

Caring for our Coast: Lessons for BC from Coastal Management Laws around the World

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British Columbia's iconic coast extends for tens of thousands of kilometers and is relied upon by millions of people. It is one of the largest coastal jurisdictions in the world. And the future of the coast is in peril - declining biodiversity, intensifying climate change impacts, and increasing conflicts over resources are a few challenges BC is currently facing. Yet, despite the importance of the coast to BC's culture and economy, many are surprised to learn that we don't have a comprehensive provincial coastal strategy or law to care for the coast.

By contrast, most other coastal provinces¹, states², and many other countries have coastal management strategies and laws. In the US, 34 of 35 coastal states have Coastal Zone Management programs. If they can do it, why can't we?

BC can benefit from the experience of other jurisdictions as it develops a coastal strategy and law. What follows below is a short, selective look at coastal strategies and laws developed by other jurisdictions to address challenges similar to those currently facing BC. We have focused on six issues in particular that a coastal strategy and law could address in BC: 1) implementing coastal and marine plans, 2) rules to direct climate adaptation, 3) reducing shoreline hardening, 4) prevention of coastal habitat loss, 5) intergovernmental coordination, and 6) maintaining public access. However, this list is in no way exhaustive; there are many other coastal issues that could benefit from a coastal strategy and law.

1. Implementing Coastal and Marine Plans

In BC, no provincial law requires collaborative planning along the coast. As a result, some of the province's busiest coastal and ocean areas have no guiding plan whatsoever. Nonetheless, BC has made considerable progress in developing coastal and marine plans. For example, the provincial government co-led the Marine Plan Partnership (MaPP) with 17 First Nations along the coast and produced Canada's first marine spatial plans with ocean zoning, involving stakeholders in a collaborative process. The MaPP marine plans provide spatial solutions to prevent user conflict, implement ecosystem-based management, and clarify complex jurisdictions. However, in the absence of legislation to ensure these plans are followed, the plans do not have any teeth, and risk being ignored, both by third parties and government decision-makers. Other jurisdictions require legally binding coastal and marine plans.

¹ East Coast Environmental Law Association, "Protecting the Coast: A Multi-Jurisdictional Legislative Review" (August 2018) at 11, online (pdf): *East Coast Environmental Law* <https://www.ecelaw.ca/media/k2/attachments/ECELAW_Protecting_the_Coast_Report.pdf>.

² 34 of the 35 coastal states and territories in the US have coastal zone management laws. For a recent review of the US *Coastal Zone Management Act*, how it works, and how it has been implemented, see: Congressional Research Service, "Coastal Zone Management Act (CZMA): Overview and Issues for Congress" (15 January 2019), online (pdf): *Federation of American Scientists* <<https://fas.org/sgp/crs/misc/R45460.pdf>>.

Examples:

Washington State – *Washington Marine Waters Planning and Management Act*

Washington State has completed an impressive marine spatial plan for its entire coast line.³ The *Washington Marine Waters Planning and Management Act*⁴ requires all state decisions to be consistent with the final marine spatial plan.

California – *Coastal Act*

This Act is widely considered to be a model for the US. The Act requires local governments to develop local coastal programs (LCPs) that are approved by the California Coastal Commission.⁵ All public agencies, including most federal agencies, must comply with the Act.

Scotland – *Marine (Scotland) Act 2010*

In Scotland, the *Marine (Scotland) Act 2010* requires the development of a national marine plan, as well as supplementary marine plans at the regional level. Decision-makers are required to “take any authorisation or enforcement decision in accordance with the appropriate marine plans, unless relevant considerations indicate otherwise” and “have regard to” the plan in making any other decisions.⁶

2. Rules to Direct Climate Change Adaptation

When it comes to sea level rise, BC’s own assessments have identified many stretches of coastline⁷ that are particularly vulnerable to climate impacts.⁸ Scientists are now projecting an acceleration of the rate of sea level rise, with unknown consequences for marine and coastal life.⁹ Some potential impacts include loss of property due to erosion and permanent inundation, saltwater intrusion into coastal aquifers, and loss of cultural and historical sites. In addition to this, rising temperatures, changes in the geographic range of key species, increased frequency and severity of coastal storms and acidification will all have significant impacts on coastal communities and ecosystems. Strategies are needed to support adaptation to a climate change future.

BC has developed sea level rise guidance to assist local planning, but more needs to be done to ensure that all communities are safe, to guard against property damage, and to protect and manage coastal ecosystems. Other jurisdictions have enacted coastal management laws that set clear rules for coastal development, ensure new developments are safe in a changing climate, and protect sensitive coastal ecosystems.

³ Washington State Department of Ecology, “Marine Spatial Plan for Washington’s Pacific Coast” (October 2017), online (pdf): *Washington Marine Spatial Planning* <https://msp.wa.gov/wp-content/uploads/2018/06/WA_final_MSP.pdf>

⁴ *Marine Waters Planning and Management*, 43 Wash Rev Code § 372 (Statute Law Committee 2019).

⁵ California Coastal Commission, “Description of California’s Coastal Management Program (CCMP)” (last visited 14 January 2020), online (pdf): *State of California – Natural Resource Agency* <https://www.coastal.ca.gov/fedcd/ccmp_description.pdf>.

⁶ *Marine (Scotland) Act 2010* (Scot), ASP 5, s 15(1) and 15(3).

⁷ Doug Biffard et al, “Report: BC Parks Shoreline Sensitivity Model” (June 2014), online (pdf): *Ministry of Environment* <<http://a100.gov.bc.ca/pub/acat/public/viewReport.do?reportId=42825>>.

⁸ West Coast Environmental Law, “Protecting the Coast in the Face of Climate Change” (25 September 2019), online (pdf): *WCEL* <<https://www.wcel.org/blog/protecting-coast-in-face-climate-change>>.

⁹ Scott A Kulp & Benjamin H Strauss, “New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding.” (2003) 10:4844 *Nature communications* 1–12.

Examples:

Nova Scotia – Coastal Protection Act

The Act recognizes that the coastline provides valuable services to the health and well-being of Nova Scotians, and that, in a changing climate, long-term economic prosperity depends upon sound environmental management.¹⁰ The Act also recognizes that sea level rise, coastal flooding, storm surges and coastal erosion pose significant threats to coastal areas. The Act sets clear rules to ensure new developments are located in places safe from sea level rise and coastal flooding. Regulations to implement the legislation are currently being developed.

New South Wales – State Environmental Planning Policy (Coastal Management) 2018

This policy, established under the *Coastal Management Act*, defines different types of coastal areas and supports coordinated and integrated management by state and local authorities, taking into account “environments, hazards, pressures and interests.”¹¹ It provides guidance to local governments on controlling development and establishes approval pathways for coastal protection works to support adaptation to climate change impacts.

3. Reducing Shoreline Hardening

The negative effects of hardened shorelines on ecosystems and coastal communities has been extensively documented around the world.¹² On the south coast of BC in particular, shoreline hardening with sea walls, dikes and other structures has had negative impacts on coastal ecosystems and has exacerbated storm damage and flooding. Beaches have disappeared, as well as wildlife, plants and fish. A recent local study explains the links between shoreline hardening and negative impacts on southern resident killer whales. The destruction of coastal habitat for forage fish reduces their availability as a food source for Chinook salmon, which in turn reduces the availability of the salmon as a food source for orcas.¹³ Hard shorelines also place coastal infrastructure at risk of damage by amplifying wave energy and the consequences of flooding. Rising sea levels will exacerbate these impacts. Some municipalities, like West Vancouver have taken great steps, at considerable expense, to address these risks.¹⁴

Other jurisdictions have recognized the costly threats of shoreline hardening and have implemented policies and legislation that encourage soft shore approaches to protect both coastal habitat and development. But in BC, there are significant gaps in existing provincial legislation that make it difficult to implement these approaches, even where coastal property owners and local governments are supportive.

¹⁰ Bill 106, *An Act Respecting Coastal Protection in Nova Scotia*, 2nd Sess, 63rd GA, NS, (assented to 12 April 2019).

¹¹ *State Environmental Planning Policy (Coastal Wetlands)* (NSW), 2018/106

¹² See, for example, Gittman, R., Fodrie, F., Popowich, A., Keller, D., Bruno, J., Currin, C. A., et al. (2015). Engineering away our natural defenses: an analysis of shoreline hardening in the US. *Front. Ecol. Environ.* 13:301–307. doi: 10.1890/150065 and Rangel-Buitrago, N., Williams, A., and Anfuso, G. (2017). Hard protection structures as a principal coastal erosion management strategy along the Caribbean coast of Colombia. A chronicle of pitfalls. *Ocean Coast. Manag.* 156, 58–75. doi: 10.1016/j.ocecoaman.2017.04.006

¹³ Environmental Law Centre, University of Victoria, "Saving Orcas by Protecting Fish Spawning Beaches" (October 2019) online (pdf): *Environmental Law Centre* <<http://www.elc.uvic.ca/wordpress/wp-content/uploads/2019/11/2019-01-11-Saving-Orcas-by-Protecting-Fish-Spawning-Beaches.pdf>>.

¹⁴ District of West Vancouver, "Shoreline Protection Plan 2012-2015" (last visited 14 January 2020), online (pdf): *West Vancouver* <<https://westvancouver.ca/sites/default/files/shoreline-protection-plan.2012-2015.pdf>>.

Examples:

Washington State – *Shoreline Management Act*

This Act delegates responsibility to local governments to develop Shoreline Master Programs (SMPs), while retaining an oversight role for the State through SMP guidelines.¹⁵ The Act recognizes that shoreline armoring (i.e. building physical structures to prevent coastal erosion) can adversely impact shoreline ecology. New developments must be designed to avoid future shoreline armoring and property owners are required to consider soft alternatives to protect their properties.¹⁶

Oregon – *Oregon Beach Bill*

This legislation gives Oregon a consistent, statutory basis to regulate structures along the shoreline to meet a state land-use planning goal that limits shoreline hardening and protects coastal habitat.¹⁷

Nova Scotia – *Coastal Protection Act*

The Act was created to protect the coast for future generations by preventing development that: 1) may damage the coastal environment; and 2) may be at risk from sea level rise, coastal flooding, storm surges and coastal erosion.¹⁸ It prohibits any activity that “interferes with the natural dynamic and shifting nature of the coast” unless it complies with the Act.¹⁹ Specific regulations on “shore-stabilizing structures” will be developed in the future.²⁰

4. Prevention of Coastal Habitat Loss

In the absence of legislation that prioritizes ecological protection, coastal habitat along BC coasts is being lost at ever increasing rates. For example, by 1978, diking, drainage and development in the Lower Mainland had destroyed more than 80% of salt marshes in the area.²¹ Estuaries, eelgrass beds, and marshes are highly productive areas that provide habitats for a host of ecologically and economically important species including herring and salmon. They are also important sites of carbon sequestration and potential climate change adaptation. Unfortunately, these ecosystems are particularly vulnerable to coastal development pressure.²²

¹⁵ *Shoreline Management Act*, 90 Wash Rev Code § 58 (Statute Law Committee 1971); Department of Ecology, “Shoreline Master Programs” (last visited 14 January 2020), online: *Department of Ecology – State of Washington* <<https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-Master-Programs>>; Department of Ecology, “Shoreline Master Programs Handbook” (revised December 2017), online: *Department of Ecology – State of Washington* <<https://fortress.wa.gov/ecy/publications/SummaryPages/1106010.html>>; *State Master Program Approval/Amendment Procedures and Master Program Guidelines*, 173 WAC § 26 (2017).

¹⁶ Washington Department of Fish and Wildlife, “Your Marine Waterfront: A Guide to Protecting your Property While Promoting Healthy Shorelines” (2016) online (pdf): *Washington Department of Fish and Wildlife* <<https://wdfw.wa.gov/sites/default/files/publications/01791/wdfwo1791.pdf>>.

¹⁷ Oregon Beach Bill, HR Res 1601, OR Leg (1967).

¹⁸ Bill 106, *An Act Respecting Coastal Protection in Nova Scotia*, 2nd Sess, 63rd GA, NS, (assented to 12 April 2019) s 2.

¹⁹ Bill 106, *An Act Respecting Coastal Protection in Nova Scotia*, 2nd Sess, 63rd GA, NS, (assented to 12 April 2019) s 10.

²⁰ Bill 106, *An Act Respecting Coastal Protection in Nova Scotia*, 2nd Sess, 63rd GA, NS, (assented to 12 April 2019) s 28(1).

²¹ Province of British Columbia, “Fraser River Estuary Study– Summary” (1978) online (pdf): *Government of Canada – Province of British Columbia* <<https://www.for.gov.bc.ca/hfd/library/documents/Bib68894.pdf>>.

²² “Seventy percent of the Fraser River estuary wetlands have been diked, drained, and filled to reclaim land for development (the greatest cause of estuary loss in the past), and this has likely had an impact on the size of the Fraser River fisheries. Similarly, on Vancouver Island, about half of both the Nanaimo and Cowichan estuary wetlands have been lost.” – Samantha Flynn, Carmen Cadrin

Intense and inappropriate coastal development at the ocean's edge carries urban sprawl into the marine environment as well as other issues including pollution and erosion.

Many jurisdictions have enacted coastal laws that set clear priorities for ecological protection and protect key sensitive coastal and shoreline areas. In BC, it is the province's responsibility to protect these vulnerable areas where land and sea interact. BC has adopted legislation that protects freshwater shorelines,²³ but does not have similar protection for marine shorelines, despite the fact that much of the foreshore along BC's coast is legally under provincial control.

Examples:

Nova Scotia – *Beaches Act*

The Atlantic provinces have legislated provisions to protect sensitive coastal areas. For example, the Nova Scotia *Beaches Act* prohibits development on listed beaches unless provincial approval is obtained.

Washington – *Shoreline Management Act*

The Act requires any use of the shoreline to be "consistent with the control of pollution and prevention of damage to the natural environment"²⁴ and prioritizes environmental protection when determining how the coast can be used.²⁵ The Department of Ecology reviews and approves shoreline development permits to ensure compliance with the Act.²⁶ The Act also requires local governments to put in place policies to achieve "no net loss of ecological function."²⁷

California – *Coastal Act*

In the face of significant population growth, California's iconic *Coastal Act* has successfully protected its coast from overdevelopment.²⁸ A main goal of the Act is to "protect, maintain, and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources."²⁹ The Act requires "any person," including a state or local agency, to obtain a permit before undertaking development, defined broadly, in the coastal zone.

& Deepa Filatow, "Estuaries in British Columbia" (March 2006) online (pdf): *British Columbia – Ministry of Environment* <http://www.env.gov.bc.ca/wld/documents/Estuaries06_20.pdf>

²³ *Riparian Areas Protection Act* [SBC 1997] c. 21

²⁴ *State Master Program Approval/Amendment Procedures and Master Program Guidelines*, 173 WAC § 26-176 (2017).

²⁵ Department of Ecology, "Shoreline Master Programs Handbook" (revised December 2017) at 22 (supra note xxiii), online: *Department of Ecology – State of Washington* <<https://fortress.wa.gov/ecy/publications/SummaryPages/1106010.html>>.

²⁶ Washington Department of Ecology reviews the locally approved variance permit and either approves, approves with conditions, or denies it within 30 days of receiving the permit package. Department of Ecology, "Shoreline Permitting Manual- Guidance for local governments" (revised November 2019), online (pdf): *Department of Ecology – State of Washington* <<https://fortress.wa.gov/ecy/publications/documents/1706029.pdf>>

²⁷ *State Master Program Approval/Amendment Procedures and Master Program Guidelines*, 173 WAC § 26-186(8)(b) (2017); See also: Department of Ecology, "Shoreline Master Programs Handbook" (revised December 2017), online: *Department of Ecology – State of Washington* <<https://fortress.wa.gov/ecy/publications/SummaryPages/1106010.html>>.

²⁸ "Although California's population has doubled again since 1970, the urban footprint along the coast is largely the same today as it was in 1972." – Gary Griggs & Charles Lester, "Coastal protection on the edge: The challenge of preserving California's legacy", *The Conversation* (10 October 2017), online: <<https://theconversation.com/coastal-protection-on-the-edge-the-challenge-of-preserving-californias-legacy-76927>>

²⁹ *California Coastal Act*, 20 CA PRC § 30230–30240 (1976).

5. Intergovernmental Coordination

Effective coastal management requires coordination among several provincial ministries, as well as Indigenous, federal and municipal governments. A coastal management law can clarify the responsibilities of the provincial and local governments and ensure improved cooperation and coordination among all orders of government. Without coordinated governance, gaps and overlaps in jurisdiction arise resulting in piecemeal and patchwork management of the coast and inefficient decision-making. The lack of clarity also creates confusion and conflict between users and governing bodies, and results in cumulative impacts that are not adequately measured or addressed.

The new BC *Declaration on the Rights of Indigenous Peoples Act* requires that all provincial laws be in harmony with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). This requires the Province to effectively engage with Indigenous governments in a coordinated manner. A coastal management strategy and law can proactively ensure provincial decision-making along the coast complies with UNDRIP.

Other jurisdictions have established through law a specialized agency as a 'one-stop shop' for coastal management. Internally, this ensures government resources and capacity are allocated efficiently, and that policy and decision-making are coordinated instead of being spread across different ministries and working groups. Externally, this supports communication, cooperation and action with other orders of government and ensures the public knows where to go with coastal issues.

Examples:

Washington – Department of Ecology under the *Shoreline Management Act*

The *Shoreline Management Act* was created to prevent the “inherent harm in an uncoordinated and piecemeal development of the state’s shorelines”³⁰ and to meet federally mandated state obligations to implement coastal management laws. Under the Act, the Department of Ecology (DOE) is the lead coastal management agency which provides a “single point of contact for Federal agencies”³¹ and users. The DOE has the authority to cooperate with the federal government, receive any benefits available through federal statutes, and represent Washington’s interests. The DOE also coordinates coastal policy at the state level by setting requirements for local governments in regards to planning and regulation.

California – Coastal Commission under the *Coastal Act*

In California, coastal management is overseen by the Coastal Commission, which has rule making authority over land and water use within the coastal zone. The Coastal Commission was set up in 1972 to help control development and maintain the character of the coast. It provides an integrated, ‘one-stop shop’, approach to coastal management.³²

³⁰ *Shoreline Management Act*, 90 Wash Rev Code § 58.020 (Statute Law Committee 1971).

³¹ *Federal Consistency with Approved Coastal Management Programs*, 15 CFR § 930.6 (2019)

³² “The Coastal Commission approves local coastal plans, hears appeals of certain local decisions, regulates development from the high tide line out to the three-nautical mile boundary of state waters, and reviews federal actions to ensure they are consistent with the Act’s policies.” – Jordan Diamond et al, “The Past, Present, and Future of California’s Coastal Act – Overcoming Division to Comprehensively Manage the Coast” (August 2017), online (pdf): *Berkeley Law* <<https://www.law.berkeley.edu/wp-content/uploads/2017/08/Coastal-Act-Issue-Brief.pdf>>.

Louisiana – Coastal Protection and Restoration Authority

The Louisiana Coastal Protection and Restoration Authority³³ was created after Hurricanes Katrina and Rita devastated the coast in 2005 and painfully demonstrated the need to coordinate state-level policy. The Authority carries out strategic planning for the coast, bringing together resources from across different government departments, and develops a master plan of projects for protection and restoration.

6. Maintaining Public Access

Public access to the coast is a contentious issue in BC.³⁴ Public shoreline access is not only important for local residents but is critical for a growing tourism sector. As the population grows, concern over coastal access will only increase. In BC, while there are common law rights to land boats on and embark from the foreshore in cases of emergency, riparian rights for coastal property owners, and rights of navigation, anchoring, mooring, and fishing over lands covered by water, there are no general public rights of access to the coastline or provincial standards. In contrast, in the US, coastal access is a highly protected and valued legal right.

Example:

California – Coastal Act

The Act guarantees public access to the coast and prohibits development from interfering with that access. It also requires “conspicuously posted” signage to encourage access.³⁵ The Act requires appropriate and feasible public facilities (including parking) to be distributed throughout an area to mitigate against impacts of overcrowding or overuse, and provides safeguards to prevent visitor and recreational facilities from becoming unaffordable.³⁶



California coast (Photo: Alejandro De La Cruz).

³³ Coastal Protection and Restoration Authority, <https://coastal.la.gov>

³⁴ See for example: S Gorkoff and W Kelowna, "Common law protects public and private rights on foreshore", *The Daily Courier* (27 April 2017), online: <http://www.kelownadailycourier.ca/opinion/letters_to_editor/article_26896c14-2ada-11e7-87e3-4321fdef42b5.html>.

³⁵ Jordan Diamond et al, "The Past, Present, and Future of California's Coastal Act – Overcoming Division to Comprehensively Manage the Coast" (August 2017), online (pdf): *Berkeley Law* <<https://www.law.berkeley.edu/wp-content/uploads/2017/08/Coastal-Act-Issue-Brief.pdf>>.

³⁶ *California Coastal Act*, 20 CA PRC §§ 30210, 30211, 30212, 30212.5, 30213, 30214 (1976).

Conclusion

A brief look around the world shows that BC is an outlier in not having a coastal management strategy and law and that there is much more the BC government can do to address the challenges faced along the coast.

As West Coast Environmental Law has detailed elsewhere, the [BC government has considerable jurisdiction](#) to regulate the coast.³⁷ A provincial coastal management strategy and law could address many other coastal issues not mentioned in this brief including: oil spill response, marine debris, land-based marine pollution, moorage, blue carbon, coastal habitat restoration, ocean renewable energy, community-based fisheries, aquatic plant harvest and protection, provincial contributions to orca recovery, and aquaculture. Without such a strategy and law, BC puts the ecological integrity of the coast as well as the economic and cultural future of coastal communities in jeopardy.

We encourage you to contact WCEL with any questions about coastal management and law.

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³⁷ West Coast Environmental Law, "Frequently Asked Questions: Provincial Jurisdiction of British Columbia over Coastal and Ocean Matters" (Accessed 14 January 2020), online (pdf): <<https://www.wcel.org/sites/default/files/publications/2019-10-08-faq-provincialjurisdiction-coastal-final.pdf>>

