



Coastal Protection Act: Proposed Regulations

CONSULTATION SESSIONS WITH NOVA SCOTIA MUNICIPALITIES

AUGUST 15TH – SEPTEMBER 30TH, 2021

ENVIRONMENT AND CLIMATE CHANGE

Your input will help refine our approach to the Coastal Protection Act regulations.

- ▶ The content of the consultation documents and this presentation pertaining to regulations is for the purpose of public consultation and is subject to change. Regulations must be approved by Governor in Council.
- ▶ Who we're engaging with:
 - ▶ All Nova Scotians
 - ▶ Municipalities
 - ▶ Formal Terms of Reference Consultation with the Mi'kmaq and outreach to indigenous groups with an environmental focus
 - ▶ Professional bodies (Engineers, Geoscientists, and Land Surveyors)
 - ▶ Sector organizations
- ▶ Consultation documents are posted online at novascotia.ca/coast
- ▶ Consultation closes on September 30th, 2021.

The Coastal Protection Act

- ▶ The need for coastal protection legislation
- ▶ How the Coastal Protection Act will work
- ▶ Overview of proposed regulations
- ▶ The role of municipalities
- ▶ Keys to success
- ▶ Discussion



Climate Change and Nova Scotia's Vulnerable Coast

- ▶ Many low-lying coastal areas in Nova Scotia will become increasingly vulnerable to sea level rise and storm surge in the coming decades.
- ▶ Nova Scotia's coast includes many areas with significant erosion risks. Stabilization measures (e.g., armouring) can accelerate erosion.
- ▶ Fighting the sea is an expensive, long-term battle. Costs can exceed the means of individual landowners whose properties are at risk from coastal flooding and erosion.
- ▶ Shoreline structures can interfere with or damage sensitive coastal ecosystems that provide valuable ecological services such as carbon sequestration.



Bill 106 - The Coastal Protection Act

The public and municipalities were consulted in 2018

- ▶ Public supported the approach
- ▶ Considerations made to mitigate municipal concerns (resources, property value impact, immediate actions)

The Coastal Protection Act was passed in 2019 to prevent or restrict development and related activity in places where it will:

- ▶ Damage sensitive coastal ecosystems
- ▶ Put property at risk from:
 - ▶ Inundation (flooding from sea level rise and storm surge).
 - ▶ Coastal erosion

The Act will be in effect once regulations are approved



Challenges that shaped the CPA

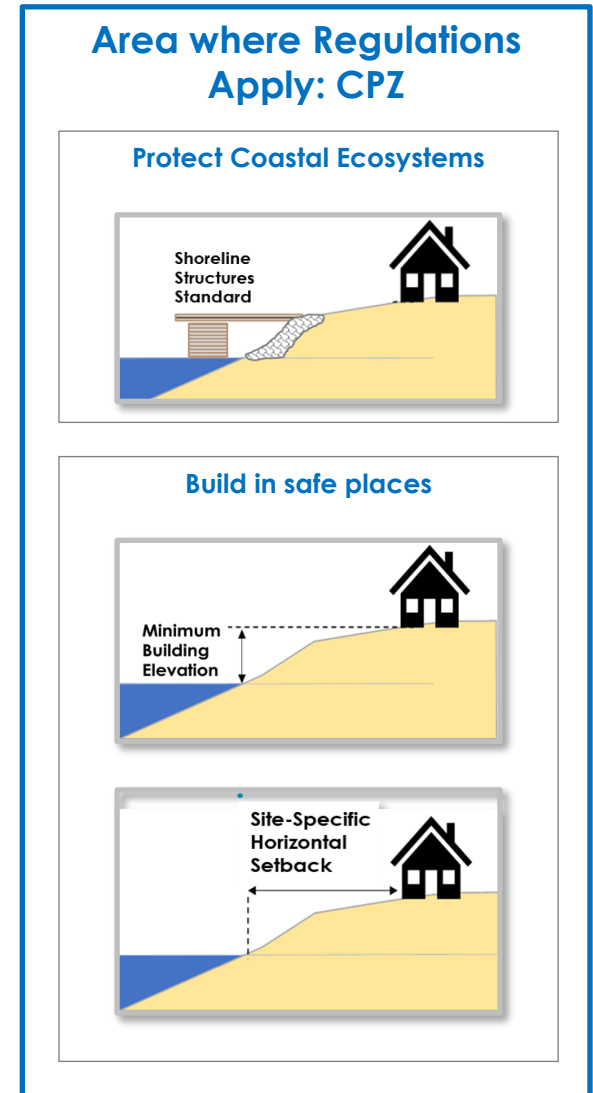
- ▶ 13,300 km of convoluted coastline with varied geology, topography, bathymetry, tides and wave exposure.
- ▶ Erosion risk levels vary significantly – sometimes within a few tens of meters at the same site – making province-wide or regional setbacks less effective.
- ▶ Need to keep incremental regulatory and administrative burden to a minimum.
- ▶ Rules / allowances for existing structures.
- ▶ Many communities with developed waterfront areas.
- ▶ Many stakeholders with diverse short and long-term interests and perspectives.



How the Coastal Protection Act will work

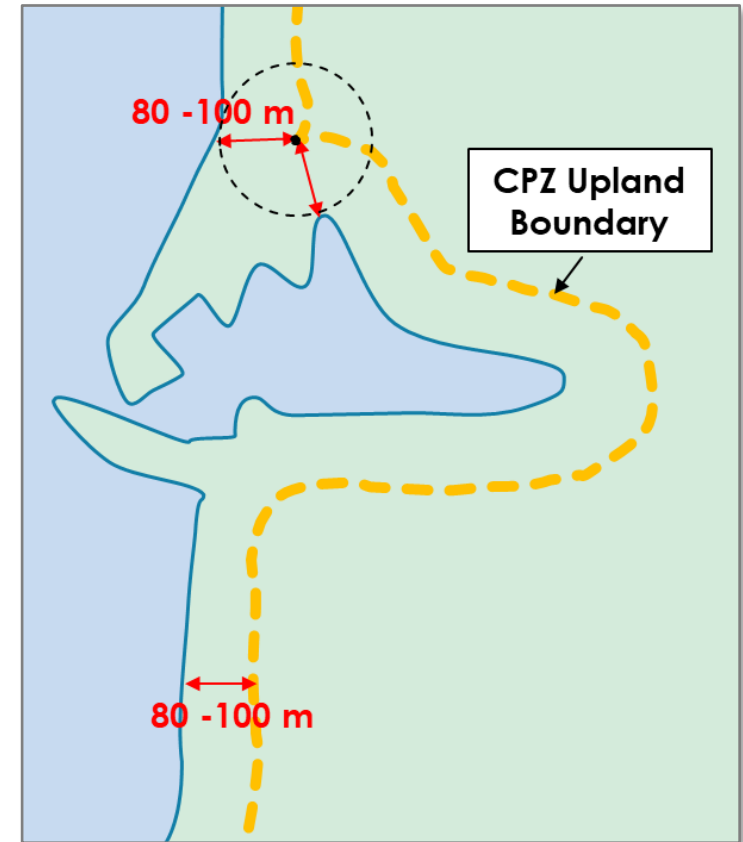
7

- ▶ Regulations will create a coastal protection zone (CPZ), a band around the coastline where the CPA and Regulations will apply.
- ▶ Primary regulatory tools are:
 - ▶ Shoreline structures standards and restrictions to protect coastal ecosystems.
 - ▶ Vertical building setbacks to reduce future coastal flooding risks.
 - ▶ **Site-specific** horizontal building setbacks determined by a designated professional (DP) to reduce risks from coastal erosion.
- ▶ The CPA does not create new permitting processes; it works through processes that already exist.
- ▶ The CPA does not require legally-permitted existing structures to be moved and allows for maintenance and repair.
- ▶ The Act and Regulations will allow for reasonable exceptions, for example, structures that need to be near the water and modified rules for developed downtown waterfronts.



Coastal Protection Zone (CPZ)

- ▶ This distance is not a setback, but a regulatory “trigger” for where:
 - ▶ the **minimum building elevation** applies, and
 - ▶ the landowner will normally require a “DP Report” to determine the **horizontal setback** for their property a building permit.
- ▶ The upland boundary of the Coastal Protection Zone (CPZ) is proposed to be 80 – 100 meters back from the ordinary high-water mark.
- ▶ Government will determine a single “default” upland distance following consultation.
- ▶ Specific delineation rules determine how the CPZ boundaries are applied around small and large estuaries, and barrier beaches.



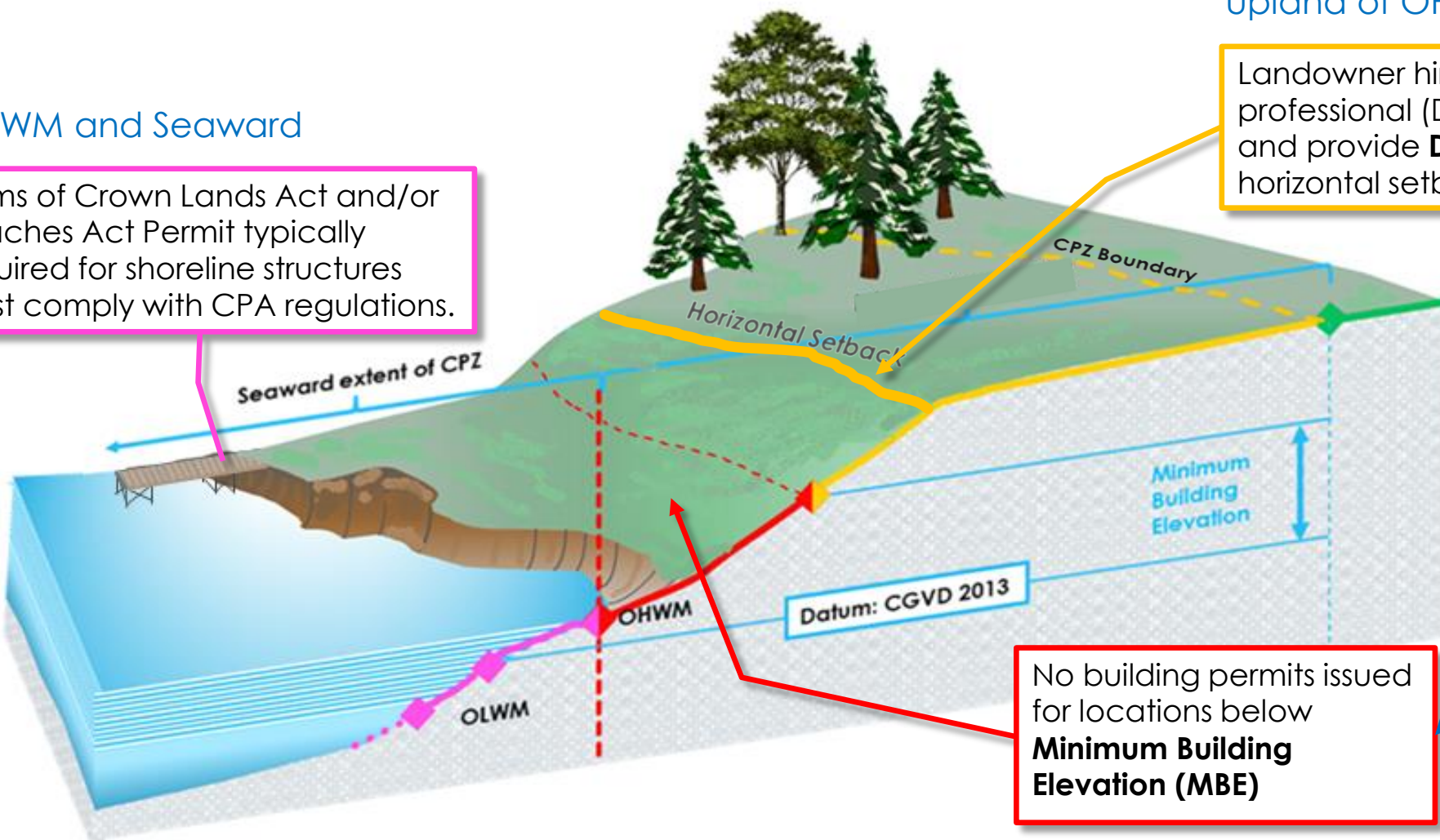
How the CPA will work

OHWM and Seaward

Terms of Crown Lands Act and/or Beaches Act Permit typically required for shoreline structures must comply with CPA regulations.

Upland of OHWM

Landowner hires designated professional (DP) to assess erosion risk and provide **DP report** with site-specific horizontal setback to municipality.



Required for Building Permit

No building permits issued for locations below **Minimum Building Elevation (MBE)**

Protecting Coastal Ecosystems

Shoreline Structures Standard

- ▶ The CPA is not intended to stop all construction along the coast.
- ▶ The CPA will help minimize unnecessary disruption of natural processes that can result in accelerated damage to natural and built infrastructure.
- ▶ Permits issued pursuant to the Crown Lands Act and the Beaches Act for activity within the Coastal Protection Zone (CPZ) must comply with the CPA once the act is proclaimed into law.
- ▶ Regulations will restrict infilling, including shoreline armouring, on submerged provincial Crown lands to cases where it is necessary to protect an existing structure or repair existing shoreline stabilization structures.

Regulatory Focus

Toxic Building Materials in contact with water

Direct destruction of habitat area

Blocking dynamic movement of coast

Disrupt sediment transport and water circulation

Disrupt ecosystem connectivity

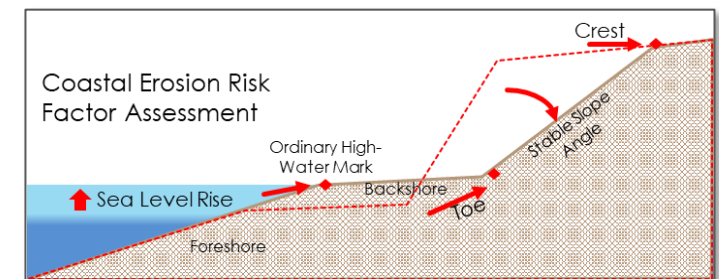
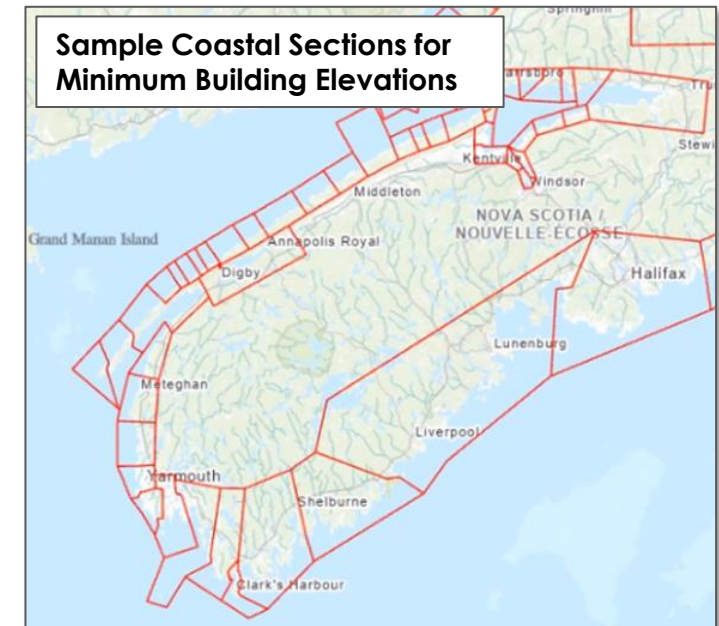
Increased wave energy reflection

Minimum Building Elevations (MBEs)

- ▶ Minimum Building Elevations will be a system of vertical building setbacks to restrict or prohibit development in low-lying areas within the CPZ that are expected to be vulnerable to sea level rise and coastal flooding.
- ▶ Because of large differences in local tidal amplitudes, MBEs will vary significantly around the coast.
- ▶ MBEs will be set out in a tabular schedule with MBEs for different areas of the coast, supported by map resources for easier interpretation.

Site Specific Horizontal Setbacks

- ▶ Nova Scotia's coast is too diverse for a "one size fits all" solution to provide effective erosion risk management. A single, rigid setback for large regions of coast will frequently be either too restrictive or too risky in any specific location.
- ▶ The CPA incorporates *site-specific* horizontal setbacks determined by a designated professional (DP) using a specific coastal erosion risk factor assessment tool to assess the risk in a consistent way.
- ▶ The risk assessment is done at the landowner's expense.
- ▶ The setback is contained in a "DP Report" which the landowner provides to the municipality when applying for a building permit or development permit.



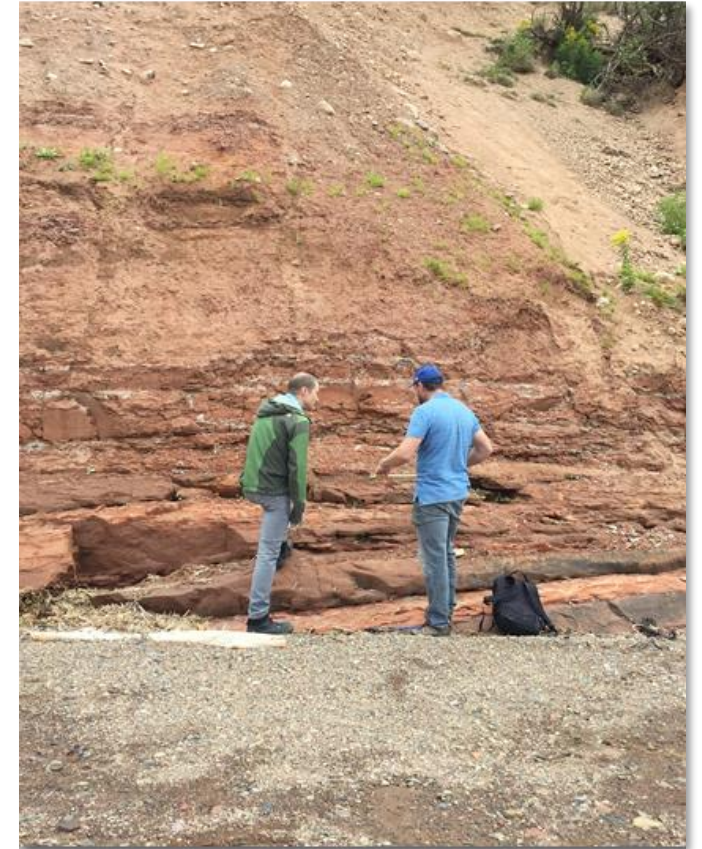
Designated Professionals

Who can be a designated professional (DP)?

- ▶ DP will need to be a member of a professional body designated under the regulations. This has not been finalized however we are in discussions with:
 - ▶ Engineers Nova Scotia
 - ▶ Geoscientists Nova Scotia
 - ▶ Association of Nova Scotia Land Surveyors

What is the DP's Role?

- ▶ The DP's role is to complete an erosion risk assessment for the landowner using the specific method prescribed in regulations and create a DP report that specifies the horizontal setback distance for the property.
- ▶ The Designated Professional is certifying they are qualified to do the work, they are a member in good standing of a designated profession and that they followed the method prescribed by the regulations in determining the horizontal setback.
- ▶ The DP's erosion risk assessment is conducted at the landowner's expense.
- ▶ The Designated Professional is not providing a guarantee of safety from coastal erosion, nor determining where the CPZ or property boundaries are located.



Municipality considering a building permit approval for construction within the CPZ must:

- ▶ Determine if the Coastal Protection Act applies:
 - ▶ Construction location is within the CPZ?
 - ▶ Act applies to structure type?
- ▶ Ensure:
 - ▶ The application for a building permit is accompanied by a DP Report.
 - ▶ The proposed location as indicated on a plot plan or surveyor's location certificate is:
 - ▶ above the Minimum Building Elevation.
 - ▶ upland of the site-specific horizontal setback provided in the DP report.
 - ▶ The designated professional was member in good standing of a professional body designated in the regulations at the time the DP report was signed.

Compliance and enforcement

- ▶ Municipalities use the usual means of monitoring, inspecting and ensuring compliance as they would with other building or development permits.

Municipalities and DP Reports

- ▶ DP reports and the horizontal setback may apply to:
 - ▶ Multiple properties, if they are adjacent and have a similar shoreline composition.
 - ▶ The entire property, if the shoreline is consistent throughout the water frontage or the setback is based on the greatest erosion risk present in the area being assessed.
 - ▶ A portion of a property, if a DP only assessed a part of the lot. The DP report must include a diagram indicating the area in which the setback applies.
- ▶ A municipality may reject a DP Report if in the opinion of the municipality it is invalid for any reason or if conditions on the site have changed.
- ▶ A landowner may hire another DP to do a further risk assessment, if they wish. A municipality may accept the second report.
- ▶ A DP Report will be valid for ten years. The municipality must keep a record.

Exemptions covered by the Act and regulations

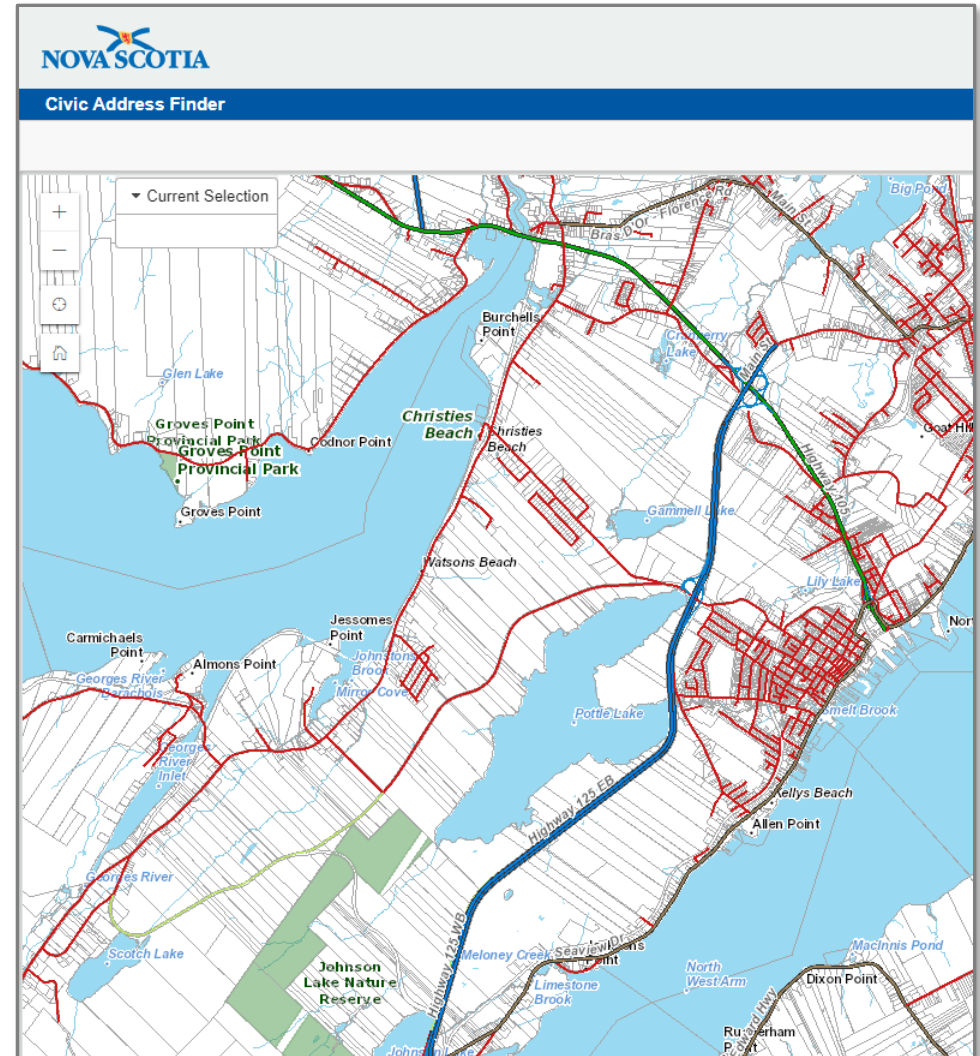
- ▶ Requirements for building permits within the zone apply to houses, cottages and commercial or industrial buildings.
- ▶ The Act provides some exemptions:
 - ▶ public infrastructure
 - ▶ commercial or industrial structures that need to be located at the shoreline.
- ▶ Proposed exemptions under the regulations:
 - ▶ trailers or mobile homes that are designed for frequent transport;
 - ▶ boathouses, detached garages, or outbuildings that are intended for storage or similar uses and do not have water service, plumbing, living quarters or similar amenities, and
 - ▶ decks, gazebos or similar structures, regardless of whether it requires a permit.

Developed Waterfronts

- ▶ Waterfronts are an important part of many Nova Scotia communities.
- ▶ The Regulations seek to balance the economic, social, and cultural value of these areas with the need to avoid increasing our risk exposure to climate change by including modified rules for these area.
- ▶ Proposed definition for a developed waterfront:
“areas dominated by mixed-use structures with a public amenity or multi-unit residential component where there are no gaps of greater than 75 meters between existing mixed-use structures, or where the area was zoned for commercial, mixed use or equivalent prior to the Act coming into effect”
- ▶ Proposed modified rules: qualifying structures in the zone would be exempted from a site-specific horizontal setback, however
 - ▶ no residential part of a new structure can be below the minimum building elevation.
 - ▶ no residential part of an existing structure being modified can be below the minimum building elevation.

Keys to Success

- ▶ On-going dialogue with stakeholders:
 - ▶ During development of regulations,
 - ▶ During implementation phase,
 - ▶ On-going operation of the Coastal Protection Act regulations.
- ▶ Training for designated professionals, municipal building officials, provincial staff.
- ▶ Effective, two-way communication with key stakeholders.
- ▶ Mapping tools on a user-friendly platform, displaying:
 - ▶ Coastal Protection Zone boundaries,
 - ▶ Minimum Building Elevation contour lines.
- ▶ Ongoing monitoring and evaluation.





Thank You!

Contact Information:

John Somers

Executive Lead, Coastal Protection Act

Nova Scotia Environment and Climate Change

john.somers@novascotia.ca