A Coastal Areas Protection Policy for New Brunswick

New Nouveau Brunswick

This document updates the Coastal Areas Protection Policy released in 2002. It is not a substitute for the *Clean Water Act* or the *Watercourse and Wetland Alteration Regulation*, NB Reg 90-80 and advice should be obtained from the Department of Environment and Local Government on questions about the application or interpretation of the laws of New Brunswick as they relate to the subject matter of this document. Other agencies such as other provincial departments, the federal government and local governments may have requirements not addressed or included in this policy. This document may be reviewed and updated periodically as deemed appropriate by the Department of Environment and Local Government (DELG)

This policy is administered by the **New Brunswick Department of the Environment and Local Government** and its **Source and Surface Water Management Branch**:

Source and Surface Water Management Branch
P.O. Box 6000, Fredericton, NB, E3B 5H1
Tel: (506) 457-4850, Fax: (506) 453-2893
E-mail: WAWA@gnb.ca

This document is also available on the New Brunswick Department of Environment and Local Government's web site at the following address:
http://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/Water-Eau/CoastalAreasProtectionPolicy.pdf

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Introduction

New Brunswick is fortunate to have diverse coastal areas ranging from the rugged beauty and grassy dunes along the Acadian Peninsula and Baie des Chaleurs to the sandy shores of the Northumberland Strait and the rocky cliffs of the Bay of Fundy. Our coast line and surrounding areas contribute significantly to our sense of being Maritime.

Several factors such as, human activity and changes in our global climate have placed stresses on coastal areas. These factors, create greater risk to public safety and structural damage, affect important agricultural lands, and threaten the bio-diversity of vegetation and wildlife which have sustained coastal regions for centuries.

The Importance of our Coastal Areas: Key Factors

1. There are development pressures on coastal areas, urban sprawl near coastal communities, growth of economic activities, and the increased desire or recreational homes and pastimes, all of which have placed significant stress on coastal lands and waterways. The key to future protection is better planning, both from an individual property perspective and at community and regional levels. By adopting improved planning and development practices, individuals, stakeholders, and communities will gain improved protection for the future.

2. While the weather has always affected life and work in coastal areas, a changing climate has generated an increased rate of sea-level rise and more frequent severe weather events, that have exacerbated impacts to coastal areas.

For coastal areas, this means severe rainfall events that can trigger flooding and more intense storms which, when accompanied with higher water levels, high winds and high tides, will trigger strong storm surges, placing people and infrastructure at risk. This, in turn, places a burden on New Brunswick's economy when businesses and citizens seek compensation for lost or damaged buildings or usable land. Over the last 25 years, a total of 25 natural disasters occurred in New Brunswick which resulted in over $196 million being spent on disaster recovery and mitigation activities.

It is clear from an environmental, public safety, and economic perspective that efforts to reduce human activities that impact coastal areas should be pursued.

3. Our knowledge of how ecosystems in coastal areas function has grown dramatically with new technologies being developed to help identify and better manage the areas of greatest sensitivity. Information sharing is also an important part of our ability to manage coastal ecosystems. There is a connection between the environmental conditions along New Brunswick's coastlines and the activities which occur further inland. Careful land, air and water management elsewhere will aid in protecting the coastal environment. Similarly, our co-operative efforts with neighbouring Canadian and American jurisdictions help us better understand pollution patterns and to join forces on preventive measures. New Brunswick's membership in the Gulf of Maine Council on the Marine Environment, for example, allows our respective scientists to share important marine data, as well as monitoring, sampling, and prevention activities. Coastal areas support economic activity, provide spaces for recreation, support a rich diversity of vegetation and wildlife, and are part of our culture and history. New Brunswick's coastal areas are deeply embedded in our collective consciousness and as such deserve all the attention and stewardship we can provide.

Identifying Sensitive Coastal Areas

Coastal features such as beaches, tidal watercourses, dunes, coastal marshes, inter-tidal areas, and rock platforms perform significant functions including acting as natural buffers to reduce the impact of storm surges and flooding. They provide essential habitat for land and marine plants and animals, some of which are rare or endangered. Coastal salt marshes for example, are a critical component of the ecosystems that support our traditional fisheries. They serve as nursery grounds for various species of fish that contribute either directly or indirectly to our commercial fisheries. They are also natural filters that purify water.

Features such as beaches and dunes can be prone to erosion. Development in these areas can disrupt the natural ecosystem balance causing water quality problems and, placing these features at greater risk of damage, ultimately placing people and property in harm's way.

Not all lands along our coast are natural features. Reclaimed or dyked lands are human-made and have been established over the years to support agricultural operations, provide protection to roads, infrastructure, and whole communities, and have been used for habitat management. Because of their multiple functions, and their potential to revert to coastal marshes, reclaimed lands are a unique part of coastal areas.

There has been a substantial effort made by scientists to understand what function each of these features plays in the overall coastal environment. With the aid of aerial photography and computer-enhanced mapping, it is possible to identify the location of coastal features. This in turn enables scientists to identify the development capacity for coastal lands and waterways. Under the Coastal Areas Protection Policy, these tools would be used to assess the likely environmental sensitivity in a coastal area and to establish zones for different types of development activity.

The Coastal Areas Protection Policy (CAPP)

The Coastal Areas Protection Policy is implemented through the *Watercourse and Wetland Alteration Regulation* and administered by the Source and Surface Water Management Branch of the New Brunswick Department of Environment and Local Government (DELG).

Policy Objectives:

- To reduce the likelihood of threats to personal safety by storm surges and to minimize the danger to personnel involved in emergency and rescue efforts during storm and/or flooding events.

- To prevent the loss of Provincially significant wetland (PSW) habitat and achieve the goal of no net loss of wetland function for all other wetlands.

- To minimize the contamination of water and wetlands from hazardous materials or other contaminants (e.g. the contents of heating fuel, or septic tanks) as well as to minimize the intrusion of salt water into wells due to water-table draw-down.

- To promote stewardship and securement of wetlands through enhanced cooperation among local, municipal, provincial, and federal governments and private sector stakeholders.

- To maintain the buffering capacity of coastal areas to protect inland areas from storm surges and to ensure that the potential effects of a watercourse or wetland alteration are adequately considered during the design stage.

- To maintain vegetation and wildlife, both for the role they play in traditional fisheries and eco-tourism, as well for their inherent value in maintaining the coastal ecosystem.

- To minimize public expenditures required to repair storm damage to public property such as roads, bridges, public buildings etc., as well as to reduce the expenditures required to control erosion as a means of protecting human-made structures.

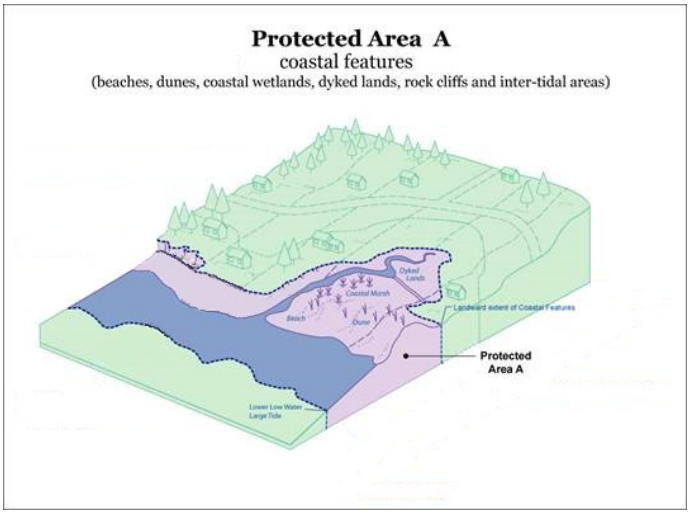
Policy operating principles:

- That the policy applies provincially, and include both incorporated and unincorporated areas, and privately and publicly owned land.
- That alternative approaches to development are to be utilized where possible to avoid, minimize, and mitigate impacts to coastal areas.
- That provision be made for activities that, by their very nature, must take place in the coastal area (such as work in dry docks, fish landings etc.) and for activities deemed to be a necessary public function.
- That appropriate public access to coastal areas is secured for public purposes.
- That the policy contributes to a cohesive and consistent provincial framework for other land and water use policies and environmental legislation.

Protection Zones

ZONE A

Zone A, the most sensitive zone, includes tidal watercourses, beaches, dunes, rock platforms, coastal marshes and dyked lands found between the Higher High Water Large Tide (HHWLT) and the Lower Low Water Large Tide (LLWLT), plus dunes extending beyond the HHWLT. Due to the extreme sensitivity and the very high risk of danger/damage from storm surges, fewer development activities are permissible in Zone A.



Activities permissible in Zone A with a Watercourse and Wetland Alteration Permit and/or an Environmental Impact Assessment Certificate of Determination and/or an Approval

- Projects that are considered a necessary public function
- Surveying that does not require heavy equipment, soil disturbance, or extensive site preparation
- Approved wetland restoration or rehabilitation activities and removal of control structures to enable dyked wetlands to revert to a natural wetland
- Education, research, or habitat management (as long as they are temporary and there are no alterations)
- Temporary access roads to conduct a specific activity in winter (one season only), provided there is no other practical access, the footprint is not subject to tidal influence, the ground is frozen, no fill is used, the roads are constructed of ice and/or snow, and no vegetation is cut in a wetland or its buffer
- Permanent roads to access an unregulated (non-wetland and non-coastal zone) portion of a property, provided there is no other practical access, there is no other upland area on the accessible portion of the property, and hydrology is maintained
- Boardwalks for access which meet DELG's Boardwalk Guidelines
- Acceptable erosion control structures, provided they are not located within coastal marshes and provided that the applicant has demonstrated that there is evidence of erosion and a resultant risk to infrastructure
- Accessory buildings associated with an existing dwelling provided they are not located within coastal marshes, avoidance of the buffer is not possible, they are located on the existing footprint associated with the dwelling, no fill is used, soil disturbance is limited to post holes, auger holes, block etc., no woody vegetation is removed, and the building is a maximum size of 25 square metres

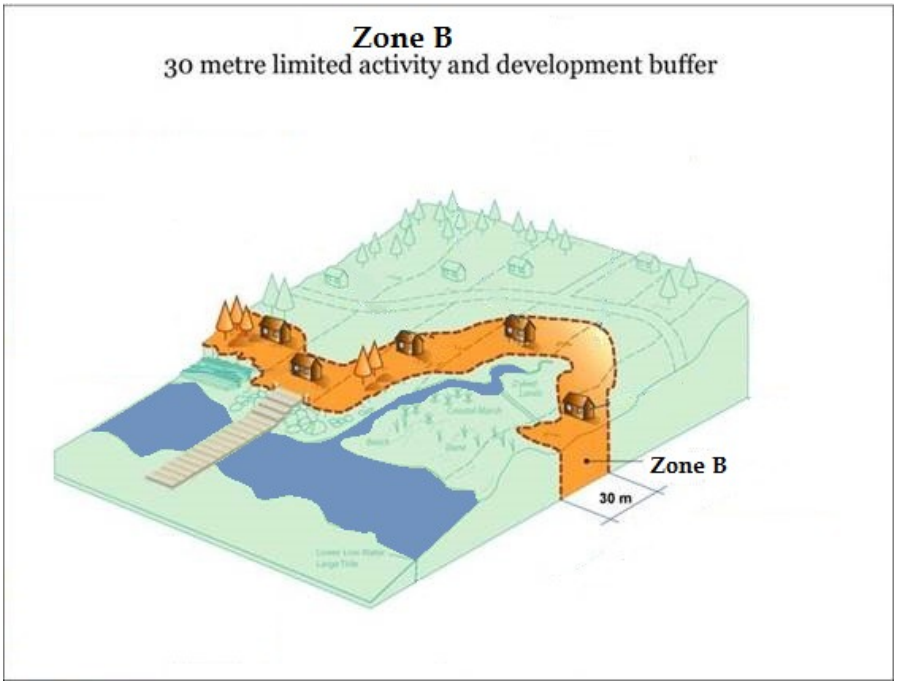
The following activities are **NOT** permitted in Zone A

- Infilling and excavation, unless it is associated with an allowable activity as describe above;
- Dredging and associated spoil disposal activities;
- Beach quarrying;
- Construction of causeways, where a bridge is a technically feasible alternative; and
- Construction of groynes (rigid structures built out from a shore to protect the shore from erosion, to trap sand, or to redirect a current)

ZONE B

Zone B, the coastal lands buffer, is the land immediately adjacent to the coastal features, such as tidal watercourses, rock platforms, dunes and beaches. Zone B consists of an area 30 metres landward from the inland edge of Zone A.

Note: The Zone B lands adjacent to a coastal marsh are an integral component of the marsh. Only permissible activities in Zone A would be permitted within 30 metres of a coastal marsh, and PSW.



Activities permissible in Zone B with a Watercourse and Wetland Alteration Permit and/or an Environmental Impact Assessment Certificate of Determination and/or an Approval

- All activities permissible in Zone A are permissible in Zone B.

- Soil disturbance associated with the construction of a new or rebuilt structure if it meets the following conditions:
  - avoidance of impacts is considered and the soil disturbance is as far away as possible from the coastal feature
  - in the case of new or rebuilt structures, the habitable portion of the structure is at least 2 metres above the HHWLT (Higher High Water Large Tide) elevation or an elevation determined by the Local Government or Regional Service Commission

- Soil disturbance associated with the expansion of an existing structure or the construction of a secondary structure if it meets the following condition:
  - the expansion or secondary structure is no closer to Zone A than the existing structure

- Erosion control activities and structures provided there is evidence of erosion and there is an existing home, commercial enterprise, or infrastructure that is at risk due to erosion.

The following activities are **NOT** permitted in Zone B

- Infilling and excavation, unless it is associated with an allowable activity;

- Dredging and associated spoil disposal activities;

- Beach quarrying;

- Construction of causeways, where a bridge is a technically feasible alternative; and

- Construction of groynes (rigid structures built out from a shore to protect the shore from erosion, to trap sand or to redirect a current)

ZONE C

Another area being considered for protection, but not yet implemented is Zone C. Zone C extends from the outer limit of Zone B landward and is identified as those areas having sensitivity to impact and storm damage as a result of topography, elevation and erodibility (geomorphology). Although the boundaries of Zone C lie outside the 30 metre setback established under the *Watercourse and Wetland Alteration Regulation*, best management practices should be used in the development of lands within this zone while meeting the following criteria:

1. The susceptibility of the development to storm surges. Key considerations in determining susceptibility to storm surges include elevation, topography, and erodibility.

2. The biophysical impact of the development on the coastal ecosystem. Key considerations in determining the impact of the development on coastal ecosystems include factors such as the potential for contamination (hazardous materials storage, septic tanks/sewage), and harmful disruption of the habitat.

All activities that are permissible in Zones A and B are permissible in Zone C.

Summary

This Policy establishes a foundation for coastal area planning and management, and identifies allowable activities in each of the coastal zones. It also provides for appropriate environmental assessment for coastal area development.

The protection of our coastal areas means the protection of both public and privately held land, the protection of livelihoods as well as personal and community enjoyment, and ultimately, the protection of our coastal environment to ensure that these same opportunities exist for generations to come

Fielding inquiries and managing the review of development proposals in coastal areas are responsibilities of DELG's Source and Surface Water Management Branch. DELG is committed to ensuring a coordinated approach to handling environmental assessment and approval relating to coastal development. Where coastal development initiatives require registration under the *Environmental Impact Assessment (EIA) Regulation – Clean Environment Act*, the Source and Surface Water Management Branch will coordinate with the Environmental Assessment Branch.

Glossary of Terms

Alteration: A temporary or permanent change made to vegetation, structures or gradient including changes that affect the flow of water within watercourses or wetlands. Alterations taking place in a watercourse or wetland or within 30 metres of a watercourse or wetland require a permit. Examples of alterations include, but are not limited to, the following: tree removal, vegetation removal, clearing of stumps and roots, excavation, land preparation, grading, the addition of fill, the construction of any structure, home, camp, garage, patio or boardwalk, infrastructure installation, septic tank and field installation, road construction, driveway construction, exterior building renovations, and landscaping.

Avoidance: The prevention of impacts on a coastal feature, by choosing an alternate project, alternate design, or alternate location for an activity or a development. Avoidance is considered the first and most desirable choice in the mitigation sequence.

Coastal marsh: Wetlands dominated by rooted herbaceous plants. These wetlands drain directly into coastal waters and have the potential to be at least partially inundated with salt or brackish water.

Dune: Unconsolidated sand or gravel deposits capping beach environments recognized by raised topography. Dunes may be vegetated with salt-tolerant vegetation such as marram grass or may be established with ericaceous vegetation or tree species (e.g. forested dune).

Grubbing: Removal of stumps and roots.

Higher high water large tide (HHWLT): The average of the predicted highest high- water levels from each year over a 19-year nodal modulation cycle.

Lower low water large tide (LLWLT): The average of the predicted lowest low water levels from each year over a 19-year nodal modulation cycle.

Minimization: Reducing the adverse effects of an alteration on the functions and values of coastal features at all stages of an activity (i.e. planning, design, and implementation) to the smallest practically achievable impact. This is step two of the mitigation sequence.

Mitigation sequence: Mitigation takes place through the application of a hierarchical sequence of alternatives listed in order of preference: 1) avoidance of impacts; 2) minimization of unavoidable impacts; and 3) compensation for residual unavoidable impacts.

Necessary public function: Activities that provide public function on a provincial scale such as public transportation projects, public infrastructure, linear pipeline or transmission corridors, and projects necessary for public safety.

Ordinary high-water mark: The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, or the presence of litter and debris.

Provincially significant wetland: A wetland having provincial, national or international importance based on one or more of the following criteria:

1. Wetlands, such as coastal marshes, which represent a remnant of a formerly more widespread wetland type where, historically, impacts to this habitat type have been severe.

2. Wetlands that are within a designated Ramsar site, National Wildlife Area, Provincial Wildlife Management Area, Migratory Bird Sanctuary, Western Hemisphere Shorebird Reserve Network site, Ecological reserve, or Protected Natural Area.

3. Wetlands that are Project sites under the North American Waterfowl Management Plan and secured for conservation through the Eastern Habitat Joint Venture.

4. Wetlands that contain one or more Endangered and/or Regionally Endangered Species as designated under the New Brunswick *Endangered Species Act* or other species of special status.

5. Wetlands that represent a significant species assemblage and/or have a high value for wildlife based on size, location, vegetation, diversity, or interspersion.

6. Wetlands that have a significant hydrologic value including flood control, water quality protection, recharge, or discharge of groundwater.

7. Wetlands that have, or are managed for, social and/or cultural values, including, but not limited to, community, spiritual, archaeological, scientific, educational, and recreational importance.

Tidal watercourse: A waterbody with water levels that fluctuate twice daily due to the rise and fall of ocean tides.

Regional Contacts

Bathurst Office
Tel: (506) 547-2092
Fax: (506) 547-7655
Email: elg.egl-region1@gnb.ca

159 Main street,
Bathurst, NB
E2A 3Z9

Miramichi Office
Tel: (506) 778-6032
Fax: (506) 778-6796
Email: elg.egl-region2@gnb.ca

316 Dalton Avenue, Industrial Park
Miramichi, NB
E1V 3N9

Moncton Office
Tel: (506) 856-2374
Fax: (506) 856-2374
Email: elg.egl-region3@gnb.ca

355 Dieppe Blvd.
Moncton, NB
E1A 8L5

Saint John Office
Tel: (506) 658-2558
Fax: (506) 658-3046
Email: elg.egl-region4@gnb.ca

8 Castle Street
Saint John, NB
E2L 3B8

Fredericton Office
Tel: (506) 444-5149
Fax: (506) 453-2893
Email: elg.egl-region5@gnb.ca

20 McGloin Street, Marysville Place
Fredericton, NB
E3A 5T8

Grand Falls Office
Tel: (506) 473-7744
Fax: (506) 473-7744
Email: elg.egl-region6@gnb.ca

65 Broadway Boulevard
Grand Falls, NB
E3Z 2J6