

**Proposal for a Protected Area status of the south shore of
Prince Edward County
and
National Marine Conservation status
for the surrounding waters**

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Proposal for a Protected Area status of the south shore of Prince Edward County
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as part of the 2020 17% biodiversity Target 1

Executive Summary: A protected area and public use status (including conservation parks, migratory bird sanctuaries, provincial or national wildlife areas as appropriate, and a National Marine Conservation Area) is sought for the south shore and surrounding waters of Prince Edward County on the northeast shore of Lake Ontario as part of Target 1 of Canada’s 2020 Biodiversity Goals and Targets (to protect at least 17 percent of terrestrial areas and inland waters). The terrestrial area of concern is in the Mixedwood Plains Ecozone in southern Ontario where biodiversity loss is greatest and conservation opportunities are extremely limited. The biodiversity value of the site is very well documented and support for conservation is very strong locally and beyond. This proposal enables (1) existing wildlife policies and legislation to be addressed; (2) huge opportunities for natural education and engagement of the public in nature –related activities; (3) a potential contribution to various aspects of the human economy including millions of dollars in revenue from eco-tourism; and (4) a significant contribution to marine and terrestrial Canada-wide protection diversity.



Figure 1. Government land parcels on the south shore of Prince Edward County.

Location, Ownership, and description

Prince Edward County is at the eastern end of Lake Ontario west of Kingston between approx. 43.9370, -76.8590 and 43.8389, -77.1555. The south shore area under consideration is delineated by the Important Bird and Biodiversity Area (IBA, Fig. 2) and includes 26 square km of land and 65 square km of near shore waters. The area includes three parcels of public land including Prince Edward Point National Wildlife Area, Ostrander Point Crown Land Block and Point Petre Provincial Wildlife Area (Fig. 1). Additional public land exists at Little Bluff Conservation Area owned by Quinte Conservation at Halfmoon Bay. The Point Petre Antenna Site at the western end of the peninsula is owned by the Department of National Defence. The Miller Family Nature Reserve (MFNR) is a 491 acre property owned by the Hastings Prince Edward Land Trust approximately midway between Point Petre and Ostrander Point. Ducks Unlimited has recognized the significance of the area and has acquired two parcels in the vicinity of Gravelly Bay in addition to constructing two berms creating two large wetlands in the Lighthall Rd and Simpson Rd areas. The public lands correspond to approximately one-half of the IBA. The other half is privately owned, including 60 land parcels as well as many smaller shoreline lots.

The natural habitat is varied and includes open and treed alvars, meadows, savannah, woodlands, wetlands, marshes, shrub thicket. Most of these habitats are the result of natural succession on former marginal agricultural or logged lands. Agricultural land use is not extensive and includes a mix of cattle or sheep grazing, with vineyards closer to Lake Ontario and some hay fields. The soils are very thin as a result of glacial scraping over limestone bedrock. The area of concern is in the Mixedwood Plains Ecozone in southern Ontario (Ecological Stratification Working Group, 1995) where biodiversity loss is greatest and conservation opportunities are limited.

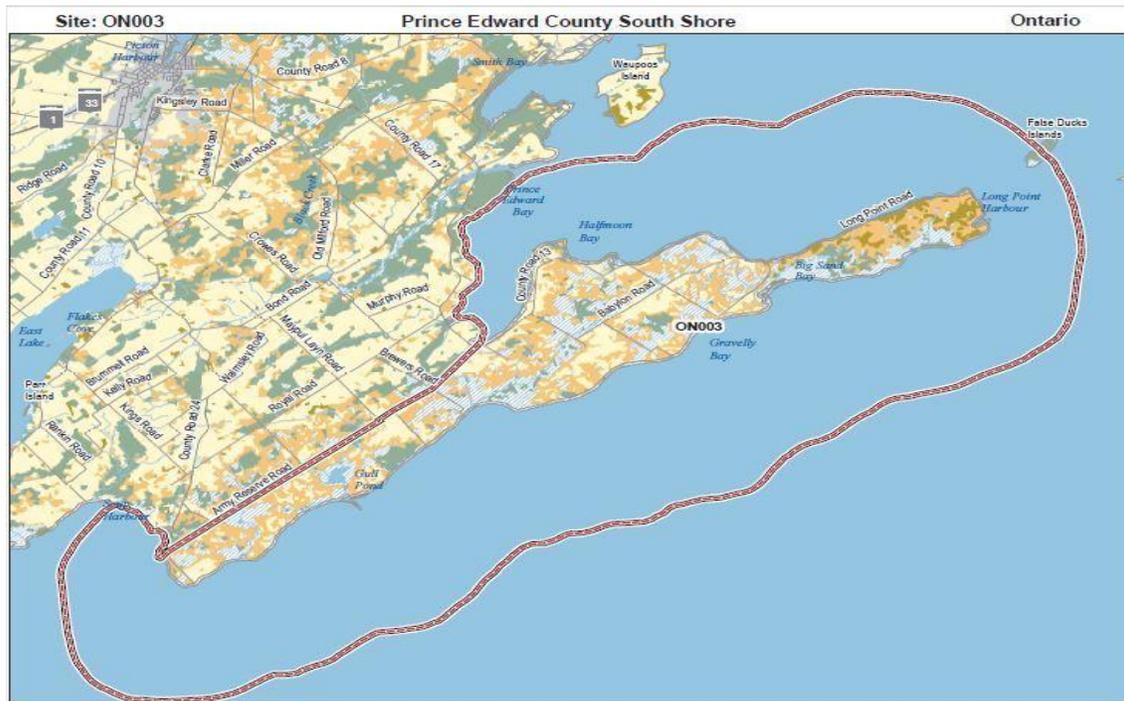


Figure 2. Southern Prince Edward County showing the boundary of the South Shore Important Bird and Biodiversity Area (IBA).

Local interest in biodiversity conservation:

- Prince Edward Point Bird Observatory (PEPtBO) is a Canadian Migration Monitoring Network station located in the Prince Edward Point National Wildlife Area. PEPtBO’s mission includes a commitment to increasing the appreciation, knowledge and understanding of birds and to providing the community with opportunities to support and engage in the conservation of bird populations and habitats by sponsoring spring and fall birding festivals and publishing their “Nature Matters!” brochure highlighting Nature Events in the south shore throughout the year. The Bird Observatory hosts thousands of visitors annually. As Caretaker of the IBA, the Bird Observatory conducts regular avian surveys for various groups of birds (Prince Edward Point Bird Observatory 2018).
- Prince Edward County Field Naturalists (PECFN) provides an educational forum dedicated to the study, promotion, appreciation and conservation of the flora and fauna within Prince Edward County. PECFN has carried out a major initiative to protect the flora and fauna of Ostrander Point (Callaghan 2015) and has led four South Shore Bioblitzes with published records (Anderson & McKay-Kuja 2014, McKay-Kuja et al. 2015, 2016, 2017).
- Hastings Prince Edward Land Trust (HPELT) acts to protect the natural beauty and cultural heritage of the Hastings and Prince Edward Counties through land acquisitions. The Land Trust manages the Miller Family Nature Reserve on the south shore that was acquired with assistance from the Nature Conservancy of Canada and the Ontario Heritage Trust.

- The Prince Edward County Draft Official Plan recognizes the South Shore as an area of natural significance by identifying it as a Natural Core Area in its Natural Heritage Strategy.
- Many thousands of people come to the county each year to enjoy the natural landscape.

Regional Bird Migration significance:

Prince Edward County's south shore is an area of significant terrestrial and aquatic biodiversity that has been recognized as a globally significant Important Bird and Biodiversity Area (IBA). The marine portion of the IBA supports globally-significant populations of three congregatory species providing winter habitat for approximately 200,000 Long-tailed Ducks, up to 15,000 White-winged Scoters and 40,000 Greater Scaup. The IBA also serves as a natural corridor for land birds crossing Lake Ontario in the spring and fall with 298 species recorded at the Prince Edward Point Bird Observatory (Menu 2014). During fall migration, large numbers of raptors, both diurnal and nocturnal, move over the IBA. Up to 2,000 hawks a day can regularly be observed. Large numbers of Northern Saw-whet Owls also move through the area in the fall resulting in up to 1500 banded in one season at PEPtBO, the largest movement of these owls recorded anywhere in the world. Valuable conservation information has been derived from studies of migratory birds throughout the south shore area.

Other Biological Values:

The IBA is also important for concentrations of migrating bats, butterflies and dragonflies. In 1995, Prince Edward Point was designated an International Monarch Butterfly Reserve as a result of its importance to migrating Monarchs. Six species of vascular plants present at Ostrander Point Crown Land Block alvar are rare and tracked by the Ontario Natural Heritage Information Centre and some of the alvar communities are globally imperilled. At least 28 regionally rare species occur on this property and others occur elsewhere in the IBA including some normally found only in the Carolinian Zone on the Lake Erie shore. The IBA contains one large Area of Natural and Scientific Interest (ANSI), one candidate ANSI and three designated Provincially Significant Wetland complexes. The South Shore is home to several species at risk including Blanding's turtle (listed as threatened provincially and endangered federally). At least 12 avian species at risk have been documented breeding in the IBA including wetland species: Least Bittern, grassland species: Bobolink and Eastern Meadowlark and insectivores: Eastern Whip-poor-will, Barn Swallow that are all experiencing significant population declines. The South Shore is identified as an area of high biodiversity in the Draft CWS Ontario Landscape Conservation Atlas and Plan (Environment and Climate Change Canada 2017).

National Marine Conservation Area

The near shore area provides important staging for millions of waterfowl but at the same time attracts hundreds of humans looking for, in addition to birds, fish and shipwrecks. Nature and geology have made the eastern end of Lake Ontario particularly dangerous to shipping. In the late nineteenth century heavy shipping traffic crossed the Lake carrying the bounty of Prince Edward County farms after harvest in the fall. The sailing ships had to deal with fierce fall storms made worse for having “built up their fury” over the 311 kms of the Lake’s length. In addition, the eastern end of Lake Ontario features underwater ridges, small islands and areas of high iron content. The combination of stormy seas, unreadable compasses due to iron magnetism and small islands and shoals made the eastern end of the Lake very dangerous for shipping. The results are scattered over the Lake bottom and have created some of Ontario's richest Marine Heritage. Some 450 wrecks are reported between Prince Edward County and Kingston. While this history has created a local myth about a “Marysburgh Vortex”, it has also created a bonanza for recreational divers and history buffs.

Main Duck Island, close to the United States border has become the focus of many legends as a commercial fishing hub, summer home of John Foster Dulles and picnicking spot for Queen Elizabeth and Prince Phillip. Currently it is part of the Thousand Islands National Park system.

The heritage- designated Prince Edward Point Lighthouse, constructed in 1881, is also part of the Thousand Islands Park system and is currently undergoing renovation and preservation activities.

Traditionally the waters off Prince Edward County’s south shore have provided a living for generations of fishermen and women. Although it is becoming rarer for individuals to seek that livelihood, the area is heavily used for recreational boating and fishing.

Value of nature and the natural landscape to human economy:

An increasing number of visitors from major urban centres in Ontario and Quebec as well as from nearby US states have a unique opportunity to experience nature and appreciate avian migration in Prince Edward County. Enjoyment of the natural landscape is a major reason for people to visit the County and this brings millions of dollars into the local economy. This can be greatly increased by improved access, accommodation, paths and interpretation. Cautious development and due diligence required by federal and provincial wildlife protection legislation will enable appropriate human activities at the same time addressing the needs of wildlife according to established policies and legislation (Migratory Birds Act, Species at Risk Act). There is additional benefit to be gained from this mostly natural habitat in its contribution to reduction of the impact of climate change.

Conclusion:

As part of the 17% initiative this proposal enables (1) existing wildlife policies and legislation to be addressed; (2) huge opportunities for nature education and engagement of the public in nature-related activities; (3) a significant contribution to various aspects of human economy through eco-tourism; and (4) ensuring cross-Canada marine and terrestrial diversity and positive impact in a part of Canada where biodiversity protection is particularly needed and species from adjacent ecozones (migratory birds) are also afforded protection.

The South Shore fulfills all five of the criteria for designation as a National Wildlife Area:

1. See “Regional Bird Migration Significance” above, for overwintering of three congregatory species in the waters of the IBA as well as avian spring and fall migration. Also, thousands of migrating dragonflies stage across the south shore for their fall migration, as do bats and Monarch Butterflies.
2. The Species at Risk present include a significant population of Blanding’s Turtle (threatened provincially and endangered federally) and twelve avian species including Whip-poor-will and Least Bittern (see “Other Biological Values”).
3. Critical nesting habitat for Blanding’s Turtle and Whip-poor-will (and the eleven other SAR).
4. Undisturbed Great Lakes shoreline marshes (one of the habitats most at risk in southern Ontario and here designated as provincially significant); alvar assemblages of vascular plants with associated animal species (globally significant); disjunct Carolinian vascular plants (e.g. Twinleaf, White Trout Lily). All of these are in jeopardy of being lost elsewhere through human development (infilling, pollution, car racing tracks, urban expansion, etc).
5. Appropriate management of the landscape could allow for the re-establishment of previously nesting SAR including Henslow’s sparrow, Upland Sandpiper and Loggerhead Shrike. It should be noted that the Chuck-will’s-widow has been observed in the same area of the South Shore for the past four years and might represent the first possibility of nesting in Ontario (and northward expansion of the species into Canada).

The South Shore fulfills all four of the criteria for designation as a Migratory Bird Area:

1. See “Regional Bird Migration Significance”
2. The area is vulnerable to area-specific threats e.g. development, especially wind and solar projects that could disrupt nesting and migration, or draining of wetlands for marinas, etc.
3. Nesting of Whip-poor-will (COSEWIC, threatened status) which is a species vulnerable to human disturbance and has restricted habitat requirements
4. See “Regional Bird Migration Significance” for overwintering waterfowl in surrounding waters

The biological importance of the South Shore has already been identified by the province:

1. See “Other Biological Values” in text above. One large Life Science Area of Natural and Scientific Interest (ANSI), one candidate Life Science ANSI, three designated Provincially Significant Wetland complexes.
2. Habitat of Blanding’s Turtle (listed as threatened provincially) where it can flourish without the threat of increased (lethal) roads.
3. Nesting of twelve avian Species at Risk including Whip-poor-will, Least Bittern, Barn Swallow, and grassland species.
4. Six species of vascular plants tracked by the Ontario Natural Heritage Information Centre and at least twenty-eight regionally rare species.

A note on protection:

The International Union for the Conservation of Nature (IUCN) defines a protected area as “a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (Environment and Climate Change Canada, 2016, p. V).

This is the definition we apply here. The protected area and public use status (including conservation parks, migratory bird sanctuaries and national wildlife areas as appropriate) is suggested for consideration since the various protection categories may be helpful in dealing with a complex landscape where species-specific management actions and traditional uses have to be applied in concert.

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