Belcarra's OCP policies for the natural environment and Environmentally Sensitive Areas located within its boundaries include:¹⁸⁴

- Support VFPA protecting eelgrass beds by working with existing recreational water lot licensees to ensure a minimum depth of water below the float at low tide;
- Collaborate with the VFPA and TWN on port authority led initiative to monitor, protect and enhance critical riparian, marine and estuarine environments;

¹⁷⁶ Village of Belcarra OCP, *supra* note 75 at 5.

¹⁷⁷ *Local Government Act*, s 464(1).

¹⁷⁸ *Ibid*, s 478(2).

¹⁷⁹ Village of Belcarra OCP, *supra* note 75 at 12.

¹⁸⁰ *Ibid* at 52–55.

¹⁸¹ Village of Belcarra OCP, *supra* note 75 at 100.

¹⁸² Government of British Columbia, "Environmental Best Management Practices for Urban and Rural Land Development in British Columbia" (2004), online as pdf:

<https://www.env.gov.bc.ca/wld/documents/bmp/urban_ebmp/EBMP%20PDF%204.pdf> at 5-1–5-2.

¹⁸³ *Ibid* at 5-2.

¹⁸⁴ Village of Belcarra OCP, *supra* note 75 at 22-24.

- Strive for net ecosystem gains when development occurs in environmentally sensitive areas through planning and development processes;
- Require ecosystem restoration and improvement where possible;
- Consider supporting research and work undertaken by TWN, VFPA, and Metro Vancouver to identify, protect and enhance Environmentally Sensitive Areas;
- Update the municipality's Environmentally Sensitive Area mapping as new data becomes available.

While these policies enable a wide range of collaborative action on protecting eelgrass, they require more detail and clarity, including the identification of TWN as a key affected government, and specific requirements for eelgrass retention at all stages of development.

5.2.2 OCP POLICIES: RECOMMENDATIONS

- Update the OCP to include values and goals that align with the values and laws of the TWN peoples.
 - Identifying and explaining broad community values in the OCP would present an opportunity for the Village of Belcarra to consult with TWN and incorporate values such as environmental stewardship and interconnectedness.
- Update the OCP to provide a more complete portrayal of the history of colonization in and around Burrard Inlet and of the municipality's legal obligations to TWN. For example:
 - Add a section outlining the municipality's legal obligations to TWN per DRIPA.
 - Add a section following 'Belcarra Indigenous History' to highlight TWN's continued rights and legal stewardship obligations in Burrard Inlet.
- Expressly identify TWN as a key affected government (not stakeholder), in addition to the provincial and federal governments.
- Add more robust language to the Environmentally Sensitive Area policies to:
 - Prioritize the restoration and expansion of the Bedwell Bay eelgrass bed;
 - Work with TWN to establish protocols to prevent impacts on eelgrass from proposed development;
 - Establish stronger requirements to protect the Bedwell Bay eelgrass bed;
 - Identify how, specifically, Belcarra will manage planning and development processes to strive for net ecosystem gain of the Bedwell Bay eelgrass bed.

5.2.3 ENVIRONMENTAL DEVELOPMENT PERMIT AREAS AND MARINE DEVELOPMENT PERMIT AREAS

Development permit areas serve to identify locations that need special treatment for certain purposes.¹⁸⁵ For example, to protect ecosystems and biodiversity values through designating an environmental development permit area (“EDPA”). Section 488(1)(a) of the *Local Government Act* authorizes an OCP to designate development permit areas for the protection of the natural environment, its ecosystems and biological diversity. This addresses the need for the protection of riparian areas, sensitive ecosystems, marine shores and aquifers.

Pursuant to this authority, local governments may designate areas as EDPAs to protect the natural environment, its ecosystems, and biodiversity; regulate the form and character of development in those areas; and influence the siting of development on a parcel of land.¹⁸⁶

A development permit for an EDPA can:¹⁸⁷

- Specify areas of land that must remain free of development, except in accordance with any conditions contained in the permit;
- Require specified natural features or areas to be preserved, protected, restored, or enhanced in accordance with the permit;
- Require dedication of natural watercourses and their setbacks;
- Require construction of works to preserve, protect, restore, or enhance natural watercourses or other specified natural features of the environment; and
- Require protection measures, including planting or retaining vegetation or trees in order to conserve, protect, restore or enhance fish habitat or riparian areas, control drainage, control erosion, or protect banks.

The Village has enacted policies supporting protection and restoration of the sensitive environment of Bedwell Bay in its new OCP, for example supporting the VFPA’s implementation of ‘no-go’ zones in environmentally sensitive areas to minimize disturbance of eelgrass beds.¹⁸⁸ However, the Village has not designated any EDPAs in the OCP.

An example of the comprehensive use of EDPAs is the City of Nanaimo designated Environmental Sensitive Development Permit Area (“ESDPA”) over lands identified as sensitive ecosystems, pursuant to s. 488(1)(a)(b) of the *LGA*, the Riparian Areas Protection Regulations, and the *Riparian Areas Protection Act*. Their objectives in doing so were to identify, protect, and minimize the disturbance of ESAs within the City, and preserve native, rare, and endangered vegetation or

¹⁸⁵ Government of British Columbia, Local Government Land Use Regulation (last visited 2 November 2024), online: <<https://www2.gov.bc.ca/gov/content/governments/local-governments/planning-land-use/land-use-regulation>>.

¹⁸⁶ Curran and Gray, *supra* note 138 at 96; pursuant to their authority from the *Local Government Act*, ss 488–491.

¹⁸⁷ *Ibid.*

¹⁸⁸ Village of Belcarra OCP, *supra* note 75 at 53.

wildlife in their natural state.¹⁸⁹ This ESDPA also set a performance-based standard for water. Development must not increase or decrease the amount of surface and/or groundwater or affect water quality within the designated ESA.¹⁹⁰ Development may not affect hydrology in the buffer area unless sanctioned by the permit.¹⁹¹ The ESDPA was updated in 2014 to include watercourses that the RAPR does not apply to, implement a ‘no net loss’ rule for riparian and watercourse habitat, and require Qualified Expert Professionals (“QEPs”) to be available during construction and post-construction phases to ensure that environmental impacts are minimized.¹⁹²

In addition to protecting ecosystems generally, EDPA guidelines can include requirements to protect specific elements of those ecosystems.¹⁹³ For example, local governments have included requirements in EDPAs to protect the nests of sensitive bird species, such as eagles and herons.¹⁹⁴ These requirements often designate “buffer zones” around nesting trees to protect them from disturbance during development.¹⁹⁵

A municipality can also designate a “marine DPA” or “shoreline DPA” along marine shorelines, to balance the competing recreational, commercial, and conservation interests to which these areas are often subject. This can be separate from, or merged with, a local government’s EDPA.¹⁹⁶ Marine DPAs are frequently designated along a strip of land running 15-30m on either side of the shoreline.¹⁹⁷

Marine DPAs frequently include a number of restrictions, including:¹⁹⁸

- Restrictions on new development within the marine DPA, and/or requirements that any new developments minimize impacts to the marine ecology and address risks from flooding, erosion, and slope stability hazards (such as through siting requirements). Reports from qualified environmental professionals with expertise in coastal processes are often required.
- Restrictions on shoreline protection measures, which can disrupt natural shoreline processes, particularly though the cumulative impacts of multiple works. “Soft” protection measures, such as minimum setbacks from the shoreline or bioengineering, can be encouraged over “hard” protection measures such as concrete walls. Some marine DPAs prohibit construction of new shoreline protection measures except to protect previously existing structures, and

¹⁸⁹ City of Nanaimo, *City of Nanaimo Bylaw No 6600* (4 July 2022), online as pdf: <<https://www.nanaimo.ca/property-development/community-planning-land-use/city-plan>> at 235 [City of Nanaimo 2022].

¹⁹⁰ City of Nanaimo, *City of Nanaimo Zoning Bylaw Part 18 Development Permit Area Guidelines* (last visited 2 November 2024), online as pdf: <[https://www.nanaimo.ca/docs/property-development/community-planning-and-zoning/part-18--development-permit-area-\(dpa\)-guidelines.pdf](https://www.nanaimo.ca/docs/property-development/community-planning-and-zoning/part-18--development-permit-area-(dpa)-guidelines.pdf)> at 2.

¹⁹¹ *Ibid.*

¹⁹² *Ibid* at 1–3.

¹⁹³ Curran and Gray, *supra* note 138 at 108.

¹⁹⁴ *Ibid*; see also Cowichan Valley Regional District’s EDPA for South Cowichan for an example of this. Cowichan Valley Regional District, *CVRD Bylaw No 4270 Schedule C Development Permit Areas* (2021), online as pdf: <<https://cvr.ca/DocumentCenter/View/102800/2023-10-11-Development-Permit-Areas>> at 17–24 [CVRD OCP].

¹⁹⁵ Curran and Gray, *ibid*.

¹⁹⁶ *Ibid* at 105.

¹⁹⁷ “Either upland of the highest water mark ... [or] below the low tide line,” *ibid*

¹⁹⁸ *Ibid* at 106.

even then, only if a qualified environmental professional has concluded that the structure is at risk from erosion due to natural shoreline processes such as tidal action, currents or waves.

- Restrictions on the use of fill in areas upland of the shoreline.
- Requirements in respect of stormwater runoff and drainage – specifically, these should not drain to the foreshore or over the edge of bluffs or shore banks and should avoid compromising slope stability.
- Requirements to preserve and protect natural beach transport processes (such as erosion and accretion) in their natural state.
- Requirements to retain natural vegetation within the marine riparian area, including woody debris, and/or to replace vegetation disturbed during development.

The Cowichan Valley Regional District (CVRD) has designated a DPA for ‘Marine Uplands and Foreshore Protection’, which covers approximately 76 kilometers of shoreline, and includes upland areas extending 15 meters inland from the high-water mark.¹⁹⁹ The CVRD identifies eelgrass beds as an example of important habitat that this DPA serves to protect, and cites their importance for spawning and rearing various fish species, and their vulnerability to damage from sedimentation resulting from shorelines development.²⁰⁰ Some permit guidelines for development applications within the Marine Uplands and Foreshore Protection DPA include:²⁰¹

- A requirement for applicants to submit a report prepared by a qualified environmental professional (QEP) to eliminate or mitigate impacts of the proposed development on the subject property, other parcels with marine shorelines in the general area, and the general marine ecology.
- A requirement for retention of lands inland from and abutting the shoreline in their natural condition, preserving native vegetation and trees. Where a building, structure or alteration of land is proposed in these areas, applications must demonstrate the circumstances that make this necessary.
- A plan to restore vegetation to marine riparian areas affected by construction or alteration of land using native species in accordance with a vegetation restoration plan, prepared by a landscape architect or qualified environmental professional.
- A requirement for applications to minimize the extent of overwater structures and the number of pilings.
- A requirement for wharves to be situated to avoid extension over marshes or other productive foreshore areas; avoid extending wharves over the water beyond the low-water mark, except as necessary to access floats or for public viewing.

¹⁹⁹ CVRD OCP, *supra* note 196 at 32.

²⁰⁰ *Ibid.*

²⁰¹ *Ibid* at 35–37.

- A requirement for the application to incorporate measures to increase light penetration to the marine environment during the day. Measures to increase light penetration may include
 - a. locating overwater structures so they will not cast shade on native aquatic vegetation or light-sensitive habitat;
 - b. locating overwater structures a minimum of 8 m from native aquatic vegetation;
 - c. using grating, glass inserts or reflective panels, with at least 60% functional openings, for elevated docks and gangways sited over nearshore areas; and
 - d. providing artificial lighting beneath overwater structures during daylight hours.

The Municipality of North Cowichan also has designated commercial, industrial, and multi-family marine properties and foreshore within 100 m above (inland) and 300 m below (seaward) of the natural boundary of the foreshore to be a DPA.²⁰² With this designation, all development on designated commercial marine land or foreshore requires a development permit.²⁰³

The designation of Bedwell Bay's eelgrass bed as an ESA supports Belcarra in implementing a marine DPA or EDPA over the eelgrass bed, to protect the eelgrass from the impacts of further development.

5.2.4 ENVIRONMENTAL DEVELOPMENT PERMIT AREAS – RECOMMENDATIONS

- In collaboration with TWN, designate the entire Bedwell Bay foreshore, including the eelgrass bed, as an EDPA, or designate the municipality of Belcarra as an EDPA and designate the eelgrass bed as a marine DPA.
- Acknowledging Belcarra's deferral to the VFPA for eelgrass protection (OCP policies NE2, HCLU 34, 35 and 36), this EDPA/marine DPA should include the following, and may include additional protection measures:
 - Require the Bedwell Bay eelgrass beds and suitable habitat (other areas with suitable substrate and depth for eelgrass but where eelgrass has not been observed) to be preserved and protected, in accordance with the permit;
 - Designate a 'buffer zone' around the eelgrass beds to protect them from disturbance during development;
 - Require protection measures, including retaining vegetation and trees in order to conserve, protect, and enhance the eelgrass beds;

²⁰² Corporation of the District of North Cowichan, *Official Community Plan Bylaw* (2011), online as pdf: <https://www.northcowichan.ca/assets/Municipal~Hall/Bylaws/Official_Community_Plan_Bylaw.pdf> at 139.

²⁰³ *Ibid.*

- Set a performance-based standard for rainwater, where development must not increase or decrease the amount of surface and/or groundwater or affect water quality within the designated area;
- Mandate that development not affect hydrology in the designated area unless sanctioned by permit;
- Implement a ‘net gain’ rule for the eelgrass beds;
- Require QEPs with expertise in coastal processes to be available during construction and post-construction phases to ensure that environmental impacts of developments are minimized or eliminated;
- Address risks from flooding, erosion, and slope stability hazards, such as through siting requirements;
- Establish a “No-Shore Landing of Motorized Watercraft” policy, to avoid inadvertent damage to intertidal marine flora and fauna. The launching and landing of non-motorized watercraft, such as kayaks, dinghies, and rowboats, may be accommodated and encouraged in specific locations.
- Designate minimum setbacks from the shoreline for new development;
- Require the preservation and protection of natural beach transport processes (such as erosion and accretion) in their natural state;
- Require a plan to restore vegetation to marine riparian areas affected by construction or alteration of land using native species in accordance with a vegetation restoration plan, prepared by a landscape architect or qualified environmental professional;
- Require applications to minimize the extent of overwater structures and the number of pilings;
- Prohibit features that will contribute to shoreline hardening, such as seawalls, riprap and bulkheads;

5.2.5 ZONING AND LAND USE

Zoning bylaws are the principal tool that local governments use to implement land use plans.²⁰⁴ Within a zone, a local government may regulate the use of land; the density of the use of land; the siting, size, and dimensions of uses permitted on the land; and the location of uses on the land.²⁰⁵ Local governments may also prohibit any uses of land within a zone.²⁰⁶ The zoning power extends to areas within the local government’s jurisdiction that are covered by water, because the definition of “land” (the use of which may be regulated under s. 479 of the *Local Government Act*)

²⁰⁴ Buholzer, *supra* note 79 at 7.1.

²⁰⁵ *Ibid* at 7.3.

²⁰⁶ *Ibid* at 7.33.

states that it includes the surface of the water.²⁰⁷ Local governments can zone parts of the foreshore to prohibit the construction of docks and other structures,²⁰⁸ and can also zone for use in coastal and marine areas out to their boundaries, including docks and marinas.²⁰⁹ Without proper mitigation, overwater structures such as piers, docks, and floating homes can adversely affect foreshore habitat such as eelgrass by affecting light, wave energy, seabed layers and water quality.²¹⁰

British Columbia courts have determined that local government zoning restrictions on long-term moorage are legally enforceable.²¹¹ Local governments can and do zone for conservation, which could be used to preserve specific marine areas.²¹² Zoning bylaws can also specify environmentally protective rules, for example building setbacks that require buildings to be located 15 to 30m back from natural boundaries.²¹³ Setbacks can protect marine riparian vegetation such as eelgrass.²¹⁴

Zoning is regulated under Village of Belcarra Zoning Bylaw No. 510, 2018.²¹⁵ The waters of Bedwell Bay, and the eelgrass bed, are designated within three zones: W-1 (Marine 1), W-2 (Marine 2), and W-3 (Marine 3).²¹⁶ Permitted principal uses in zones W-1, W-2 and W-3 are limited to: floats, wharves, piers and walkways necessary for practical access to property immediately abutting the foreshore, except a group or shared wharfage facility; recreational vessel moorage; and marine parks.²¹⁷ Group wharfage facilities are permitted in zone W-2,²¹⁸ and shared wharfage facilities are permitted in zone W-3.²¹⁹ A group wharfage facility is a wharf owned and operated by a Group Wharfage Association, which is a group of four to six Village residents formed pursuant to the Society Act for the purpose of owning and operating a group wharfage facility.²²⁰ A shared wharfage facility is a wharf owned and operated by an individual or group of Village residents which will accommodate more than three boats.²²¹

²⁰⁷ *Ibid* at 7.6; *Community Charter*, Sched, s 1.

²⁰⁸ *Local Government Act*, s 479.

²⁰⁹ *Ibid*, s 314(2)(b).

²¹⁰ Bedwell Bay Sustainability Plan, *supra* note 34 at 4.

²¹¹ Hewson, *supra* note 37 at 249; see also *West Kelowna (District) v Newcomb*, 2015 BCCA 5 (CanLII); *Victoria v Zimmerman*, 2018 BCSC 321 at paras 2 and 31.

²¹² Hewson, *supra* note 37 at 253; See also District of Highlands, *District of Highlands Zoning Bylaw No 100 – A Bylaw to Regulate Land Use and Density* (7 October 2024), s 14.

²¹³ Stewardship Centre for British Columbia, *Green Shores Policy and Regulatory Tools for Local Governments: A survey of shoreline management in bylaws, plans and policies* (Revised May 2016), online as pdf:

<www.stewardshipcentrebc.ca/PDF_docs/greenshores/reports/GSPolicyandRegulatoryToolsLocalGovtsReport2016.pdf> at 37.

²¹⁴ Hewson, *supra* note 37 at 253.

²¹⁵ Village of Belcarra, *Village of Belcarra Zoning Bylaw No 510* online as pdf: <<https://belcarra.ca/assets/media/2021/05/Bylaw-510-2018-Zoning-Bylaw-Consolidated-.pdf>>.

²¹⁶ *Ibid*, Sched A at 61.

²¹⁷ *Ibid*, ss 701.2(a–c), 702.2(b), 703.2(b).

²¹⁸ *Ibid*, s 702.2(a).

²¹⁹ *Ibid*, s 703.2(a).

²²⁰ *Ibid*, s 104.

²²¹ *Ibid*.

Zone W-1 has ten additional “special conditions”:²²²

- (1) No commercial or industrial activity other than private residential boat chartering and water taxi operations shall take place on a float, wharf or pier.
- (2) All floats, wharves, piers and walkways must be located within the boundaries of water licence or sublicence of occupation granted or approved by the Vancouver Fraser Port Authority and, where applicable, the Village of Belcarra. Vessels navigating the harbour and their mooring, berthing, etc. are subject to the regulation and control of the Vancouver Fraser Port Authority.
- (3) No float or wharf shall extend any further distance from the shore than is necessary for boat access and in cases where the length may exceed 45 metres (147.6 feet), shall in no event extend beyond a point where there is more than 2.5 metres (8.2 feet) depth of water at extreme low Spring tides.
- (4) No section of a float or wharf shall exceed a width of 6 metres (19.7 feet), except for a maximum of 2 wharf fingers, each of which may have a length of no more than 7.5 metres (24.6 feet) and a width of no more than 1.2 metres (3.9 feet). (Note: No portion of an access walkway that connects a public road to a float or wharf shall exceed a width of 2 metres (6.6 feet).)
- (5) No building, shed or structure may be erected on any float or wharf in this zone other than necessary posts to carry lighting fixtures and the necessary wiring thereto together with such other posts, rails, and supports as may be necessary for safety.
- (6) Floats, wharves, piers and walkways shall be designed and constructed as to not impede pedestrian access along the public foreshore nor diminish public access to the beach.
- (7) Signage of wharfage facilities shall be restricted to improvements within the boundaries of a water license or lease, and signs shall not be situated on municipally administered lands.
- (8) Float homes and houseboats shall not be permitted.
- (9) All discharged effluent shall be from a certified treatment system that complies with the standards for sewage discharge into a marine environment as established by the responsible authority.
- (10) The maximum length of a wharf shall not exceed 17 metres (55.8 feet).

Belcarra’s current zoning bylaws do not mandate building setbacks, restrict long-term moorage, delineate any conservation priorities regarding the Bedwell Bay eelgrass beds, or specify any environmental protection rules.

²²² *Ibid*, s 701.10.

5.2.6 ZONING AND LAND USE RECOMMENDATIONS

- Implement building setbacks in the range of 15 to 30 m from the natural boundary.
- Implement zoning restrictions on moorage within the boundaries of Belcarra.²²³
- Amend the current bylaws to add environmental conservation, habitat enhancement, and habitat restoration as a permitted principal use in any Zone, or specifically Zones W-1, W-2, and W-3.
 - Environmental conservation may be defined as the “preservation and protection of natural resources and assets in their natural state including the habitat of birds, fish and other wildlife.”²²⁴
- Create a new ‘Conservation Zone’ over the Bedwell Bay eelgrass with a buffer around the beds and restrict or prohibit development of overwater structures in the newly established Conservation Zone.
 - Identify the permitted principal use in the Conservation Zone as “habitat protection, management, and enhancement.”
 - Permit an accessory use of educational and interpretive signage and displays.
- Implement a bylaw restricting or prohibiting the construction of private docks within a designated radius of the eelgrass beds and suitable eelgrass habitat in the boundaries of Belcarra.
- Amend the current bylaws to add a provision that stipulates that TWN must consent to any moorage facility.

5.3 REMOVAL OF DERELICT VESSELS

Derelict vessels are abandoned vessels that may have been left intentionally (by owners hoping to save on disposal fees) or neglected. As these vessels, and the pollutants they carry, sink and go adrift, they become dangerous to both human and ecological health. Marine debris, and water contamination by invasive plants, fuels, oils, grease, and toxic materials, are known to decrease biodiversity and threaten wildlife, and may damage sensitive habitat such as eelgrass beds.²²⁵

²²³ To note, Belcarra will not be able to introduce a complete ban on mooring under a zoning bylaw per *West Kelowna (District) v Newcomb*, 2015 BCCA 5; however, the municipality could explore a zoning bylaw that restricts all mooring except for temporary usage.

²²⁴ Village of Lions Bay, *The Municipality of the Village of Lions Bay Zoning and Development Bylaw No 520, 2017*, s 2.1 (3 July 2018), online as pdf: <https://www.lionsbay.ca/sites/lionsbay.ca/files/2022-01/bylaw_520_-_zoning_and_development_certified_consolidation_b1548_b1549_0.pdf>

²²⁵ Caitlin Wessel *et al*, “An evaluative tool for rapid assessment of derelict vessel effects on coastal resources” (2018) 207 J Env Management 262–268.

Abandoned derelict vessels are largely subject to federal jurisdiction and regulation, and both the VFPA and Transport Canada have policies to deal with these boats. While vessel owners are responsible for removing derelict vessels, including the associated costs,²²⁶ under the *Canada Marine Act*²²⁷ the VFPA may take action to remove derelict vessels when there is any navigational or environmental safety risk.²²⁸ If the derelict vessel is on the shore and thus outside of the VFPA's jurisdiction, Transport Canada must be contacted.²²⁹ Similar to the VFPA, Transport Canada only has the authority to remove a boat if it poses a potential or immediate hazard to navigation or the environment, under the *Wrecked, Abandoned or Hazardous Vessels Act*.²³⁰ Transport Canada can, however, authorize any person (including a municipality) to remove abandoned boats if the owner of the wreck is unknown.²³¹

Local governments are somewhat limited in their ability to address problems related to abandoned derelict vessels.²³² Some local governments have taken on the management of moorage, in hopes that proactive management of moorage and boat storage will lessen the instances of boats becoming derelict.²³³ For example, the District of Central Saanich has negotiated a Licence of Occupation from the Province to oversee and manage the number and location of mooring buoys at Brentwood Bay, following community concerns about derelict and abandoned boats.²³⁴

In Victoria, concerned citizens founded the Dead Boats Disposal Society, a non-profit dedicated to the removal and disposal of abandoned boats and marine debris from shorelines.²³⁵ The Dead Boats Society works with Transport Canada to remove derelict boats off of coastlines, at no cost to owners. If the Society cannot identify the owner of an abandoned boat, they must issue a 30-day notice and make an application for removal through Transport Canada.²³⁶

Currently, Belcarra zoning bylaws that apply to Bedwell Bay prohibit in all zones “the storage of derelict vehicles [including boats]²³⁷ except if such a derelict vehicle is maintained in working order and is used for work on the lot, or is used for fire department training purposes.”²³⁸ Vessels

²²⁶ Vancouver Fraser Port Authority, “Derelict vessels” (last visited November 2022), online: <<https://www.portvancouver.com/about-us/faq/derelict-vessels/>> [VFPA 2022].

²²⁷ *Canada Marine Act* SC 1998, c 10.

²²⁸ *Ibid*, s 62(c).

²²⁹ VFPA 2022, *supra* note 28.

²³⁰ *Wrecked, Abandoned or Hazardous Vessels Act*, SC 2019, c 1.

²³¹ *Ibid*, s 37(4).

²³² Hewson, *supra* note 37 at 255; citing DFO, “Small Craft Harbours Abandoned and Wrecked Vessels Removal Program” (10 Jan 2020), online: <<https://www.dfo-mpo.gc.ca/sch-ppb/vessels-bateaux/index-eng.html>>.

²³³ Hewson, *supra* note 37 at 255.

²³⁴ *Ibid* at 252, citing “Brentwood Bay Moorage,” (last visited November 2022), online: <<https://www.centrialsaanich.ca/our-community/parks-recreation-culture3/brentwood-bay-moorage>>.

²³⁵ Dead Boats Society, “About Dead Boats Disposal Society” (last visited November 2022), online: <<https://deadboatsdisposalsociety.ca/about-us/>>.

²³⁶ *Wrecked, Abandoned or Hazardous Vessels Act*, s. 38(2)(b).

²³⁷ Village of Belcarra, *Zoning Bylaw No 510* (2018), s 104.

²³⁸ *Ibid*, s 202(1)(b).

navigating the harbour and their mooring, berthing, etc. are subject to the regulation and control of the VFPA.²³⁹

The Belcarra zoning bylaw does not address the issue of anchored vessels that become derelict. Further, while the storage of derelict vessels is prohibited, neither Belcarra's bylaws nor its OCP address how Belcarra deals with derelict vessels for which the owner is unknown.

5.3.1 DERELICT VESSELS: RECOMMENDATIONS

- In partnership with TWN and the VFPA and/or Transport Canada, develop a joint monitoring program to track abandoned vessels in Bedwell Bay that may become derelict.
- In partnership with TWN and the VFPA and/or Transport Canada, designate Bedwell Bay as a priority area for the removal of derelict vessels through provincial or federal initiatives, to protect the eelgrass bed.
- In partnership with TWN, develop a joint agreement with the VFPA and/or Transport Canada to take action, for example once a year, to remove derelict vessels from Bedwell Bay.
- Obtain a Licence of Occupation from the Province of British Columbia to proactively oversee and manage the number and location of mooring buoys in Bedwell Bay.
- Implement a public education campaign regarding derelict vessels run-off pollution.

5.4 STORMWATER MANAGEMENT

Stormwater runoff occurs when rain or snowmelt flows over the ground, as impervious surface such as driveways, parking lots, sidewalks, and streets prevent the runoff from naturally soaking into the ground.²⁴⁰ As this runoff flows into a stormwater collection system, or directly into a water body, it can pick up debris, chemicals, dirt, and other contaminants, thereby creating a source of pollution.²⁴¹ Excess nutrients from land, such as fertilizers and sewage, and boat discharges can cause blooms of plant plankton and algae. These algae blooms can then block out the sunlight needed for growth of young eelgrass shoots.

In Puget Sound, studies conducted by the Washington State Department of Ecology have identified stormwater runoff as the largest source of pollutants in water bodies;²⁴² Burrard Inlet is likely similar.²⁴³ A characterization study of urban stormwater from a City of Vancouver catchment on the Fraser River in the 1980s and other studies in the U.S. have found high fecal coliform levels

²³⁹ *Ibid*, s 701.10(2).

²⁴⁰ Burrard Inlet Action Plan Summary, *supra* note 2 at 11.

²⁴¹ *Ibid* at 11.

²⁴² State of Washington Department of Ecology, "Stormwater" (last visited December 2022), online: <<https://ecology.wa.gov/Water-Shorelines/Water-quality/Runoff-pollution/Stormwater>>.

²⁴³ Burrard Inlet Action Plan Summary, *supra* note 2 at 11.

(e.g., 10,000+ MPN/100 mL) in stormwater, suggesting stormwater is likely to be significant source of pathogens generally.²⁴⁴ Sources of pathogens in stormwater are thought to include pets, livestock, and wildlife.²⁴⁵ In the future, there will likely be greater runoff volume due to both population growth and climate change, resulting in increased seasonal rainfall and more intense rainstorms.²⁴⁶

Stormwater management requires a comprehensive and integrated approach to the planning, design and implementation of systems that mitigate and control impacts of urban development. The goal of effective stormwater management is to protect and maintain the health of marine ecosystems, aquatic life, and water quality, and reduce the risks of flooding and erosion.²⁴⁷

Municipalities may require, by bylaw, runoff controls where paved areas or roofed areas are proposed to be developed.²⁴⁸ Municipalities may also regulate stormwater drainage through its powers over subdivision servicing²⁴⁹ and drainage.²⁵⁰

In Belcarra, the Village's drainage network consists mainly of open channel drainage (ditches and culverts) with a limited number of stormwater sewers.²⁵¹ The entire drainage network of Belcarra eventually discharges into Bedwell Bay and Belcarra Bay, through numerous outfalls and creeks.²⁵² Currently, Bedwell Bay's stormwater management bylaws are outlined in the 'Drainage' section of the Subdivision and Development Bylaw.²⁵³

5.4.1 STORMWATER MANAGEMENT: OCP POLICIES

Belcarra lists its stormwater network (including ditches, culverts, and stormwater mains) as an 'infrastructure asset' in its OCP.²⁵⁴ The OCP highlights that it is a policy of Council to "ensure that municipal assets [...] are aligned with community goals,"²⁵⁵ one of those goals being to be a

²⁴⁴ Burrard Inlet Action Plan, *supra* note 16 at 29; see Leslie Swain, "Stormwater Management – the next step?" (1985) 10 Can Water Resource J 1 at 47.

²⁴⁵ Burrard Inlet Action Plan, *ibid* at 29.

²⁴⁶ Government of British Columbia, "Stormwater Planning: A Guidebook for British Columbia" (2002), online as pdf: <https://www2.gov.bc.ca/assets/gov/environment/waste-management/sewage/stormwater_planning_guidebook_for_bc.pdf> at 26.

²⁴⁷ *Ibid* at 51.

²⁴⁸ *Local Government Act*, ss 523, 525.

²⁴⁹ *Ibid*, s 506.

²⁵⁰ *Community Charter*, s 69.

²⁵¹ Village of Belcarra, "Village of Belcarra Drainage Study" (2018) at 5, online as pdf:

<https://belcarra.ca/assets/media/2019/05/2018_Belcarra_Drainage_Study_-_Final_Report-1.pdf>.

²⁵² *Ibid* at 5.

²⁵³ Village of Belcarra, *Subdivision and Development Bylaw No 492* (2015), ss 6.0–6.7 [Village of Belcarra 2015].

²⁵⁴ Village of Belcarra OCP, *supra* note 75 at 40.

²⁵⁵ *Ibid*.

steward of the natural environment.²⁵⁶ Belcarra's open drainage system provides habitat for aquatic life, and serves to filter contaminants out of stormwater runoff.²⁵⁷

The OCP includes a policy that Council adopt an 'Integrated Stormwater Management Plan' that "considers the Burrard Inlet Water Quality Objectives and Burrard Inlet Action Plan to guide growth, development, and construction of drainage infrastructure in the municipality, including ditches."²⁵⁸ This Plan has not been developed yet, so the recommendations in this report may be used to inform its policies. It is also important to note that while integrated stormwater management plans are a means of mitigating the impacts of future development on watershed health, there is currently no mechanism to ensure implementation within the land use planning process or effectiveness monitoring to ensure results are being achieved.²⁵⁹ Watershed health objectives must be strongly linked to development planning through the development and adaptation of specific standards for implementation and monitoring.²⁶⁰

5.4.2 STORMWATER MANAGEMENT BYLAWS

The objective of the Stormwater Management concept used to design drainage systems in the Village of Belcarra is to "limit the effect of peak flows on property, receiving streams and watercourses, and to preserve the natural beauty and environment, characteristic of Belcarra."²⁶¹ While Belcarra's open drainage system allows stormwater to infiltrate the ground,²⁶² infiltration rates in Belcarra are typically very low, due to a high percentage of glacial tills and clay.²⁶³

Current bylaws stipulate the design of storm sewers,²⁶⁴ manholes,²⁶⁵ catchbasins,²⁶⁶ ditches,²⁶⁷ culverts,²⁶⁸ inlet and outlet structures,²⁶⁹ and flow control structures.²⁷⁰

The basic requirements for stormwater storage include a containment location of defined area and volume, with a restricted outlet designed to maintain the discharge to the downstream storm sewer at the pre-development level equivalent to grass condition for a five-year return flow.²⁷¹ Individual on-site storage of stormwater for single family dwellings is not permitted.²⁷²

²⁵⁶ *Ibid* at 20.

²⁵⁷ *Ibid* at 43.

²⁵⁸ *Ibid*.

²⁵⁹ Burrard Inlet Action Plan, *supra* note 16 at A-5.2.

²⁶⁰ *Ibid* at 77, A-5.2.

²⁶¹ Village of Belcarra 2015, *supra* note 255, s. 6.1.1.

²⁶² Village of Belcarra OCP at 43.

²⁶³ Village of Belcarra 2015, *supra* note 255, s 6.2.2(c).

²⁶⁴ *Ibid*, s 6.3.1(a).

²⁶⁵ *Ibid*, s 6.3.1(b).

²⁶⁶ *Ibid*, s 6.3.1(c).

²⁶⁷ *Ibid*, s 6.3.1(d).

²⁶⁸ *Ibid*, s 6.3.1(e).

²⁶⁹ *Ibid*, s 6.3.1(f).

²⁷⁰ *Ibid*, s 6.3.1(g).

²⁷¹ *Ibid*, s 6.5.

²⁷² *Ibid*.

Ground disposal by infiltration may be used depending on soil conditions; in this case, the 24-hour sustained percolation rate should exceed or equal the designed release rate from the proposed development site.²⁷³

For fisheries streams, care must be taken to ensure that no toxic materials are employed, and materials such as concrete and fine soils are not permitted to enter the watercourse.²⁷⁴

The current bylaws do not discuss water quality or pollution for non-fisheries streams. The bylaws also do not stipulate the maximum percentages of areas that can be covered with impermeable material.²⁷⁵

5.4.3 STORMWATER MANAGEMENT: RECOMMENDATIONS

- In collaboration with TWN, adopt a data-driven, whole-of-watershed approach to stormwater management planning that considers cumulative impacts of Belcarra's policies and bylaws on watershed health.²⁷⁶
- In partnership with TWN, develop a joint monitoring and evaluation program for all water management initiatives and develop a regular reporting and communication structure for measuring Belcarra's success in protecting its water resources.
- Adopt a comprehensive Watercourse Protection Bylaw, pursuant to authority flowing from section 9 of the Community Charter and section 2(1)(b) of the Spheres of Concurrent Jurisdiction – Environment and Wildlife Regulation.²⁷⁷
- In any new Watercourse Protection Bylaw, enact watercourse protection provisions that:
 - Restrict the polluting or obstructing or impeding of the flow of a stream, creek, waterway, watercourse, waterworks, ditch, drain, or sewer, and impose penalties for contravention of the prohibition;
 - Establish a maximum percentage of lot or watershed areas that can be covered by impermeable material, particularly adjacent to sensitive ecosystems;
 - Establish standards for drainage works for the ongoing disposal of surface runoff and stormwater from paved areas and roof areas during and after construction to maintain water quality.
- Enact provisions that ensure that the quantity of rainwater leaving the site after development shall be equal to or less than the quantity of rainwater leaving the site before development, to achieve the following performance targets:

²⁷³ *Ibid*, s 6.5(c).

²⁷⁴ *Ibid*, s 6.7(f).

²⁷⁵ Authority derived from the *Local Government Act* s 523(2).

²⁷⁶ This aligns with Village of Belcarra OCP, *supra* note 75 at 43.

²⁷⁷ BC Reg 144/2004.

- Impervious surfaces shall be designated to drain at least 90% of the rainwater runoff volumes entering the lot for any storm event to the natural hydrologic pathways within the same lot (i.e. through infiltration and other source controls), such that not more than 10% of the total rainwater runoff volume crosses any lot line at post-development;
 - The rate of pre-development rainwater runoff from the lot shall be maintained at all times to ensure that stream flow rates do not exceed those rates corresponding with the natural mean annual flood, and that this maximum rate will not occur more than once per year.
- At a watershed level, commit to effective impervious cover objective of less than 10% and total impervious cover objective of less than 25% within a specified time frame, and amend or enact bylaws to support this objective.
- Utilize proactive forms of stormwater management to address the increased frequency and intensity of weather events, by restoring natural hydrologic pathways and reducing the volume of storm run-off based on the following strategies:
 - Reduce the amount of run-off by minimizing impervious areas and maximizing vegetation retention through Low-Impact Development;
 - Increase on-site infiltration into the ground or reuse it at the site level through vegetated bioswales, rain gardens, or rainwater harvesting;
 - Encourage an increased depth of permeable soil throughout Belcarra where possible, and support a design approach of using absorbent landscaping for stormwater management.
- Work with TWN to monitor stormwater flowing into Bedwell Bay, to identify sources of pollution.
- Implement a public education campaign regarding storm run-off pollution, and commit funding for this purpose.
- Implement a water monitoring program, designed and reviewed annually by Qualified Professionals, and carried out by TWN and/or Village of Belcarra staff to ensure consistency in data collection.
- Share all water quality monitoring reports with TWN, and partner with TWN to assess improvements to riparian and subtidal ecosystem health and other identified ecological conditions.
- Provide funding and support for the planting of riparian vegetation along creeks and ditches along with general planting throughout the municipality, to aid in the stabilization of creek banks as well as interception and uptake of water.
- Adopt municipal Best Management Practices, such as regular street sweeping and cleaning of sediments from municipal stormwater pipes, sumps, and catch basins, to reduce the amount of sediment in stormwater runoff.

5.5 VOLUNTARY NO ANCHOR ZONES

Anchoring and mooring can physically disturb eelgrass beds.²⁷⁸ One way that municipal governments have regulated anchorage to promote healthy eelgrass in their adjacent waters is through denoting eelgrass beds as falling within a ‘voluntary no anchor zone’ and marking the area with mooring buoys. The Belcarra OCP acknowledges the VFPA’s commitment to designating a “no anchoring” zone at the head of Bedwell Bay to protect the eelgrass beds from damage due to recreational boats and anchoring.”²⁷⁹ In support of this approach and a municipal initiative relating to no anchoring, the case study of Bowen Island Municipality is provided below.

5.5.1 CASE STUDY: MANNION BAY

Bowen Island Municipality has obtained a 30-year Licence of Occupation from the Province for Mannion Bay. This allows the municipality to actively manage mooring buoys in order to restore and protect the eelgrass in its marine environment, including requiring regulations and fees.²⁸⁰ Eelgrass inventory completed by scientists and community members in 2014 helped determine buoy placement.²⁸¹

This initiative was modeled after similar successful initiatives implemented in Washington State. As the no anchor zone is voluntary, it relies on the support and collaboration of Bowen Island residents and does not require any enforcement or extra resources. Marker buoys outline the zone, and these buoys denote a request to boaters who visit Mannion Bay to proactively anchor outside of the eelgrass habitat.²⁸²

A Licence of Occupation is issued by the Ministry of Forests, Lands, Natural Resource Operations & Rural development under the *Land Act*, which provides tenure for the use of provincial Crown land.²⁸³ A Licence of Occupation conveys non-exclusive use for its described purpose where there are potentially multiple users of a site, where survey is not required, and where government wishes to retain future options and management control over use of the lands.²⁸⁴

Under its Licence of Occupation, Bowen Island Municipality mandates that if someone has a mooring buoy in Mannion Bay, they are required to:²⁸⁵

²⁷⁸ Burrard Inlet Action Plan, *supra* note 16 at 43.

²⁷⁹ Village of Belcarra OCP, *supra* note 75 at 53

²⁸⁰ Hewson, *supra* note 37 at 252.

²⁸¹ Bowen Island Municipality, “Mannion Bay Revitalization” (last visited November 2022), online: <https://bowenislandmunicipality.ca/parks-recreation-culture/environment/mannion-bay/> [Bowen Island].

²⁸² *Ibid.*

²⁸³ BC Assessment, “Leases, Permits and Other Tenures Policy” (last visited November 2022), online as pdf: <https://info.bcasessment.ca/services-and-products/APPs/Leases-Permits-and-Other-Tenures-Policy.pdf> at 5.

²⁸⁴ *Ibid* at 5.

²⁸⁵ Bowen Island, *supra* note 283.

- Pay annual fee of \$240 to Bowen Island Municipality in one installment by the first day of the calendar year;
- Ensure vessel is safe, seaworthy and in compliance with the Licence of Occupation;
- Ensure that use of vessel complies with the Use of Beaches and Water Areas Bylaw No.418, 2016, including restrictions related to live-aboards and floating storage units; and
- Owners of unoccupied and recreational vessels mooring in the bay for more than 48 hours in a 30-day period are required to provide Bowen Island Municipality with proof of insurance, name, phone number, address and email address.

5.5.2 RECOMMENDATIONS: VOLUNTARY NO-ANCHOR ZONES

- Work collaboratively with other government and non-government organizations, including TWN, to support a no anchor zone around the Bedwell Bay eelgrass bed.

5.6 PARKS AND PUBLIC SPACES

Local governments can reserve or designate land that they own as public parks.²⁸⁶ Protection of coastal areas as parks can provide benefits for adjacent marine ecosystems and provide an opportunity for local governments to manage recreational access to the shoreline.²⁸⁷

For example, Whytecliff Park in West Vancouver is a coastal and marine park that was created by a community-led initiative along with members of the West Vancouver Municipality, the Marine Life Sanctuaries Society, the Vancouver Aquarium, and Canadian Parks and Wilderness Society.²⁸⁸ Efforts to protect this area began in the late 1960s, as spearfishing became popular in the area, damaging populations of many fish species such as rockfish, lingcod, and sculpin.²⁸⁹ The proximity of Whytecliff Park to the densely populated urban core of Vancouver was seen to present an opportunity to promote a conservation message that could potentially reach more people than a more remote area.²⁹⁰

Belcarra's OCP is informed at a regional level by Metro Vancouver's Regional Parks Plan, which provides overarching policy frameworks for parks and recreation areas across the region.²⁹¹ A goal identified in the Metro Vancouver Regional Parks Plan is for Metro Vancouver to add lands to the

²⁸⁶ *Community Charter*, s 30; *Local Government Act*, ss 278, 559, 564(4).

²⁸⁷ Hewson, *supra* note 37 at 260.

²⁸⁸ Sean Kolenko, "The curious case of West Vancouver's Whytecliff Park" (9 May 2012), online as pdf: <mlssbc.files.wordpress.com/2013/01/history-of-whytecliffe-park-north-shore-news-20121.pdf> [Kolenko].

²⁸⁹ Hewson, *supra* note 37 at 261.

²⁹⁰ Kolenko, *supra* note 290.

²⁹¹ Village of Belcarra OCP, *supra* note 75 at 6.

regional park system to improve ecological health, provide more recreation opportunities, protect biodiversity, and increase the resilience of the region.²⁹²

TWN has interjurisdictional arrangements with the District of North Vancouver for Cates Park/Whey-ah-Wichen. In 2001, TWN and the District of North Vancouver established the Cates Park/Whey-ah-Wichen Agreement for the District's largest seaside park, and in 2006 they released the "Park Master Plan and Cultural Resources Interpretation Management Plan," a more in-depth plan that builds on the agreement, endorses co-governance, and upholds TWN authority and autonomy.²⁹³ Belcarra's Zoning Bylaws have current provisions that outline the permitted principal use of all marine areas of Bedwell Bay to be a "marine park":

- s.701.2 Permitted principal uses [of Marine 1 (W-1)]: (c) Marine parks
- s.702.2 Permitted principal uses [of Marine 2 (W-2)]: (b) All uses permitted within the W-1 zone
- s.703.2 Permitted principal uses [of Marine 3 (W-3)]: (b) All uses permitted within the W-1 zone

As parks and public spaces are municipally owned, they are directly collaboratively managed and may be able to address eelgrass health directly.

5.6.1 RECOMMENDATIONS: PARKS AND PUBLIC SPACES

- With other governments and agencies, create a marine park in Bedwell Bay with protections in place for the eelgrass bed, through developing an agreement and collective management plan with TWN. This plan should be developed with the intent to restoring identified areas (ex. the Bedwell Bay eelgrass beds) for traditional uses. This may include allocating funding for installation of interpretive signs in təmtəx̱w̱tən in the 2023/24 budget year.
- Develop co-governance structure with TWN representatives involving decision-making structures regarding management and allowable use of the marine park.

5.7 REQUESTS FOR VESSEL OPERATIONS RESTRICTIONS

Boat motors can damage eelgrass. To mitigate this, some municipalities have implemented Vessel Operation Restriction Regulations through Transport Canada.²⁹⁴ These regulations implement boating restrictions in particular nearshore areas demarcated by marker buoys, and can restrict

²⁹² Metro Vancouver, "Regional Parks Plan" (2022), online as pdf: <https://view.publitas.com/metro-vancouver/21-284-prk_regional-park-plan-plan-2022-v19/page/40-41> at 40.

²⁹³ District of North Vancouver and Tsleil-Waututh Nation, "Cates Park/Whey-ah-Wichen Park Master Plan and Cultural Resources Interpretation Management Plan" (2006), online as pdf: <<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=694717a5a039a50fd6cc157c2a09c467fcb99202>>.

²⁹⁴ Vessel Operations Restriction Regulations, SOR/2008-120.

the use of all boats (either pleasure craft or commercial vessels); impose speed limits; restrict towing activities; and prohibit sporting activities.²⁹⁵ Requests for Vessel Operations Restrictions require collaboration, detailed preparation, and “relatively extensive consultation” with all affected parties.²⁹⁶ It is also important to note that local governments may be responsible for funding, or raising funds, to cover the costs of these markers.²⁹⁷

This approach has been used in Cowichan Bay, where motorized vessels are prohibited in certain nearshore areas except for a marked navigation channel, to protect eelgrass beds in the Bay.²⁹⁸ This restriction outlines exemptions for Indigenous food, social and ceremonial purposes, search and rescue, and ecological conservation work.²⁹⁹ To implement these restrictions, the local government collaborated with the Royal Canadian Mounted Police, BC Wildlife Federation, Department of Fisheries and Oceans, and Cowichan Tribes, among other agencies.³⁰⁰

5.7.1 RECOMMENDATIONS: REQUESTS FOR VESSEL OPERATIONS RESTRICTIONS

- Work collaboratively with TWN, the VFPA, British Columbia, and other agencies to explore the option of restricting the use of motorized vessels in nearshore areas with eelgrass beds by implementing Vessel Operations Restriction Regulations through Transport Canada.

²⁹⁵ Transport Canada, “Local Authorities’ Guide: Vessel Operation Restriction Regulations” (2019), online as pdf: <https://tc.canada.ca/sites/default/files/migrated/local_authorities_guide_english_accessible_pdf.pdf> at 4.

²⁹⁶ *Ibid* at 7.

²⁹⁷ Hewson, *supra* note 37 at 263.

²⁹⁸ Lexi Baines, “Safe navigational channel on the way for Cowichan Bay” (6 Jan 2016), online: <<https://www.cowichanvalleycitizen.com/news/safe-navigational-channel-on-the-way-for-cowichan-bay/>> [Baines].

²⁹⁹ *Ibid*; see Cowichan Valley Regional District, “Area D – Cowichan Bay OCP Meeting Notes” (2011), online as pdf: <<https://www.cvr.d.ca/Archive/ViewFile/Item/1368>> at 2.

³⁰⁰ Baines, *ibid*.

6. CONCLUSION

Advancement of TWN interests within the municipal decision-making framework of Belcarra to protect the Bedwell Bay eelgrass beds requires substantive reform to policies and bylaws governing land use and management. There is strong legal and policy rationale for Belcarra to pursue this goal. The Integrated Stormwater Management Plan that is currently in development is one window to identify and engage opportunities for policy and bylaw reform. However, this analysis shows that there are numerous other opportunities for the advancement of TWN interests beyond the Integrated Stormwater Management Plan. The recommendations contained within this report support TWN in further discussions with Belcarra regarding the municipality's responsibility to advance TWN interests.