

Coastal Protection Legislation

Consultation Document




NOVA SCOTIA

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Nova Scotia is rich in coastline and nearly surrounded by the sea. To travel the edges, entering every harbour, cove, inlet, and tidal estuary, would be 13,300 kilometres. No wonder we are fishing people. We are boating people. We are beach and cottage people. We are swimmers, sailors, surfers, and divers. We love the sea.

Our province is shaped by the sea. We have stories of sea adventures and sea tragedies. We have calm harbours, windswept bluffs, and shifting sands. We witness the wind and the waves and the tides constantly reshaping our coastline — and sometimes sweeping away what we build. Respect for the sea — and the power of the sea — is a lesson we continue to learn.

We like to build in sight of the sea. But the tides, currents, wave action, erosion, and high winds are givens. When we interfere unnecessarily with these natural processes, there are serious consequences. Coastal areas like saltmarshes and coastal wetlands help filter out harmful substances and provide habitat for endangered species. Interfering with the normal, natural movement of these features, by building too close to the shoreline, for example, can damage sensitive coastal areas. Building too close to the shoreline also puts people's investment in their property at risk and can threaten public safety. Rising sea levels and powerful storm surges are making damage more common. Sometimes, we unintentionally add to the problem. When we physically alter the shoreline, we can accelerate the coastal erosion we are trying to control. Trying to control the sea is expensive and not often possible. A more realistic solution would be to build on less vulnerable land.



Our coast has been formed through billions of years of natural history. It has been a source of food and a means of transportation for Mi'kmaq for thousands of years. It has enabled trade and been a gateway for immigration for hundreds of years. It is a part of our identity, and protecting our coast is important to Nova Scotians.

Our prosperity is closely tied to the sea and our coastal nature. Ships come here — and are built here. We feast on our local sea catch and export sea products around the world. We escape to the beach to relax and unwind. We invite the world to enjoy our unspoiled spaces, our picturesque coastal towns, our plentiful wildlife, and our spectacular natural beauty.

How do we balance protecting what we build near the coast with protecting natural ecosystems and the natural beauty that make our province special?

A 1998 report by the Geological Survey of Canada identified Atlantic Canada as having the largest extent of sensitive (to sea-level rise) coastline in Canada, including much of the coast of Nova Scotia. We have a land mass that is gradually sinking, through a natural process called subsidence. We have a coastline that varies in composition, from stable cliffs to erosion-prone beaches and dune systems. We have dynamic coastal features that constantly change in response to tides, currents, and storm surges, with ecosystems and wildlife that shift and migrate in response to these natural coastal processes. So as sea levels rise, we are going to notice change in coastal areas. Some coastal bluffs, for example, could retreat by meters per year.

While it is difficult to generalize about large sections of coast, significant areas of Nova Scotia are prone to high rates of coastal erosion and coastal flooding. The Intergovernmental Panel on Climate Change projects that sea level will continue to rise. This, combined with regional conditions in Atlantic Canada, where some of our land base is sinking, means Nova Scotia may experience significant sea-level change in the coming decades. Some experts (Forbes et al., 2006) estimate sea-level rise of between 0.7 and 1.4 meters by the end of this century.*

* Forbes report: quoted in *Our Coast: Live, Work, Play, Protect: The State of Nova Scotia's Coast: Technical Report*, Province of Nova Scotia, 2009, p 162.

The government has committed to creating legislation to provide legal protection for our coasts. So how do we design new legislation that helps ensure future generations can continue to benefit from our natural coastal areas, that helps protect our coastal assets, that preserves healthy ecosystems, and that encourages people to build in areas less vulnerable to damage from rising sea level, erosion, and storm surges?

We want to hear from Nova Scotians. Your opinions can help us develop an effective piece of legislation.

The legislation will need to:

1. Define a “Coastal Protection Zone” where the act will apply
2. Restrict certain activities within the Coastal Protection Zone
3. Create provisions for monitoring and compliance

Each of these tasks is discussed more fully below.

Define a Coastal Protection Zone

The new law needs to clearly define where it applies — the Coastal Protection Zone —and where it doesn't.

This needs to be easy for everyone to understand — citizens, businesses, governments, and those who enforce regulations and bylaws.

Where do you think the new legislation should apply?

A coastal protection zone could be a band of area around our entire coastline.

Here are some of the things we will consider:

- How wide a band?
- Where would it start? We need to define a starting point or reference line — like the high-water mark, the low water mark, or mean sea level.
- What would be the setback distance?

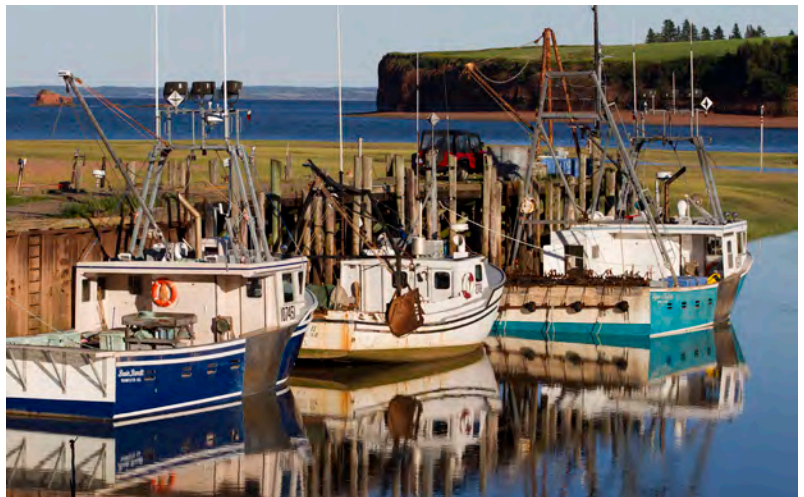
- Should the coastal protection zone include elevation in its calculations? For example, a cottage near the ocean at sea level is more vulnerable than one near the ocean but on a hill. What minimum elevation above the high-water mark allows for storm surge?
- What about evidence of erosion? Some areas are sheltered with little evidence of erosion, while some are actively eroding or constantly changing. How do we include an on-the-ground assessment of local risk?

A new law would need to be mindful of other laws and overlapping jurisdictions and the ways we live and work and play in our coastal areas.

Here are some of the issues and perspectives we will be working through:

- How do we respect commercial and industrial uses? Many of us make our living on the sea or near the sea. Seafood is our number one export, valued at \$2 billion annually, and the seafood sector employs thousands of Nova Scotians. How do we keep out of the way of the economic activities that sustain us? This includes activities covered by the Fisheries and Coastal Resources Act and the Marine Renewable Energy Act — fish processing, aquaculture, rockweed harvesting. Fishing and aquaculture will be exempt, but how do we define this exemption? What other economic activities must we keep out of the way of?
- What about land protected by other laws? Beaches are protected under the Beaches Act, sensitive areas protected by the Special Places Act, or dykelands protected under the Agricultural Marshlands Conservation Act. The boundary of a coastal protection zone may exclude specific types of land designations.

- What about local land-use bylaws? Some areas of the province already define coastal setbacks under local municipal land use bylaws. Other areas have no specific restrictions. How do we balance local needs with provincial standards?
- What about respecting the ways we have lived on the coast for hundreds and thousands of years? The Mi'kmaq depended on coastal resources long before contact with Europeans – evidenced by finds in the Acadian dykelands and shell middens. Preserving traditional uses and natural ecosystems are important to the Mi'kmaq – and to all Nova Scotians. Most coastal communities have existed for hundreds of years in our bays and coves, with generation after generation relying on the ocean for their livelihoods. How do coastal communities adapt to changing coastlines in harmony with nature and natural processes?



Restrict Certain Activities

The goals of coastal protection are to:

- prevent damage to sensitive coastal ecosystems and wildlife habitat – like saltmarshes and coastal wetlands
- reduce risks to public safety – from storm surges, flooding, flying debris, washed out bridges and roads
- reduce the risk of property damage – to future homes, cottages, businesses, public infrastructure

But we must achieve these goals with consideration for our coastal way of life:

- the vibrancy of our coastal lifestyle – fishing communities, downtown working waterfronts, and industries that depend on direct access to coastal waters
- the economic activity that involves our coastal assets – how we make a living here

As we work out the provisions of the new law, we will need to get specific:

What activities should the new legislation prohibit or restrict within the coastal protection zone?

- New construction?
- Removal of material – like beach sand?
- Alteration of the natural contour of the land – like saltmarshes?
- Deposit or dumping of waste or other materials?



How do we carefully balance the need to accommodate existing structures and recreational and commercial use of coastal areas while still providing meaningful protection for coastal areas?

For example, we don't want to disturb the vibrancy of our fishing communities, or our downtown waterfronts, or our industries that depend on direct access to coastal waters.

What types of structures and activities do you think should be restricted in the coastal zone?

How do we make allowances for existing homes, cottages, and businesses on coastal waterfronts and inside the Coastal Protection Zone?

We will also need to consider how we protect existing structures threatened by sea-level rise and coastal erosion while minimizing the impact on the environment.

What about potential building sites near the shoreline which, because of local conditions, pose no risk of environmental damage? Sites both on firm ground that's not prone to erosion and those high enough above sea level to not be threatened by storm surges. Would it make sense to issue a "variance" that allows construction to go ahead in these cases? Should we require a professional, such as an engineer or a geologist, to sign off on an exception?

What sorts of exceptions do you think we should consider making for activities in the coastal zone?

We want to ensure that the new law also respects approved activities under other federal or provincial laws. For example,

- Aquaculture leases and rockweed harvesting leases
- Permits issued under the Beaches and Foreshores Act or Crown Lands Act
- Projects approved under the Marine Renewable Energy Act
- Agricultural marshlands protected under the Agricultural Marshlands Conservation Act
- Projects or activities that have been approved under the Environment Act

Create provisions for monitoring and compliance

We want to make it as easy as possible for Nova Scotians to understand and comply with the new legislation. For example, we don't want people to invest a great deal of time and money in planning to build a structure that the new legislation won't allow.

As we create and implement this new law, we need to think through how it will be experienced by the people who will need to comply with it:

- How do we make the new rules easy to know about? Easy to comply with?

- How do we intervene early enough in the development or building process to avoid disappointment and unnecessary expense?
- How do we minimize the overall administrative burden of a new law while still providing protection for our coasts?

Share your thoughts on coastal protection legislation with us

We need to hear from you! Please take the time to share your thoughts about the proposed legislation. A few questions are set out below. If you have thoughts about anything else we should consider, please share those as well.

- What are your thoughts on the proposed legislation?
- Where should the new law apply? What should the boundaries of the Coastal Protection Zone be?
- What other provisions, if any, would you like to see in the new law and why?
- Are there any ideas in this document you would like to see removed from consideration? Why?
- What sorts of exceptions do you think we should consider making for activities in the coastal zone?
- How do you think coastal protection legislation might affect you?

How to respond to this document

Please visit novascotia.ca/coast to fill out our online survey. If you don't have Internet access, please call 902-424-2547 and we'll send you a paper copy.