

Wellers Bay National Wildlife Area Management Plan



Acknowledgements:

This management plan was prepared by Laurie Maynard (Canadian Wildlife Service [Ontario]). Thanks are extended to Madeline Austen, Shannon Badzinski, John Brett, Lesley Dunn, Christian Friis, Krista Holmes, Andrea Kettle, Dave Moore, Jeff Robinson, and Daniel Rokitnicki-Wojcik (Canadian Wildlife Service [Ontario]), Olaf Jensen (Canadian Wildlife Service [National Capital Region]), Darcy Henderson (Canadian Wildlife Service [Prairie and Northern]), Kathy St. Laurent, Al Hanson (Canadian Wildlife Service [Atlantic]), David Courchaine, Dwayne James (Department of National Defence) and Todd Norris (Ontario Ministry of Natural Resources and Forestry) for their contributions to the development or review of the document, and to Marie-Claude Archambault, Krista Holmes (Canadian Wildlife Service [Ontario]), Corey Nugent and Alan Marsh (formerly Canadian Wildlife Service [Ontario]) for preparation of maps and figures.

Hélène Lévesque (Canadian Wildlife Service [Ontario]) prepared the 1986 *Management Plan: Wellers Bay National Wildlife Area*, which provided the groundwork for this update.

Copies of this plan are available at the following addresses:

Environment and Climate Change Canada
Public Inquiries Centre
7th Floor, Fontaine Building
200 Sacré-Coeur Boulevard
Gatineau QC K1A 0H3
Telephone: 819-997-2800
Toll Free: 1-800-668-6767 (in Canada only)
Email: ec.enviroinfo.ec@canada.ca

Environment and Climate Change Canada - Canadian Wildlife Service
Ontario Region
4905 Dufferin Street
Toronto ON M3H 5T4

Environment and Climate Change Canada Protected Areas website at: www.ec.gc.ca/ap-pa

ISBN: 978-0-660-06434-5
Cat. No.: CW66-535/2016E-PDF

How to cite this document:

Environment and Climate Change Canada. 2016. Wellers Bay National Wildlife Area Management Plan, Environment and Climate Change Canada, Canadian Wildlife Service, Ontario Region, 50 pp.

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment and Climate Change Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

Environment and Climate Change Canada
Public Inquiries Centre
7th Floor, Fontaine Building
200 Sacré-Coeur Boulevard
Gatineau QC K1A 0H3
Telephone: 819-997-2800
Toll Free: 1-800-668-6767 (in Canada only)
Email: ec.enviroinfo.ec@canada.ca

Cover photos: © David White (left – Wellers Bay), Thinkstockphotos.ca (middle – Lesser Scaup) and Environment and Climate Change Canada – Canadian Wildlife Service (right – aerial photo of Wellers Bay National Wildlife Area, Lake Ontario, taken by Ian Parsons)

© Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment and Climate Change, 2016

Aussi disponible en français

About Environment and Climate Change Canada's Protected Areas and Management Plans

What are Environment and Climate Change Canada's Protected Areas?

Environment and Climate Change Canada establishes marine and terrestrial National Wildlife Areas for the purposes of conservation, research and interpretation. National Wildlife Areas are established to protect migratory birds, species at risk, and other wildlife and their habitats. National Wildlife Areas are established under the authority of the *Canada Wildlife Act* and are, first and foremost, places for wildlife. Migratory Bird Sanctuaries are established under the authority of the *Migratory Birds Convention Act, 1994* and provide a refuge for migratory birds in the marine and terrestrial environment.

What is the size of the Environment and Climate Change Canada Protected Areas Network?

The current Protected Areas Network consists of 54 National Wildlife Areas and 92 Migratory Bird Sanctuaries comprising more than 12 million hectares across Canada.

What is a management plan?

A management plan provides the framework in which management decisions are made. They are intended to be used by Environment and Climate Change Canada staff to guide decision making, notably with respect to permitting. Management is undertaken in order to maintain the ecological integrity of the protected area and to maintain the attributes for which the protected area was established. Environment and Climate Change Canada prepares a management plan for each protected area in consultation with First Nations and other stakeholders.

A management plan specifies activities that are allowed and identifies other activities that may be undertaken under the authority of a permit. It may also describe the necessary improvements needed in the habitat, and specify where and when these improvements should be made. A management plan identifies Indigenous rights and allowable practices specified under land claims agreements. Further, measures carried out for the conservation of wildlife must not be inconsistent with any law respecting wildlife in the province in which the protected area is situated.

What is Protected Area Management?

Management includes monitoring wildlife, maintaining and improving wildlife habitat, periodic inspections, enforcement of regulations, as well as the maintenance of facilities and infrastructure.

Research is also an important activity in protected areas; hence, Environment and Climate Change Canada staff carries out or coordinates research in some sites.

The series

All of the National Wildlife Areas are to have a management plan. All of these management plans will be initially reviewed 5 years after the approval of the first plan, and every 10 years thereafter.

To learn more

To learn more about Environment and Climate Change Canada's protected areas, please visit our website at www.ec.gc.ca/ap-pa or contact the Canadian Wildlife Service.

Wellers Bay National Wildlife Area

The Wellers Bay National Wildlife Area (NWA) is located along the shores of Prince Edward County near Trenton, in northeastern Lake Ontario. It was established in 1978 to protect the peninsula and islands of Wellers Bay in Lake Ontario for the benefits of waterfowl. Covering a total area of 41 hectares (ha), the NWA is comprised of a long, narrow sand spit known as the Baldhead Peninsula with three adjoining small islands: Bald Island, Fox Island, and Baldhead Island.

The Great Lakes shoreline is one of the most modified habitats in Canada, and also one of the most important habitats for migratory waterfowl, shorebirds, and songbirds in North America. Over the last 100 years, the majority of natural habitat has been drastically altered by shoreline development and urbanization. Wellers Bay NWA is a protected area within this altered landscape. The NWA contains ecologically sensitive coastal ecosystems that are rare habitats in Ontario. Its features are part of a long, narrow baymouth barrier beach that extends 7 km across the mouth of Wellers Bay, known as the Wellers Bay Coastal Sand Spit, a provincially designated Area of Science and Natural Interest, and one of the last undeveloped sand spits in Lake Ontario.

The baymouth barrier beach protects the wetlands and shoreline habitats of Wellers Bay, making the area an important stopover site and provides important staging and feeding habitats for waterfowl and a variety of birds during spring and fall migration as they pass through eastern Lake Ontario. In 2009, Canadian Wildlife Service surveys of the lower Great Lakes during fall migration found that approximately 22% of the total waterfowl in eastern Lake Ontario were in Wellers Bay and area. The most abundant species were Greater and Lesser Scaup and Canada Geese. Species inventory and monitoring within the NWA is limited however, Wellers Bay NWA is known to support over 50 species of birds, with at least 10 species having confirmed nesting on the NWA.

Ten species listed under the federal *Species at Risk Act* have been reported at the Wellers Bay NWA, including 3 birds, 3 reptiles, 1 amphibian, 1 insect and 2 fish. Species at risk like the Least Bittern, Pugnose Shiner and Western Chorus Frog are observed and critical habitat has been identified for some of them. Monarch butterflies can be observed in the area in significant numbers as they migrate to their wintering grounds in the south.

Prior to the establishment of the Wellers Bay NWA, the sand spit and the adjacent waters of Wellers Bay and Lake Ontario were owned by the Department of National Defence (DND) and served as an Air Weapons Range. The boundary of this Legacy Site (Figure 2) is identified on some nautical charts as an 'exclusion zone'. Unexploded explosive ordnances (UXO), including 500-pound bombs and other explosives remain on or near the site (DND, 2016). As such, a safety zone

remains for an area that includes the NWA and extending into the waters of Wellers Bay and Lake Ontario, where an explosive hazard warning is posted (see Appendix 4). DND retains jurisdiction over the lakebed within the safety zone. Public access to the Wellers Bay NWA is prohibited. The NWA has been closed to the public since the land was transferred to the Canadian Wildlife Service (CWS) from DND in 1969, with a covenant that the land be protected as a conservation area for waterfowl. Public safety concerns limit the activities permitted on the NWA, and its management potential. Monitoring wildlife and improving habitat are restricted, authorized to select individuals trained in the health and safety procedures related to UXOs. Nevertheless, minimizing human disturbance is also a priority management strategy to protect the fragile beach and dune ecosystems and sensitive wildlife habitats, and promote their natural restoration. Other priority management actions include reducing the impact of invasive and over abundant species on the habitats of Wellers Bay NWA, as well as managing the risk of exposure to UXO and personal injury on the site. DND continues to perform annual surface sweeps as the property is continuously changing (due to the dynamic environment of water, wind and sand). At least 30 UXOs and 3,933 kg of debris have been removed between 2006 and 2014 (DND, 2014).

The Wellers Bay NWA is 1 of 10 NWAs in Ontario. It is an International Union for Conservation of Nature Category IV Protected Area. The lands of the NWA are administered by the Canadian Wildlife Service (CWS) of ECCC under the *Wildlife Area Regulations* of the *Canada Wildlife Act*. This 2016 Wellers Bay NWA Management Plan is an update of the Management Plan: Wellers Bay National Wildlife Area (Lévesque, 1986), and replaces all previous versions.

For greater certainty, nothing in this management plan shall be construed so as to abrogate or derogate from the protection provided for existing Indigenous or treaty rights of the Indigenous peoples of Canada by the recognition and affirmation of those rights in section 35 of the *Constitution Act, 1982*.

Table of Contents

1	DESCRIPTION OF THE PROTECTED AREA.....	1
1.1	Regional Context.....	5
1.2	Historical Background	7
1.3	DND UXO and Legacy Site Management at Wellers Bay NWA.....	8
1.4	Land Ownership	9
1.5	Infrastructure	9
2	ECOLOGICAL RESOURCES	11
2.1	Terrestrial and Aquatic Habitats	11
2.2	Wildlife	15
2.2.1	<i>Birds</i>	15
2.2.2	<i>Mammals</i>	16
2.2.3	<i>Reptiles and Amphibians</i>	16
2.2.4	<i>Invertebrates</i>	17
2.2.5	<i>Fishes</i>	17
2.3	Species at Risk	17
2.4	Non-Native and Invasive Species.....	19
3	MANAGEMENT CHALLENGES AND THREATS	21
3.1	UXO Hazards and Risks.....	21
3.2	Restoration and Management of Important Habitats and Wellers Bay Coastal Sand Spit.....	21
3.3	UNAUTHORIZED Public Access.....	21
3.4	Non-native and Invasive Plants	22
3.5	Non-native, Invasive and Overabundant Wildlife and Feral and Domestic Animals	23
3.6	Motorized Watercrafts	23
3.7	Climate Variability and projected Climate Change	24
4	GOALS AND OBJECTIVES.....	25
4.1	Vision	25
4.2	Goals and Objectives	25
4.3	Evaluation	27
5	MANAGEMENT APPROACHES.....	28
5.1	Habitat Protection and Management	28
5.2	Wildlife Management.....	29
5.2.1	<i>Waterfowl and Migratory Birds</i>	29
5.2.2	<i>Overabundant Wildlife and Feral and Domestic Animals</i>	29
5.3	Species at Risk	29
5.4	Monitoring and Surveys.....	30
5.5	Research.....	30
5.6	Multi-Agency Land Management Partnerships	31
5.7	Public Information and Outreach	32
6	AUTHORIZATIONS AND PROHIBITIONS.....	33
6.1	Prohibition of Entry	33
6.2	Authorizations	33
6.3	Exceptions.....	34
6.4	Other Federal and Provincial Authorizations.....	35
7	HEALTH AND SAFETY	36
8	ENFORCEMENT	38

9	PLAN IMPLEMENTATION	39
9.1	Management Authority and Mandate.....	40
9.2	Management Plan Review.....	40
10	COLLABORATORS	41
11	LITERATURE CITED	42
12	ADDITIONAL INFORMATION SOURCES	45
	APPENDIX 1: Legislation	46
	APPENDIX 2: Canadian Wildlife Service (Ontario) Conditions Of Research Requests	47
	APPENDIX 3: Environment and Climate Change Canada Wellers Bay National Wildlife Area Public Information Notice, 2013	48
	APPENDIX 4: Department of National Defence Wellers Bay National Wildlife Area Public Information Notice, 2014	49
	APPENDIX 5: Contacts for Wellers Bay National Wildlife Area	50

1 DESCRIPTION OF THE PROTECTED AREA

The Wellers Bay National Wildlife Area (NWA) was established in 1978 along the western shore of Prince Edward County, Ontario (Figure 1). It is comprised of Bald Island, Fox Island, Baldhead Island¹ and the northern portion of the Baldhead Peninsula (Figure 2) totalling 41 ha, and contains rare, provincially significant dune and beach communities and panne² habitats on one of the last undeveloped sand spits and islands in Lake Ontario.

The NWA covers approximately two thirds of the 7-kilometre-long Wellers Bay Coastal Sand Spit, which is designated as a provincially significant life science Area of Natural and Scientific Interest (ANSI), and acts as a baymouth barrier beach across the mouth of Wellers Bay³ (Figure 2). Shallow wetlands along the eastern shoreline of the NWA, adjacent to the sand spit, and along the Wellers Bay shoreline, are protected from Lake Ontario by this barrier beach, providing habitats for feeding and staging waterfowl, and stopover sites for other migratory birds.

The Wellers Bay NWA is relatively flat, comprised primarily of upland habitats ranging from open beach and sand dunes to small areas of deciduous forest, and wetlands. The sand beach and dunes, composed of fine sand, are dynamic and constantly shifting due to high erosion caused by changing water levels of Lake Ontario, wind and wave action, storm events, and the movement of ice during winter. The Lake Ontario shoreline is prone to erosion and quickly drops off into deeper water. On the Wellers Bay side, the water is shallow and the nearshore is dominated by submerged and emergent aquatic vegetation. There are some open beach and unvegetated dune areas in the central section of the Baldhead Peninsula where vegetation has been damaged or lost due to previous land uses and human activity (authorized and unauthorized). These unvegetated areas are particularly vulnerable to erosion and encroachment of invasive species.

A narrow channel north of Baldhead Island (outside of the NWA), provides water access from Lake Ontario to Wellers Bay (Figure 2). The island between this opening and Baldhead Island is provincial Crown land that is not part of the NWA.

Prior to the establishment of the NWA, the Wellers Bay Coastal Sand Spit and the adjacent waters of Wellers Bay and Lake Ontario were used by the Department of National Defence (DND) as an Air Weapons Range. DND confirms Wellers Bay as an Unexploded Explosive Ordnance (UXO) Legacy Site (DND, 2016) (Figure 2) for which there exist potential UXO risks associated with

¹ Baldhead Island is also known as Bald Head Island and Green Island, hereafter referred to as Baldhead Island. Baldhead Island is currently connected to the mainland by a continuous dune system.

² A panne is an ecosystem characteristic of coastal areas. It is a narrow wetland that forms in a depression between two elevated features. Their low nutrient levels and extreme water level fluctuations limit their flora to mainly sedges and rushes. Freshwater pannes are globally and provincially rare.

³ Wellers Bay is also known as Weller's Bay, hereafter referred to as Wellers Bay.

past departmental activities. A safety zone remains for an area that includes the NWA and extending into the waters of Wellers Bay and Lake Ontario, where an explosive hazard warning is posted (see Appendix 4). DND retains jurisdiction over the lakebed within the safety zone. Public access to the Wellers Bay NWA is prohibited. Erosion from wave and wind action or disturbance to dunes and beach may expose UXOs and DND continues to perform annual surface sweeps of the property. At least 30 UXOs and 3,933 kg of debris have been removed between 2006 and 2014 (DND, 2014).

Since the land transfer from DND in 1969, and official designation of the NWA in 1978 (Table 1), a number of new legislative and policy changes have influenced site management. Waterfowl were and are the primary wildlife group of concern, but other wildlife, species at risk, and rare or unique habitats are now part of the criteria for directing management on NWAs.

Table 1: Wellers Bay National Wildlife Area Summary Information

Protected Area Designation	National Wildlife Area
Province or Territory	Ontario
Municipality	Municipality of Prince Edward County
Geographic County	Prince Edward County
Latitude and Longitude	Latitude 44°00'N/Longitude 77°36'W
Size	41 ha
Environment and Climate Change Canada Protected Area Designation Criteria	<p>Criteria 1. a) <i>The area supports a population of species or subspecies or a group of species that is concentrated, for any portion of the year.</i></p> <ul style="list-style-type: none"> ▪ Refuge for migratory birds during spring and fall migration. <p>Criteria 3. a) <i>The area is a rare or unusual wildlife habitat, of a specific type in a biogeographic region.</i></p> <ul style="list-style-type: none"> ▪ Coastal sand spit and islands ▪ Baymouth barrier beach (maintains provincially significant wetland complex in Wellers Bay)
Environment and Climate Change Canada Protected Area Classification System	Species and Critical Habitat Conservation (Category A)
International Union for Conservation of Nature (IUCN) classification	Category IV Habitat/Species Management Area: Category IV provides a management approach used in areas that have already undergone substantial modification, necessitating protection of remaining fragments, with or without intervention (Dudley, 2008).
Order in Council Number	P.C. 1978-1496
Directory of Federal Real Property (DFRP) Number	09593
Gazetted	1978
Additional Designations	<ul style="list-style-type: none"> • Wellers Bay Coastal Sand Spit- Provincially Significant Life Science Area of Natural and Scientific Interest (includes Wellers Bay NWA), Ontario Ministry of Natural Resources and Forestry (OMNRF) • Wellers Bay Wetland Complex - Provincially Significant

	<p>Wetland (includes wetland portion of Wellers Bay NWA), OMNRF</p> <ul style="list-style-type: none"> • Wellers Bay Area UXO Legacy Site - DND
Faunistic and Floristic Importance	<ul style="list-style-type: none"> • One of the last undeveloped sand spits in Lake Ontario • Coastal undeveloped islands on Lake Ontario • Baymouth barrier beach, forested dunes and islands protect marshes in Wellers Bay • Important migratory habitat for birds and insects <p>Extremely rare, provincially significant dune and beach communities (i.e., Treed, Open and Shrub Sand Dune, and Mineral Treed Beach/Bar Ecosites), ranked S1 'Critically Imperiled' (Bakowsky, 2008 and 1996) in Ontario. Globally and provincially significant panne habitat (i.e., Great Lakes Coastal Meadow Marsh Ecosite), ranked 'Imperiled'- G2 (NatureServe, 2015), and S2 in Ontario (Bakowsky, 1996)</p>
Species at Risk	<ul style="list-style-type: none"> • 10 federally listed (Endangered, Threatened and Special Concern) species under the <i>Species at Risk Act</i> (SARA), including 3 birds, 3 reptiles, 1 amphibian, 2 fish and 1 insect. • 13 species designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) have been recorded at the NWA (i.e. 3 bird species in addition to SARA-listed species). • 2 additional species provincially listed under the <i>Endangered Species Act, 2007</i> (ESA)
Non-native and Invasive Species	<ul style="list-style-type: none"> • Mute Swan (<i>Cygnus olor</i>), Double-crested Cormorant (<i>Phalacrocorax auritus</i>), Tartarian Honeysuckle (<i>Lonicera tatarica</i>), Common Buckthorn (<i>Rhamnus cathartica</i>), White/Silver Poplar (<i>Populus alba</i>), non-native Phragmites/Common Reed (<i>Phragmites australis</i> subsp. <i>australis</i>) and Purple Loosestrife (<i>Lythrum salicaria</i>).
Management agency	Environment and Climate Change Canada (Canadian Wildlife Service)
Public access and use	Public access is prohibited. There is ongoing risk to public health and safety from UXO, and to the sensitive dune ecosystem, wildlife and their habitats, from human disturbance.
Other	All authorized visitors must obtain Occupational Health and Safety training and DND UXO safety briefing prior to visit and require a <i>Canada Wildlife Act</i> permit.

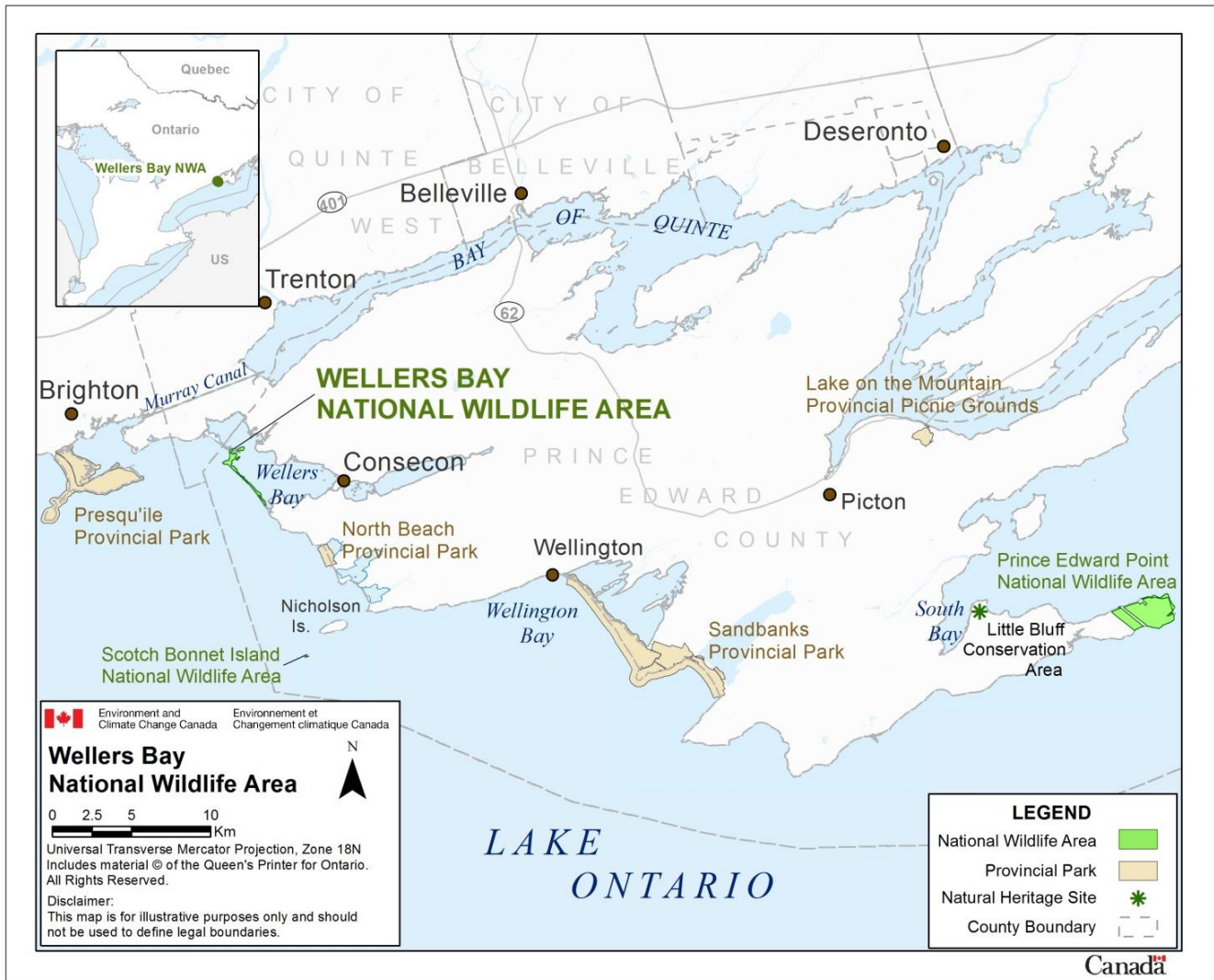


Figure 1: Location of Wellers Bay National Wildlife Area, Lake Ontario

Source: Environment and Climate Change Canada, Canadian Wildlife Service – Ontario, 2016

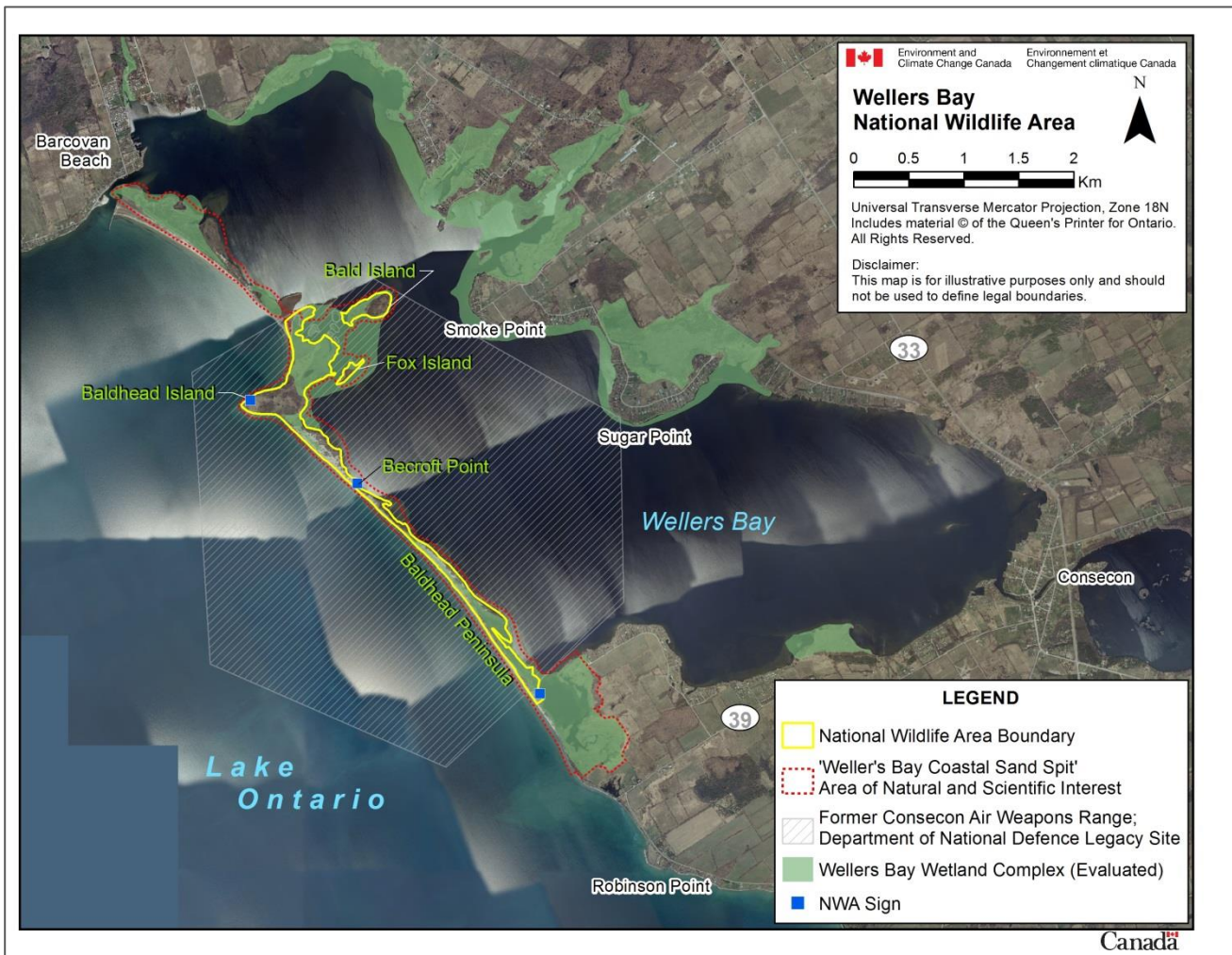


Figure 2: Aerial view of Wellers Bay National Wildlife Area, Lake Ontario (2008)

Source: Environment and Climate Change Canada, Canadian Wildlife Service – Ontario, 2016

1.1 REGIONAL CONTEXT

The Wellers Bay NWA is located within the Municipality of Prince Edward County, near the towns of Brighton, Trenton and Consecon (Figure 1). Prince Edward County is an irregularly shaped peninsula characterized by flat limestone plains covered with a shallow layer of unconsolidated loamy soil produced by the scouring action of glaciers on sedimentary rock. The shoreline is complex with numerous embayments. It is dominated by large coastal marshes that are protected by baymouth bars (i.e., barrier beach) and sand spits (EC and OMNR, 2003). These wetlands, barrier beach and sand spits serve as a natural travel corridor and provide important stopover, feeding and staging habitat for migratory birds and wildlife as they migrate across Lake Ontario.

One of the largest of these barrier beach wetlands on eastern Lake Ontario is the Wellers Bay Wetland Complex (363 ha) (EC and OMNR, 2003). The Wellers Bay Wetland Complex is a provincially significant wetland complex made up of four individual wetlands located along the shore of Wellers Bay, composed primarily of marsh (81%) and swamp (19%) (Snetsinger and Kristensen,

1993). The Wellers Bay Wetland Complex is regionally significant for waterfowl staging and migratory bird stopover habitat and locally significant for fish spawning and nursery habitat (Snetsinger and Kristensen, 1993). An assessment of wetland water quality, submerged aquatic vegetation and aquatic macroinvertebrates in 2011 indicated that the wetlands in Wellers Bay and marsh adjacent to the NWA are in good condition and comparable to other wetlands in eastern Lake Ontario (EC-CWS, 2011).

The Wellers Bay Coastal Sand Spit is 7 km long, extends northeast across the mouth of Wellers Bay, and includes several small islands and two connecting sand spits to the northwest and southeast. This feature is designated as the Wellers Bay Coastal Sand Spit Provincially Significant Life Science Area of Natural and Scientific Interest (ANSI) (Figure 2), representing one of the last undeveloped coastal sand spits in Lake Ontario. This ANSI includes the Wellers Bay NWA. The islands are limestone outcroppings, and the sand spit that connects Baldhead Island to the mainland, known as the Baldhead Peninsula, is a dynamic beach dune system.

During periods of high water, gaps in the sand spit have occasionally been created, allowing the connection between Lake Ontario and Wellers Bay. The sand spit north of Baldhead Island extends to Barcovan Beach on the mainland (Figure 2). A narrow channel is dredged between Lake Ontario and Wellers Bay, maintained by the Friends of Wellers Bay non-profit association. The channel encourages water circulation in the Bay with Lake Ontario to improve water quality and keeps the sand deposition from the baymouth barrier beach from closing off boat access from the lake.

Eastern Lake Ontario and Wellers Bay are popular areas for recreational boating, sport fishing and tourism. Recreational fishing in summer and winter, boating, hunting and wildlife viewing are popular activities. The shoreline of the mainland portion of Wellers Bay is largely developed and privately owned. Land use along the shoreline of Wellers Bay includes seasonal cottages, year-round homes, marinas tour operators, campgrounds, and farms.

The Wellers Bay NWA is within the North American Bird Conservation Initiative Bird Conservation Region 13; within the Mixedwood Plains Ecozone, Manitoulin-Lake Simcoe Ecoregion (Wilken, 1986). There are a number of natural heritage sites (i.e., Presqu'île Provincial Park, North Beach Provincial Park, Sandbanks Provincial Park, Scotch Bonnet Island NWA, and Prince Edward Point NWA) nearby. Together with Wellers Bay NWA, these sites provide a protected areas network of available habitats on the landscape for wildlife, important stopover and travel routes for other migratory birds, bats and butterflies. Particularly during spring migration, shoreline sites are especially important due to the early emergence of insects that provide a critical food source for migrant species. Presqu'île Provincial Park and the south shore on Lake Ontario and nearshore

waters of Prince Edward County are both recognized by BirdLife International as Important Bird Areas because of the large numbers of waterfowl, colonial water birds, migratory land birds and bird species at risk that use these areas (Wilson and Cheskey, 2001; Cheskey, 1999). Prince Edward Point NWA, on the southeastern point of Prince Edward County is also designated as Monarch Butterfly Reserve.

Agriculture has been the basis for the economy and the predominant land use in Prince Edward County for several generations. The climate, which is moderated by Lake Ontario, is suitable for orchards. In recent years, both the number of vineyards and wine production has increased in Prince Edward County and with it, an increase in tourism to the area.

1.2 HISTORICAL BACKGROUND

The Wellers Bay area was originally hunting and fishing grounds for the Cayuga Iroquois who formed small villages with some farming. In the 17th century the area was settled by French Missionaries, and quickly developed due to the abundance of fish and furs. As settlement progressed, towns grew around harbours, landings and mill sites (Brown, 2010). The peninsula of the Prince Edward County became the focus of transportation with a road linking the Bay of Quinte with Wellers Bay. The Kente Portage Road follows a long-established Indigenous portage route between Wellers Bay and the Bay of Quinte, later used by early explorers and settlers into the area (Brown, 2010). Consecon became an important port within Wellers Bay, where ships would dock and load up with grain. Railways began to arrive in 1870, and in 1889, the Murray Canal was cut through the Prince Edward Peninsula, eliminating the long and hazardous shipping route around Prince Edward County (Brown, 2010) and the need for ports on Wellers Bay.

In 1938 and 1939, the federal DND purchased Bald Island, Fox Island, Baldhead Island and a large portion of the Baldhead Peninsula within Wellers Bay from private citizens, to be used as an Air Weapons Range. It was known as the Consecon Air Weapons Range, after the nearby town of Consecon. From 1939 until 1953, it served as a practice bombing range and as a gunnery range. Live bombs, rockets and explosive projectiles were directed at targets in the area. Not all of these ammunitions exploded on impact, and UXO, including 500-pound high explosive bombs and other munitions, remain on or near the NWA (DND, 2011). UXO were uncovered and detonated as recently as 2012 (DND, 2014). In 1969, the administration and control of the property were transferred from DND to the Canadian Wildlife Service (part of the Department of Indian Affairs and Northern Development at that time and now part of Environment and Climate Change Canada), with the condition that the lands be used as a conservation area for waterfowl. In 1978, the Wellers Bay NWA was established for the purposes of wildlife conservation under the *Canada Wildlife Act*. The NWA has always been closed to the public; Access is prohibited under the *Wildlife Area Regulations* of the *Canada Wildlife Act*. Due to the potential danger from UXO, a stipulation of the transfer by

DND to CWS was that no future disposal of the property could take place without consultation with DND.

1.3 DND UXO AND LEGACY SITE MANAGEMENT AT WELLERS BAY NWA

Established in 2005, DND's Unexploded Explosive Ordnance and Legacy Sites Program aim is to reduce safety risks posed by UXO. A UXO Legacy Site is any property that was owned, leased or used by DND, but no longer resides within DND's inventory, and for which there exists a UXO risk associated with past Departmental activities (DND, 2016).

The Program identifies and catalogues such sites, assesses risks and works to reduce UXO risk through property controls, assessment surveys, UXO clearance operations and public education. At sites where the potential risk is great, public safety must be ensured by restricting access to the sites. The level of risk is determined by the probability that people will encounter UXO, combined with the probability that the encounter will lead to personal injury. The limits of existing UXO detection technology means that no UXO legacy site can ever be declared completely hazard-free (DND, 2016).

The Wellers Bay NWA is a DND Legacy Site (Figure 2). DND surveillance activities have documented unexploded bombs and munitions at or below the surface, on the NWA and adjacent water in Lake Ontario and Wellers Bay, and determined a continued, confirmed UXO risk. In March 2011, DND completed a *Record of Legacy Site Risk Management Report* for the Wellers Bay NWA (DND, 2011) based on CWS' land use of prohibited access. The risks are low in frequency of occurrence but very high in potential severity. DND measures risks by hazard severity of the UXO (i.e. type of UXO) and probability of an individual's encounter with a UXO. At Wellers Bay NWA, the probability of encounter with a UXO is currently based on prohibited public access (DND, 2011). Population growth in nearby urban centres and increased public interest in outdoor recreation, as well as a concerning misconception that the Wellers Bay NWA is not a UXO risk, has resulted in a rise in trespassing on the site, which compounds the risk and subsequent mitigation to ensure public safety.

DND and the Legacy Sites Program keeps warning signs on the NWA, and continues to place Information Notices in several newspapers and publications in the area indicating the existing danger. Warnings are published annually during the summer to advise the public of the ongoing risk (DND, 2011).

There have been many UXO clearance efforts conducted at the Wellers Bay NWA since 1954. The initial UXO clearance largely focused upon locating and destroying eight 500-lb bombs alleged to be on site and in the process other ordnance fragments were located. In 2010, munitions

and practice warheads were found (DND, 2011), and in 2012 UXO washed ashore (CWS pers. comm., 2013); all had to be destroyed on site. At least 30 UXO and 3,933 kg of munition debris have been removed from the site between 2006 and 2014 (DND, 2014). Some areas remain inaccessible due to dense vegetation. Clearing those areas would drastically disturb and damage the natural vegetation. As long as human disturbance remains low (i.e., no trespassing), the vegetation potentially is a natural barrier. There is an ongoing risk that UXO may be exposed by wind and dune movement.

An exhaustive clearance would entail severe disruption to the ecology of the NWA, including destruction of habitat and destabilization of dune systems. Even an exhaustive clearance would not completely remove the UXO hazard because of the dynamic nature of the site due to wind and water action. Because public safety is of highest priority, DND will continue to carry out sweeps for UXO and detonations, as required. Although there are attempts to minimize impacts, DND activities may continue to impact the sensitive habitats at the Wellers Bay NWA.

As per the land transfer agreement, DND retains responsibility for managing the UXO on the NWA and oversees the UXO training of persons authorized to be on site.

1.4 LAND OWNERSHIP

Surface title of the Wellers Bay NWA belongs to the Crown in Right of Canada (Government of Canada) and is administered by Environment and Climate Change Canada's Canadian Wildlife Service (ECCC-CWS) as described in Schedule 1 of the *Wildlife Area Regulations* of the *Canada Wildlife Act*. The Crown in Right of Canada does not hold the subsurface mineral rights for Wellers Bay NWA. All lands at the water's edge are protected as part of the NWA. ECCC-CWS manages and maintains lands and infrastructure (e.g., signage) within the Wellers Bay NWA.

Through an agreement with the Province of Ontario, DND retains jurisdiction over the lakebed within a safety zone (Appendix 4) extending under the waters of Wellers Bay and Lake Ontario, and which were part of the former Consecon Air Weapons Range (Figure 2).

1.5 INFRASTRUCTURE

There are no facilities, buildings, roads, trails or docks within the Wellers Bay NWA.

Infrastructure consists of signs. Signs are posted to identify NWA boundaries, indicate prohibited entry and the presence of UXOs. Signs require frequent maintenance due to damage from exposure to the elements and vandalism.

Three large NWA identification signs are posted on Baldhead Island and the Baldhead Peninsula (Table 2). ECCC-CWS "Entry Prohibited" signs and DND "Unexploded Explosive

Ordnance Warning” signs are posted around the perimeter of the NWA (Figure 3; Table 2). DND and ECCC-CWS work cooperatively to post signs safely in the NWA at the same locations.



Figure 3: ECCC-CWS Entry Prohibited sign and DND Unexploded Explosive Ordnance Warning sign, Wellers Bay National Wildlife Area, Ontario
 Photo: Jeff Robinson © Environment and Climate Change Canada, Canadian Wildlife Service

Table 2: Infrastructure at Wellers Bay National Wildlife Area

Type of Infrastructure	Approximate Number	Responsibility holder or owner
Signs:		
NWA identification signs	3 signs	ECCC-CWS
NWA boundary signs	20 signs	ECCC-CWS
NWA Entry Prohibited signs	60 signs	ECCC-CWS
DND UXO Warning signs	50 signs	DND

2 ECOLOGICAL RESOURCES

Wellers Bay NWA has not been subjected to thorough ecological studies due to the sensitive sand spit and dune habitats, and the presence of UXO. Information on ecological resources is limited to historic records, periodic studies, Environment and Climate Change Canada (Canadian Wildlife Service and Wildlife Enforcement Directorate [ECCC-WED]) and DND site visits, and incidental observations.

2.1 TERRESTRIAL AND AQUATIC HABITATS

Terrestrial habitats range from open beach, sand dunes and treed dunes on the sand spit, to small areas of deciduous forest and grassed patches (Figure 4).

The Baldhead Peninsula is a long, narrow sand spit. There are narrow sand beaches and dunes along both sides of the peninsula (Figure 5). The sand beach along the southwest side is sparsely vegetated due to wave action from Lake Ontario. The most common species growing on the open beach include American Sea-rocket (*Cakile edentula*), Wormwood (*Artemisia campestris*) and Marram/American Beach Grass (*Ammophila breviligulata*) (White, 2008; Figure 6). There are four significant dune and beach bar communities (i.e. Treed, Open, Shrub Sand Dune and Mineral Treed Beach/Bar Ecosites) located on Baldhead Island and the Baldhead Peninsula, ranked S1 Critically Imperiled in Ontario (NatureServe, 2015) because of extreme rarity (Bakowsky, 2008 and 1996).



Figure 4: Aerial photo of Wellers Bay National Wildlife Area, Lake Ontario.
Photo: © Environment and Climate Change Canada, Canadian Wildlife Service



Figure 5: Baldhead Peninsula, Wellers Bay National Wildlife Area, Ontario, 2012
Photo: Jeff Robinson © Environment and Climate Change Canada, Canadian Wildlife Service



Figure 6: Marram/American Beach Grass, Wellers Bay National Wildlife Area, Ontario, 2008
Photo: © Environment and Climate Change Canada, Canadian Wildlife Service

On areas with higher elevation (Bald, Fox, Baldhead Islands and along tops of dune ridges), deciduous trees and shrubs have become established. These areas are generally immature deciduous forest and are characteristic of habitat that is recovering from an extended period of human disturbance (i.e., previous use of the site as a bombing range, and ongoing disturbance to dunes and vegetation from unauthorized recreational activities).

Bald Island (3.6 ha) has stands of White Elm (*Ulmus americana*) and Balsam Poplar (*Populus balsamifera*), with a few willow shrubs (*Salix* spp.) that grow adjacent to marshes on the east shore of the island (White, 2008; Figure 7). Fox Island (0.9 ha) is small and covered mainly with tall grasses and shrubs such as willow and Red Raspberry (*Rubus idaeus* ssp. *strigosus*), and scattered trees along the water's edge (White, 2008).

Baldhead Island is connected to the mainland via the Baldhead Peninsula. Vegetation on Baldhead Island is predominantly deciduous forest with a few small herbaceous patches where vegetation was disturbed. Dense stands of trees (Balsam Poplar [*Populus balsamifera*], Red Ash [*Fraxinus pennsylvanica*], Manitoba Maple/Box Elder [*Acer negundo*], Eastern Cottonwood [*Populus deltoides*] and Silver/White Poplar [*Populus alba*], with a shrub layer of primarily willows and Red-osier Dogwood [*Cornus stolonifera*]), grow on the west and east portions of the island (White, 2008). The most common ground flora are Canada Goldenrod (*Solidago canadensis*), Reed Canary Grass (*Phalaris arundinacea*), Common Milkweed (*Asclepias syriaca*) and Red Raspberry (White, 2008).

There are four areas of wetland within the NWA. There is a narrow fringe of marsh vegetation dominated by Narrow-leaved Cattail (*Typha angustifolia*) and Hybrid Cattail (*Typhax glauca*) surrounding both Bald and Fox Islands (Figure 8). Bulrush (*Schoenoplectus* spp.) beds are present offshore to the east and north side of Bald Island and within small interior depressions at the southern section of the Baldhead Peninsula. These small shallow depressions, known as "panne" habitat, occur in low-lying areas between the dunes (Figure 9). The panne habitat (i.e., Great Lakes Coastal Meadow Marsh Ecosite) is very rare in Ontario and ranked G2/S2 imperiled (NatureServe, 2015; Bakowsky, 1996). The wetland habitats change over time because they are influenced by both seasonal and inter-annual water level fluctuations in Lake Ontario and Wellers Bay.



Figure 7: Bald Island, Wellers Bay National Wildlife Area, Ontario, 2012
Photo: Jeff Robinson © Environment and Climate Change Canada, Canadian Wildlife Service



Figure 8: Bald Island, Wellers Bay National Wildlife Area, 2009
Photo: Steward Hamill © Environment and Climate Change Canada, Canadian Wildlife Service



Figure 9: Panne habitat, Wellers Bay National Wildlife Area, Ontario

Photo: © Environment and Climate Change Canada, Canadian Wildlife Service

2.2 WILDLIFE

2.2.1 Birds

There is a long history of birds using the Wellers Bay area (Wellers Bay, Wellers Bay Coastal Sand Spit and Wellers Bay NWA). However, because most bird surveys cover the broader Wellers Bay area, there is limited information on bird populations specific to Wellers Bay NWA.

Numerous bird species use the sand spit and Wellers Bay as a stopover site or pass through as migrants during spring and fall. The sand spit is integral to the persistence of the high-quality marshes adjacent to the NWA and along the shores of Wellers Bay. Large numbers of ducks and geese seek shelter from Lake Ontario and feed in the shallow marshes within the bay. In 2009, ECCC-CWS migrant waterfowl surveys of Wellers Bay (includes the bay, sand spit and NWA), found approximately 22% and 14% of the total number of waterfowl in eastern Lake Ontario occurred within the Wellers Bay area in the fall and spring, respectively (EC-CWS, 2009). The most abundant waterfowl species being Greater and Lesser Scaup (*Aythya* spp.) and Canada Goose (*Branta canadensis*). Other waterfowl species found during migration were American Black Duck (*Anas rubripes*), Mallard (*Anas platyrhynchos*), Common and Red-breasted Merganser (*Mergus* spp.). ECCC-CWS mid-winter surveys found that a variety of waterfowl use eastern Lake Ontario and Wellers Bay (EC-CWS, 2012a). The most common species found were Mute Swan (*Cygnus olor*),

Long-tailed Duck (*Clangula hyemalis*), Canada Goose, Mallard and American Black Duck (EC-CWS, 2012a).

General wildlife surveys (spring and summer 2008 and 2009, and summer 2013) within the NWA reported over 50 species, including Common Yellowthroat (*Geothlypis trichas*), Warbling Vireo (*Vireo gilvus*), Wood Thrush (*Hylocichla mustelina*), Northern Harrier (*Circus cyaneus*), Least Flycatcher (*Empidonax minimus*), Willow Flycatcher (*Empidonax traillii*), Barn Swallow (*Hirundo rustica*), Bald Eagle (*Haliaeetus leucocephalus*), Osprey (*Pandion haliaetus*), Double-crested Cormorant (*Phalacrocorax auritus*), Common Tern (*Sterna hirundo*), Great Egret (*Ardea alba*), Pied-billed Grebe (*Podilymbus podiceps*), Least Bittern (*Ixobrychus exilis*), Black Tern (*Chlidonias niger*), Bufflehead (*Bucephala albeola*) and Common Goldeneye (*Bucephala clangula*) (EC-CWS, 2013; EC-CWS, 2009; Ecological Services, 2013; Hamill, 2008; Hamill, 2009).

Many species have been confirmed nesting within the NWA, including Baltimore Oriole (*Icterus galbula*), Song Sparrow (*Melospiza melodia*), Belted Kingfisher (*Megaceryle alcyon*), Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), Bank Swallow (*Riparia riparia*), Red-winged Blackbird (*Agelaius phoeniceus*), Spotted Sandpiper (*Actitis macularius*), Mallard, Wood Duck (*Aix sponsa*), Mute Swan and Caspian Tern (*Hydroprogne caspia*) (EC-CWS, 2013; Hamill, 2009).

The records of Piping Plover *circumcinctus* subspecies (*Charadrius melodus circumcinctus*) nests and migrants in the NWA are historic and predate the designation of this species as endangered in 1986 (EC-CWS, 2014). Nonetheless, there is suitable Piping Plover habitat available at the NWA, and in 2010 and 2012, Piping Plovers were observed at nearby Presqu'île Provincial Park during spring migration (EC-CWS, 2012b) and more recently, nesting in two locations on Lake Ontario (CWS pers. comm. 2015), suggesting that populations may be improving. Annual surveys are conducted at the NWA to monitor the habitat and detect the presence of Piping Plovers as they continue to recover in the Great Lakes region.

2.2.2 Mammals

Mammals reported in the NWA include Coyote (*Canis latrans*), North American Beaver (*Castor canadensis*), Raccoon (*Procyon lotor*) and White-tailed Deer (*Odocoileus virginianus*).

2.2.3 Reptiles and Amphibians

The marsh areas and shallow open water, and sandy beaches, dunes and upland areas, of the NWA provide important overwintering, egg-laying, nursery and adult feeding habitats for amphibians and reptiles.

Nine species of reptiles and amphibians have been reported within the NWA, including Eastern Garter Snake (*Thamnophis sirtalis sirtalis*), threatened Western Chorus Frog (*Pseudacris triseriata*), American Bullfrog (*Lithobates catesbeiana*), Green Frog (*Lithobates clamitans*), Northern Leopard Frog (*Lithobates pipiens*) and Eastern American Toad (*Anaxyrus americanus*) and three species of turtles (EC-CWS, 2012c; Hamill, 2009).

2.2.4 Invertebrates

The nearby wetlands in Wellers Bay produce numerous flying insects, which insectivorous bird species consume to fuel their spring and fall migrations. ECCC–CWS sampling of aquatic macroinvertebrates in Wellers Bay in 2011 indicated that the wetland complex is in good condition and comparable to other wetlands in eastern Lake Ontario (EC-CWS, 2011).

Invertebrates within the NWA have not been well inventoried or surveyed. Field visits and general wildlife surveys reported the special concern Monarch Butterfly (*Danaus plexippus*) in the NWA, sometimes in large numbers (Government of Canada, 2016; Hamill, 2009, CWS pers. comm., 2013). Areas in natural succession on the Wellers Bay Coastal Sand Spit likely provides stopover habitat for Monarchs on the shore of Lake Ontario. Large numbers of Monarchs congregate to feed and rest at nearby Prince Edward Point NWA (east of Wellers Bay NWA) during late summer and early fall on their way south to their wintering grounds (COSEWIC, 2010).

2.2.5 Fishes

The fish populations and aquatic habitat found within Lake Ontario and Wellers Bay are an important component of the food chain for a variety of wildlife, including the birds, mammals and reptiles that use the NWA. Major fish species include Walleye (*Sander vitreus*), Northern Pike (*Esox lucius*), Large and Smallmouth Bass (*Micropterus* spp.), Perch (*Perca flavescens*), Bluegill (*Lepomis macrochirus*) and Muskellunge (*Esox masquinongy*) (OMNR 2009), but also smaller at-risk species like the endangered Pugnose Shiner (*Notropis anogenus*) and special concern Bridle Shiner (*Notropis bifrenatus*) have been recorded in Wellers Bay, adjacent to the NWA (Mandrak, 2010).

Fish habitat in Wellers Bay NWA is limited to a small area of wetland and shallow water around Bald and Fox islands, and small panne habitat areas along the sand spit that lie between the high water mark and the water's edge that may become inundated during periods of high water in Lake Ontario.

2.3 SPECIES AT RISK

Ten known species at risk, listed under the federal *Species at Risk Act* (SARA), have been reported at the Wellers Bay NWA, including three reptiles, one amphibian, two fishes, one insect and three birds, one of which has not been observed in over 40 years (Table 3; EC-CWS, 2014;

Government of Canada, 2016). To date, critical habitat⁴ has been identified under SARA for Pugnose Shiner and Western Chorus Frog (Fisheries and Oceans Canada, 2012; EC 2015). It is anticipated that critical habitat may be identified within the NWA for other species at risk (e.g., Least Bittern) and including sensitive species⁵.

Also observed at the NWA are Barn Swallow, Eastern Meadowlark (*Sturnella magna*) and Wood Thrush, designated as threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) (Table 3; COSEWIC, 2016; EC-CWS, 2014; Ecological Services 2013; Hamill, 2009). Not listed under SARA but of local importance and reported at this site are the Bald Eagle and Black Tern, listed as special concern under the Ontario *Endangered Species Act, 2007* (Table 3; EC-CWS, 2014; Government of Ontario, 2012; Hamill, 2009). Appendix 1 provides links to more information on federal and provincial species at risk legislation in Ontario.

Table 3: Species at Risk recorded at the Wellers Bay National Wildlife Area

Common and Scientific Names of Species	Status			Presence or Potential of Presence ^d
	Canada		Ontario	
	SARA ^a	COSEWIC ^b	ESA, 2007 ^c	
Invertebrates				
Monarch <i>Danaus plexippus</i>	Special Concern	Special Concern	Special Concern	Confirmed
Fishes				
Bridle Shiner <i>Notropis bifrenatus</i>	Special Concern	Special Concern	Special Concern	Confirmed
Pugnose Shiner <i>Notropis anogenus</i>	Endangered	Threatened	Threatened	Confirmed
Amphibians				
Western Chorus Frog (Great Lakes-St Lawrence River-Canadian Shield population) <i>Pseudacris triseriata</i>	Threatened	Threatened	Not at Risk	Confirmed
Reptiles				
<sensitive species>	<sensitive species>	<sensitive species>	<sensitive species>	<sensitive species>
<sensitive species>	<sensitive species>	<sensitive species>	<sensitive species>	<sensitive species>
Snapping Turtle <i>Chelydra serpentina</i>	Special Concern	Special Concern	Special Concern	Confirmed

⁴ SARA: “critical habitat” means the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species’ critical habitat in the final recovery strategy or in an action plan for the species. (Government of Canada, 2002; <http://laws-lois.justice.gc.ca/PDF/S-15.3.pdf>).

⁵ Species names have been withheld from this Management Plan where there are location sensitivities (e.g., s.124 of the *Species at Risk Act*) or not in the best interest of the species.

Common and Scientific Names of Species	Status			Presence or Potential of Presence ^d
	Canada		Ontario	
	SARA ^a	COSEWIC ^b	ESA, 2007 ^c	
Birds				
Bald Eagle <i>Haliaeetus leucocephalus</i>	No status	Not at Risk	Special Concern	Confirmed
Bank Swallow <i>Riparia riparia</i>	No status	Threatened	Threatened	Confirmed
Barn Swallow <i>Hirundo rustica</i>	No status	Threatened	Threatened	Confirmed
Black Tern <i>Chlidonias niger</i>	No status	Not at Risk	Special Concern	Confirmed
Eastern Meadowlark <i>Sturnella magna</i>	No status	Threatened	Threatened	Confirmed
Eastern Whip-poor-will <i>Antrostomus vociferus/Caprimulgus vociferus</i>	Threatened	Threatened	Threatened	Potential
Eastern Wood-pewee <i>Contopus virens</i>	No status	Special Concern	Special Concern	Confirmed
Least Bittern <i>Ixobrychus exilis</i>	Threatened	Threatened	Threatened	Confirmed
Piping Plover <i>circumcinctus</i> subspecies <i>Charadrius melodus circumcinctus</i>	Endangered	Endangered	Endangered	Potential
Wood Thrush <i>Hylocichla mustelina</i>	No status	Threatened	Special Concern	Confirmed

^a SARA (*Species at Risk Act*): Extinct, Extirpated, Endangered, Threatened, Special Concern, Not at risk (assessed and deemed not at risk of extinction) or No status (not rated).

^b COSEWIC (Committee on the Status of Endangered Wildlife in Canada): Extinct, Extirpated, Endangered, Threatened, Special Concern, Not at Risk (assessed not at risk), or Data Deficient (available information is insufficient to resolve eligibility for assessment or permit an assessment of the wildlife species' risk of extinction).

^c ESA, 2007 (*Endangered Species Act, 2007*): Ontario Ministry of Natural Resources (Species at Risk in Ontario [SARO] List): Extirpated, Endangered, Threatened, or Special Concern.

^d "Confirmed", "probable" or "potential."

2.4 NON-NATIVE AND INVASIVE SPECIES

There is a significant number of non-native and invasive plant and animal species within the Wellers Bay NWA, including Tartarian Honeysuckle (*Lonicera tatarica*), Common Buckthorn (*Rhamnus cathartica*), White/Silver Poplar (*Populus alba*), non-native Phragmites/Common Reed (*Phragmites australis* subsp. *australis*), Purple Loosestrife (*Lythrum salicaria*), Mute Swan and Double-crested Cormorant.

Some plant species have been well-established over decades and, in essence, are integrated into existing habitats. However, problems arise with aggressive species that have the

ability to rapidly spread and displace native species and decrease biodiversity: two plants of particular concern at Wellers Bay NWA are non-native Phragmites/Common Reed and White/Silver Poplar. Disturbance from foot traffic (e.g., DND UXO sweeps and trespassing) offer opportunities for invasive species to spread.

3 MANAGEMENT CHALLENGES AND THREATS

3.1 UXO HAZARDS AND RISKS

There is an ongoing risk to visitors due to UXO on the NWA. The risks are low in frequency of occurrence but very high in potential severity. Mitigation of risks of UXO are difficult at Wellers Bay NWA because of the dynamic nature of the sand spit, due to wind and water action, which results in the constant migration of UXO to the surface and subsurface of the beach. An exhaustive clearance of UXO would entail severe disruption to the ecology of the NWA, including destruction of habitat and destabilization of dune systems. Even an exhaustive clearance would not completely remove the UXO hazard. The site will continue to require UXO surface clearance sweeps to safely remove and monitor UXO, public education and communications. Authorized visitors (e.g., ECCC-CWS and DND staff) are subject to mandatory UXO briefings and health and safety protocols.

3.2 RESTORATION AND MANAGEMENT OF IMPORTANT HABITATS AND WELLERS BAY COASTAL SAND SPIT

The physical setting of the Wellers Bay NWA, its fragile dune ecosystem and the presence of UXO, presents management challenges, particularly for the restoration and management of habitats used by wildlife in the nearshore beach and dunes (including species at risk). The sand beach and dunes are fragile ecosystems that may be degraded or destroyed when subjected to all but very light human activity. It is a challenge to balance the need for site visits (i.e., biological surveys and monitoring, site management, UXO detection, monitoring and clearance, mitigation of health and safety risks and enforcement), with the need to prevent and limit human disturbance of the vegetation, wildlife and habitats. The fragile beach and dune ecosystem, combined with the presence of UXO, limit management options to maintain, improve and protect wildlife habitat. This includes the ability to monitor lake-wide threats such as the incidence of botulism, disease, non-native and invasive species (terrestrial and aquatic), extreme weather, non-point source pollution, and toxic chemicals on migratory birds and their habitat. These threats will have an impact on wildlife and habitat at Wellers Bay NWA, as they do throughout the lower Great Lakes.

In addition, signs used to convey NWA boundaries, prohibit access and UXO warning are subject to wind and weather and are often lost or damaged during extreme storm events.

3.3 UNAUTHORIZED PUBLIC ACCESS

Unauthorized public access and use is a significant health and safety concern, undermines the conservation goals for the NWA, and creates additional pressures on resources to prevent prohibited activities and mitigate the impacts. This includes increased demands on ECCC-CWS as

well as Environment and Climate Change Canada's Wildlife Enforcement Directorate staff (ECCC–WED).

Public access has always been prohibited at the Wellers Bay NWA because of the safety risks associated with the presence of UXO on the NWA. It was a condition of the land transfer from DND to CWS. The condition is also appropriate to protect the fragile beach and dune ecosystem and wildlife from disturbance, and in line with the purpose of NWAs under the CWA.

Since the NWA was established, the population in nearby urban centres and public recreation in Lake Ontario have increased considerably. As the population of southeastern Ontario continues to grow, it is expected that development pressures, tourism and associated recreation activities will also increase. Protected areas are regularly promoted as destinations by external interests, often without a full understanding of the health and safety risks for visitors, sensitivities of wildlife and habitats to human disturbance, restrictions on public access and use, and regulations by which the area is protected. For example, visits to beaches (e.g., Baldhead Beach in Wellers Bay NWA) are among the listed attractions in tourism promotional and online materials. This type of information may inadvertently promote illegal access and activities in the NWA. Visitors to eastern Lake Ontario and Wellers Bay come from a large geographic area, making compliance promotion materials and information difficult to tailor and deliver to various audiences. The incidence of illegal access (visitors without authorization or permits) to the NWA and prohibited activities in the NWA are frequent, particularly in the summer. Examples of illegal access and prohibited activities in the Wellers Bay NWA include access to the beach and dunes by foot, boat or ATV, removal of and damage to signs, hiking, picnicking, livestock grazing, horseback riding, fires, volleyball net posts staked in the ground, and garbage dumping. The beaches on both sides of the peninsula are regularly used by swimmers and sunbathers, and paths across the middle and extending from the mainland into the NWA exist from frequent unauthorized use. Use impacts include damage and loss of dune vegetation to the increased erosion.

Part of the management challenge at Wellers Bay NWA is a public misconception that the UXO risks are low. Risk to the public is low when based on no public access and with the implementation of DND's risk management measures (DND, 2011). It does not account for the current rate and number of trespassing events. The potential severity of risk to the public from UXO remains very high. As such, public access will remain a prohibited activity at Wellers Bay NWA.

3.4 NON-NATIVE AND INVASIVE PLANTS

A number of non-native and invasive plant species occur within the NWA (e.g., Tartarian Honeysuckle [*Lonicera tatarica*], Common Buckthorn [*Rhamnus cathartica*], White/Silver Poplar,

non-native Phragmites/Common Reed and Purple Loosestrife). However, the distribution and abundance of non-native and invasive plants within the NWA have not been studied.

Two species of particular concern within the NWA are non-native Phragmites and White/Silver Poplar, because these species can spread rapidly, outcompete native species and decrease biodiversity, and can be difficult to remove or control once established. Phragmites is established in the NWA at the north end of Baldhead Peninsula and appears to be expanding. Regular monitoring is required to track and manage the expansion of these species. Management may be successful if implemented while the stands are still relatively small.

Developing and implementing effective management options to reduce the impacts of non-native and invasive plant species is often hampered by limited knowledge of the species and the ability of many of these species to adapt to growing conditions in Ontario.

3.5 NON-NATIVE, INVASIVE AND OVERABUNDANT WILDLIFE AND FERAL AND DOMESTIC ANIMALS

Non-native, invasive, and overabundant wildlife and feral and domestic animals that can pose challenges for management of the NWA include birds such as Mute Swans, Double-crested Cormorants and wildlife such as skunks, raccoons and coyotes, feral cats and dogs, and domestic livestock and horses.

While the number of non-native, invasive and feral and domestic animals on the NWA is likely small and infrequent, these animals disrupt natural habitats through soil disturbance and contamination, trampling of vegetation on the beaches and dunes, increasing erosion of dunes, and spreading non-native and invasive plants (e.g., livestock and horses transport on hooves and in manure). In addition, some animals (e.g., raccoons and feral cats) can exert significant predation pressure on native wildlife through nest destruction and eating eggs and individuals (i.e., birds and turtles), as well as transfer disease and pathogens to wild animals. Ongoing monitoring and active management may be required.

3.6 MOTORIZED WATERCRAFTS

The waters surrounding Wellers Bay NWA are popular for recreational boating, fishing and waterfowl hunting. Boating impacts on lakeshore ecology include wake effects, wildlife disturbance, noise and pollution. Many animals respond to human disruptions by altering their behavior and location. Wave action and noise from boats and jet skis, and human presence on shore and in the nearshore (1.5 km from shore), are a significant concern during the spring and summer, particularly for birds and turtles that use the sand beach and dunes for nesting. Such disturbance may cause adult birds to flush off their nest or, in some cases, abandon nests, eggs and young, increasing

vulnerability from predation. A high wake can swamp nests, destroying or damaging nests and eggs. The presence of humans and domestic dogs may cause turtles to delay nesting or abandon nests. Adult turtles and hatchlings are also vulnerable to injury and fatality due to strikes from boat propellers.

3.7 CLIMATE VARIABILITY AND PROJECTED CLIMATE CHANGE

Fluctuations in climate, over seasons and years, influence the growth and structure of habitat communities available for wildlife on the NWA. In addition, current climate change models predict that long-term continuous change to average weather conditions will lead to warmer air temperatures, lower lake levels and warmer water temperatures due to a decrease in winter ice cover and subsequent increased evaporation. Although the impacts of climate change on the habitats and wildlife on the NWA are unknown, it is expected that there will be changes in the distribution, range and breeding behaviours of migratory birds and wildlife using the NWA.

4 GOALS AND OBJECTIVES

4.1 VISION

The long-term vision for the Wellers Bay NWA is conservation: to conserve habitat for migratory birds and native wildlife and plants, including species at risk.

In the interest of public safety and to protect the ecological values of the site, ECCC-CWS will continue to prohibit public access to the Wellers Bay NWA.

4.2 GOALS AND OBJECTIVES

Goal 1: Maintain and protect sand spit, dune, upland deciduous forest, and wetland habitats, particularly for migratory birds and native plants and wildlife, including species at risk.

Objectives:

- 1.1 Naturally occurring coastal processes and plant succession will persist and occur unimpeded over the long term (10 years).
- 1.2 Detect and reduce the extent and/or rate of expansion of non-native and invasive plants, within the next five years, in areas determined to be causing significant problems for native plants and wildlife, particularly species at risk and their habitats.
- 1.3 Reduce the impacts of feral and domestic animals and overabundant wildlife on the diversity of native flora and fauna, within the next five years, if the species are determined to be causing significant problems for native plants and wildlife, particularly species at risk and their habitats.
- 1.4 Reduce the number of unauthorized access and the incidents of prohibited activities within the NWA.
- 1.5 Manage and monitor authorized activities (e.g., ECCC-CWS site management and research, ECCC-WED enforcement, and DND UXO investigations and clearance activities), to reduce ecological impacts.

Goal 2: Reduce risks to public health and safety due to the presence of UXO within the NWA.

Objective:

- 2.1 Implement a coordinated ECCC/DND strategy to reduce UXO risks, including the establishment and implementation of procedures and training to reduce risks to

authorized visitors from potential hazards posed by UXO, and to promote general public awareness.

2.2 Ensure ECCC-CWS capacity to maintain relationships with stakeholders (e.g., neighbours, local planning authorities, government agencies (DND and OMNRF), and enforcement personnel), participate in community and stakeholder meetings, and promote public awareness and compliance with general prohibitions.

Table 4. Management Approaches for Wellers Bay National Wildlife Area

Management Challenges and Threats	Goals and Objectives	Management Approaches (actions, including level of priority*)
<ul style="list-style-type: none"> • Disturbance (e.g., increased erosion, trampling) to fragile sand beach and dune environment and wildlife from prohibited activities. • Fragmentation of habitats and travel corridors for migrant wildlife as a result of development pressures and human disturbance. • Decreased biodiversity due to the expansion of invasive and/or non-native plant and animal species. • Habitat degradation and predation pressures by feral and domestic animals. • Unauthorized and authorized access causing disturbance to wildlife and habitat (particularly staging and nesting birds, species at risk). • Data deficiencies about site-specific habitat requirements for species at risk. 	<p>Goal 1: Maintain and protect sand spit, dune, upland deciduous forest, and wetland habitats, particularly for migratory birds and native plants and wildlife, including species at risk.</p> <p>1.1 Naturally occurring coastal processes and plant succession will persist and occur unimpeded to support populations of migratory birds and native plants including species at risk.</p> <p>1.2 Detect and reduce the extent and/or rate of expansion of non-native and invasive plants, within the next five years, in areas determined to be causing significant problems for native plants and wildlife, particularly species at risk and their habitats.</p> <p>1.3 Reduce the extent of negative impacts of feral and domestic animals and overabundant wildlife on the diversity of native flora and fauna.</p> <p>1.4 Reduce the number of unauthorized access and the incidents of prohibited activities within the NWA.</p> <p>1.5 Manage and monitor authorized activities (e.g., ECCC-CWS site management and research, ECCC-WED enforcement, and DND UXO investigations and clearance activities), to reduce ecological</p>	<ul style="list-style-type: none"> • Allow natural processes to occur undisturbed and unimpeded as much as possible. • Authorized visitors (e.g. ECCC-CWS, DND, ECCC-WED, <i>Canada Wildlife Act</i> permit holders) receive mandatory training or are accompanied by trained personnel to avoid and reduce disturbance to wildlife and habitat. (1) • Conduct biological inventory for the NWA every six years to report on biological diversity and threats. (2) • Implement recommendations from recovery documents (recovery strategies, action plans, management plans, etc.) for survival and recovery of species at risk, where feasible. (1) • Monitor habitat change (i.e., extent and quality) of wetland, prairie and upland vegetation communities, including the extent of invasive species (e.g. non-native Phragmites) using aerial photography and site visits. (3) • Implement erosion control (e.g., revegetation, sediment traps) to retain sand and promote dune restoration, where appropriate. (2) • Undertake targeted control of non-native and invasive species as appropriate. (3) • Control and remove over-abundant, non-native and invasive wildlife when necessary. (2) • Publish public notices annually in local newspapers and post public notices at local campgrounds and boat launches, and on northeast and southwest boundaries of NWA to promote compliance with <i>Wildlife Area Regulations</i>. (1) • Engage ECCC-WED when required. (1) • Review of collaborative arrangements, agreements and permits; revise and renew

Management Challenges and Threats	Goals and Objectives	Management Approaches (actions, including level of priority*)
	impacts.	as appropriate. (1) • Complete outreach and education initiatives within neighbouring communities. (2)
<ul style="list-style-type: none"> • UXO risk to visitors. • Public misconception or mistrust of high UXO risks and prohibited public access. • Ongoing demand for public access and recreation within Wellers Bay NWA. • Communicating UXO and safety risks to various audiences. • Unauthorized access causing disturbance to wildlife and habitat (particularly staging and nesting birds, species at risk). 	<p>Goal 2: Reduce risks to public health and safety due to presence of UXO within the NWA.</p> <p>2.1 Implement a coordinated ECCC/DND strategy to reduce UXO risks, including the establishment and implementation of procedures and training to reduce risks to authorized visitors from potential hazards posed by UXO, and to promote general public awareness.</p> <p>2.2 Ensure ECCC-CWS capacity to maintain relationships with stakeholders (e.g., neighbours, local planning authorities, government agencies (DND and OMNRF), and enforcement personnel), participate in community and stakeholder meetings, and promote public awareness and compliance with general prohibitions.</p>	<ul style="list-style-type: none"> • Continue to implement coordinated DND/ECCC UXO strategy to include: cooperative posting (i.e., signs, public notices, prohibition of entry and activities by public), public meetings, UXO sweeps and removal, as necessary, UXO reporting procedures, and mandatory Occupational Health and Safety training, and UXO Safety briefings for authorized visitors. (1) • ECCC-CWS conduct regular site visits to monitor and maintain signs and assess impacts of human activities on wildlife and habitat, and mitigate as necessary. (1) • ECCC-WED conduct regular site visits. (1) • Document and prepare annual summary of prohibited activities and authorized activities on the NWA and assess potential and cumulative impacts on wildlife and habitat. (1) • Use signage and public notices to promote compliance and reduce unauthorized access and prohibited activities. (1) • Complete outreach and education initiatives within neighbouring communities. (2)

* Level of Priority: 1 (from 0 to 3 years), 2 (from 4 to 6 years), 3 (from 7 to 10)

4.3 EVALUATION

Annual monitoring will be performed within the limits imposed by the availability of financial and human resources. The management plan will be reviewed 5 years after its initial approval and reviewed and updated every 10 years thereafter. The evaluation will take the form of an annual review of monitoring data obtained from the monitoring, surveys and research outlined below. This monitoring will be used to establish priorities for action and to allocate resources.

5 MANAGEMENT APPROACHES

The overall management philosophy for Wellers Bay NWA is to protect the ecological values of the site in order to ensure the continued existence of wildlife and plants, including species at risk. Active management will be kept to a minimum to limit disturbance to wildlife and fragile beach and dune ecosystems. Management will be undertaken only to sustain habitats and biodiversity, monitor UXO and mitigate the effects of human disturbance, consistent with the International Union for the Conservation of Nature classification as a Category IV Habitat/Species Management Area (Dudley, 2008). Public safety, species habitat use, timing windows, critical habitats and other constraints will be considered within all management actions.

This section and Table 4 contain a description of approaches that could be used in the management of the Wellers Bay NWA. However, management actions will be determined during the annual work planning process and will be implemented as human and financial resources allow.

5.1 HABITAT PROTECTION AND MANAGEMENT

Habitat management goals and objectives for the Wellers Bay NWA are based on minimal intervention in the natural processes. There has been limited active habitat or vegetation management at the NWA. Rather, natural processes occur unimpeded, with the primary focus of habitat protection to ensure that human activities do not interfere with natural sand beach and dune dynamics and habitats for migratory birds and species at risk.

ECCC-CWS will not interfere with natural forces that act on the sand spit and dunes. However, mitigation measures may be contemplated if there is a threat due to human disturbance or destruction of the vegetation. Erosion control may continue on a limited scale by means of revegetation or placement of sediment traps to retain sand and promote restoration of the dunes and beach.

ECCC-CWS will continue to work with DND to monitor coastal processes and risks of UXO. Authorized visits to the sand spit and dunes and low-impact studies will be kept to a minimum and monitored over time to assess effects of disturbance to wildlife and habitat.

Regular monitoring will be conducted to track changes in vegetation community density and extent through vegetation mapping using aerial photography and occasional site surveys. Periodic biological inventories on the NWA, as well as collaborative monitoring (e.g. Coastal Habitat Assessment and Monitoring Program [CHAMP], bird monitoring programs) occurring within Wellers Bay will assist reporting on biological diversity and threats.

It is anticipated that additional critical habitat may be identified for several species during the term of this management plan (Table 3). ECCC-CWS will implement recommendations from recovery documents for survival and recovery of species at risk where feasible.

Non-native or invasive plants

Actions to control non-native or invasive plants have not been undertaken at the NWA. The extent and rate of expansion of non-native or invasive plants will be periodically assessed to evaluate impacts and activities to manage and reduce will be considered only if the species are determined to be causing significant problems for native plants and wildlife, particularly species at risk and their habitats.

5.2 WILDLIFE MANAGEMENT

5.2.1 Waterfowl and Migratory Birds

Protection and conservation of habitat for migratory birds, species at risk and other wildlife will be achieved mainly by limiting human disturbance and providing a refuge for species during sensitive breeding, nesting and/or staging periods of their lifecycle. Migratory birds and species at risk will be monitored as part of broader survey efforts, and threats will be assessed. Active management actions may be undertaken if the need arises.

Species at risk will be surveyed to assess population size and distribution, potential and existing threats, and to determine and implement best management practices and recovery actions.

5.2.2 Overabundant Wildlife and Feral and Domestic Animals

Actions to control overabundant wildlife and feral and domestic animals have not been undertaken at the NWA. The need for non-native and invasive species management will be assessed upon completing site visit and survey work. Activities to control non-native and invasive species will be considered only if the species are determined to be causing significant risk for habitat and wildlife within the NWA.

Where routine monitoring of the NWA identifies particular problems with domestic or feral animals, removal of problem animals may be undertaken by ECCC-CWS, and incidents of domestic livestock at large or people releasing or feeding wild or feral animals will be reported to ECCC-WED.

5.3 SPECIES AT RISK

Species at risk and habitat requirements for species' persistence, breeding, stopover and recovery within the NWA will be identified and protected. Today, Wellers Bay NWA provides year-round and seasonal habitat for ten species listed under SARA. These species are particularly susceptible to human disturbance and non-compatible land use activities. Recovery strategies and

management and action plans for species at risk will be key drivers of management activities at the NWA. Management will be adapted as critical habitat is identified within the NWA and more recovery strategies and action plans are completed and posted on the *Species at Risk Act* Public Registry.

Individual species at risk will be managed in an integrated approach with other species at risk and other wildlife. Overlapping and competing habitat needs will be evaluated, and habitat management will be based on providing the greatest amount of benefit to the greatest number of species at risk, while considering high-priority species (those at greatest risk).

5.4 MONITORING AND SURVEYS

Monitoring and surveys at the Wellers Bay NWA will be kept to a minimum to limit disturbance to wildlife and habitats, allow the site to recover from previous disturbance and minimize the health and safety risks to investigators from UXO. Monitoring will be carried out in a manner that contributes to meeting recovery strategy and action plan objectives and requires careful planning and a coordinated approach. Ongoing monitoring needs are as follows, and will be conducted on an as needed basis:

1. Monitor distribution and abundance of migratory birds (particularly waterfowl, land birds and water birds), amphibians, reptiles and species at risk using established monitoring and survey protocols.
2. Monitor the extent, distribution and ecological integrity of wetlands, beach and dune, panne, aquatic, and forest habitats, using established monitoring and survey protocols.
3. Monitor the quality and quantity of habitat available for migrating waterfowl and species at risk (e.g., critical habitat as identified in recovery documents).
4. Monitor, at select locations, the volume of illegal access and prohibited activities, and the effects of human disturbance (authorized and unauthorized) to coastal processes (erosion and accretion) and vegetation (sand beach and dunes).
5. Measure the occurrence, distribution and density of non-native and invasive species (e.g., Silver Poplar, non-native Phragmites, Mute Swan and Double-crested Cormorant), and feral and domestic animals (e.g., dogs and livestock).
6. Annual DND Legacy Sites Program surface sweeps to monitor the presence of UXOs.

5.5 RESEARCH

Environment and Climate Change Canada may support research activities within and around the NWA if their results are likely to provide data and information on topics of interest, including waterfowl and migratory bird population monitoring, understanding coastal processes and the risks

posed by climate change to sand dune and beach habitats within the NWA, protection or recovery of species at risk, habitat restoration, the effects of climate change and water level variability on coastal processes (within the NWA along the Lake Ontario and Wellers Bay shorelines) including assessing the vulnerability of sand spit, dune, upland and wetland habitats, reducing illegal public access to and prohibited activities on NWA lands, and the effects of invasive and non-native species on habitat and wildlife.

Research activities will be considered when the results will not interfere with the conservation of wildlife, will not likely cause significant adverse environmental effects and where public safety risks can be mitigated. ECCC–CWS CWA permits are required under the *Wildlife Area Regulations* to conduct research and monitoring in the Wellers Bay NWA. All research requests must be made in writing. Refer to Appendix 2: Canadian Wildlife Service (Ontario): Conditions of Research Requests (in National Wildlife Areas). To obtain a permit to conduct research in Wellers Bay NWA and to receive instructions concerning guidelines for a research proposal, please contact:

Environment and Climate Change Canada - Canadian Wildlife Service
Ontario Region Permit Office
867 Lakeshore Road
Burlington ON L7R 4A6
Tel.: 905-336-4464
Fax: 905-336-4587
Email: wildlife.ontario@canada.ca

Upon completion of the activity, permit holders are required to submit all data/information collected to ECCC–CWS, as a condition of the permit.

5.6 MULTI-AGENCY LAND MANAGEMENT PARTNERSHIPS

Efforts to maintain or increase capacity of ECCC-CWS staff to establish and maintain relationships with government agencies (such as DND, ECCC-WED and OMNRF), neighbours, local planning authorities, and enforcement personnel will facilitate a coordinated approach for the management and conservation of Wellers Bay NWA.

ECCC-CWS will identify opportunities to address current and future management challenges and threats, including waterfowl conservation, multi-species conservation, habitat restoration, control of invasive and non-native species, adaptations to climate change and variability, and species at risk recovery.

5.7 PUBLIC INFORMATION AND OUTREACH

Public awareness and compliance with prohibitions on entry and use of the NWA is a key component to successful implementation of the Wellers Bay NWA management plan. Increasing ECCC-CWS staff capacity for compliance and promotion activities is important to improve public relations, raise awareness and reduce mis-information and misconception.

ECCC-CWS public information and outreach activities are designed to enhance public understanding and appreciation of the important conservation role of the Wellers Bay NWA for protection of the Wellers Bay Coastal Sand Spit, wetlands outside of the NWA in Wellers Bay, migratory birds and other wildlife including species at risk, and to encourage public cooperation in wildlife conservation.

Signage, notices and outreach materials will be used to increase awareness and promote voluntary cooperation and compliance with the *Canada Wildlife Act* and *Wildlife Area Regulations*, which prohibit domestic animals and the release of domestic or wild animals within the NWA.

ECCC-CWS and DND established a cooperative posting strategy that simultaneously brings to public attention the dangers of the area and its NWA status. Public information notices are published annually by ECCC-CWS (Appendix 3) and DND (Appendix 4). ECCC-CWS and DND signs are posted in the same locations within the NWA (see Section 1.5).

Signage at the Wellers Bay NWA and communication and outreach materials will be reviewed and updated periodically to ensure that they provide clear direction to visitors, partners and the public on the prohibition of entry, prohibited activities and requirements for permits, and health and safety hazards within the NWA. Awareness is also generated through a CWS website and via printed materials available on the Environment and Climate Change Canada protected area website at www.ec.gc.ca/ap-pa.

6 AUTHORIZATIONS AND PROHIBITIONS

In the interest of wildlife and their environment, human activities are minimized and controlled in NWAs through the implementation of the *Wildlife Area Regulations*. These regulations set out activities that are prohibited (subsection 3[1]) in the wildlife area and provide mechanisms for the Minister of the Environment and Climate Change to authorize certain activities, which are otherwise considered prohibited, to take place in NWAs. The regulations also provide the Minister with the authority to prohibit entry into NWAs.

Activities within an NWA are authorized where notices have been posted at the entrance to or along the boundaries of the NWA or when notices have been published in local newspapers. All activities in an NWA are prohibited unless a notice has been posted or published authorizing the activity to take place. However, in addition to notices, certain activities may be authorized by obtaining a permit from the Minister of the Environment and Climate Change.

The Minister has the legislative authority to permit activities in the NWA and in accordance to the *Canada Wildlife Act* (s. 12(g)) and *Wildlife Area Regulations* (s. 3(2),4,and 6) and the *Species at Risk Act* (s.73 and 74). A number of permitted uses are described in Section 6.3 below.

6.1 PROHIBITION OF ENTRY

Under the *Wildlife Area Regulations*, the Minister of the Environment and Climate Change may publish a notice in a local newspaper or post notices at the entrance of any wildlife area or on the boundary of any part thereof prohibiting entry to any NWA or part thereof. These notices can be posted when the Minister is of the opinion that entry is a public health and safety concern and when entry may disturb wildlife and their habitat.

For Wellers Bay NWA, entry is not allowed (prohibited) to the entire NWA.

Notices and signs prohibiting entry and warning of the UXO risks are posted around the perimeter of the NWA and/or published in local newspapers. Unauthorized boats are prohibited from landing on Wellers Bay NWA at all times. There are no authorized public activities at Wellers Bay NWA.

Note: If there is a discrepancy between the information presented in this document and the notice, the notice prevails because it is the legal instrument prohibiting entry.

6.2 AUTHORIZATIONS

Permits and notices authorizing an activity may be issued only if the Minister is of the opinion that the activity is scientific research relating to wildlife or habitat conservation, that the activity

benefits wildlife and their habitats or will contribute to wildlife conservation, or that the activity is not inconsistent with the purpose for which the NWA was established and is consistent with the most recent management plan.

The Minister may also add terms and conditions to permits in order to minimize the impact of an activity on wildlife and wildlife habitat. Permit requests may be denied if in the opinion of the management authority the proposed activity is not in the best interest of the protected area or be revoked if the terms and conditions are not met. Refer to Appendix 2 for conditions of research permits in Wellers Bay NWA.

All requests for permits or authorizations for Wellers Bay NWA must be made in writing at least 7 weeks prior to the date of requirement to the following address:

Environment and Climate Change Canada - Canadian Wildlife Service
Ontario Region Permit Office
867 Lakeshore Road
Burlington ON L7R 4A6
Tel.: 905-336-4464
Fax: 905-336-4587
Email: wildlife.ontario@canada.ca

For further information, please consult the Environment and Climate Change Canada Policy when Considering Permitting or Authorizing Prohibited Activities in Protected Areas Designated Under the Canada Wildlife Act and Migratory Birds Convention Act, 1994 (December, 2011) (Environment Canada, 2011). This policy document is available on the Environment and Climate Change Canada Protected Areas website at www.ec.gc.ca/ap-pa/.

6.3 EXCEPTIONS

The following activities will be exempt from the requirements for permitting and authorizations under the *Wildlife Area Regulations*:

- Activities related to public safety, health or national security that are authorized by or under another Act of Parliament or that are authorized under the *Health of Animals Act* and the *Plant Protection Act* to protect the health of animals and plants;
- Activities related to routine maintenance of National Wildlife Areas, implementation of management plans, and enforcement activities conducted by an officer or employee of Environment and Climate Change Canada.

For Wellers Bay NWA, exceptions to the prohibited activities include, but are not limited to:

- DND UXO assessment activities and clearance operations;

- Research, surveys and monitoring of species and habitat.

These activities are administered through permits and formal collaborative agreements.

6.4 OTHER FEDERAL AND PROVINCIAL AUTHORIZATIONS

Depending on the type of activity, other federal or provincial permits or authorizations may be required to undertake an activity in this NWA. Contact your regional federal and provincial permitting office for more information:

Federal:

Canada Wildlife Act, Wildlife Area Regulations, Migratory Birds Convention Act, 1994, and Species at Risk Act:

Environment and Climate Change Canada - Canadian Wildlife Service

Ontario Region Permit Office

867 Lakeshore Road

Burlington ON L7R 4A6

Telephone: 905-336-4464

Fax: 905-336-4587

Email: wildlife.ontario@canada.ca

Fisheries Act and Species at Risk Act:

Fisheries and Oceans Canada

Central and Arctic Region

520 Exmouth Street

Sarnia, ON N7T 8B1

Telephone: 519-383-1813 or

Toll-Free 1-866-290-3731

Fax: 519-464-5128

Provincial:

Fish and Wildlife Conservation Act, Endangered Species Act:

Ontario Ministry of Natural Resources and Forestry

Natural Resources Information Centre

300 Water St

Peterborough ON K9J 8M5

Telephone: 1-800-667-1940 (toll-free)

TTY: 1-866-686-6072

7 HEALTH AND SAFETY

All reasonable efforts will be made to protect the health and safety of the public, including adequately informing authorized visitors of any known or anticipated hazards or risks. Authorized visitors (including researchers and contractors) must make all reasonable efforts to inform themselves of risks and hazards and must be prepared and self-sufficient. Natural areas contain some inherent dangers, and proper precautions must be taken by visitors, recognizing that Environment and Climate Change Canada staff neither regularly patrol, nor offer services for visitor safety in NWAs.

Public access to the Wellers Bay NWA is prohibited. Thus, ECCC-CWS and DND take precautions to inform the public of the public health and safety risks due to UXO on the site, and the *Wildlife Area Regulations* of the *Canada Wildlife Act* are strictly enforced. There is a risk of death or serious injury to persons entering Wellers Bay NWA from hazards posed by UXO, including bombs and other munitions. People are advised not to touch any UXO or other suspicious objects and to report all suspicious objects by calling 911 or local police (DND, 2016; www.forces.gc.ca/en/business-unexploded-ordnance/index.page).

Authorized visitors (persons who have been issued a permit) must obtain Occupational Health and Safety training and an UXO safety briefing prior to their visit or be accompanied by trained personnel, make all reasonable efforts to inform themselves of risks and hazards, and be prepared and self-sufficient. Authorized visitors to the Wellers Bay NWA may encounter severe weather (e.g., wind, heat, storms), uneven and unstable ground, and access to the NWA can be difficult. In general, authorized visitors must seek and heed expertise to operate in these environments and demonstrate that they have the required training, certification and means to access the site safely.

In case of emergency or to report a UXO or suspect objects at Wellers Bay NWA, call 911 immediately.

If a UXO is found, do not touch or disturb it. Leave the area and dial 911.

Do not use a cellphone near the UXO because the cellphone may cause the device to explode.

In the case of environmental emergencies, contact will be made with the Canadian Environmental Emergencies Notification System at the following address:

Ontario Spills Action Centre

Ontario Ministry of the Environment

416-325-3000 or 1-800-268-6060

Any emergency should be reported immediately to the appropriate responding authorities. Reports should include the date, time and nature of the incident/accident, contact names and information of the reporting party (for follow-up information), and other relevant details. Multiple authorities should be advised as soon as possible, if the situation warrants. Refer to Appendix 5 for a list of contacts.

Non-emergency issues related to security or health and safety issues for Wellers Bay NWA should be reported to:

Environment and Climate Change Canada – Canadian Wildlife Service

Ontario Region

4905 Dufferin Street

Toronto ON M3H 5T4

Telephone: 1-800-668-6767

Email: ec.enviroinfo.ec@canada.ca

8 ENFORCEMENT

The management of NWAs is based on three Acts and the associated regulations:

- *Migratory Birds Convention Act, 1994* and *Migratory Birds Sanctuary Regulations*
- *Canada Wildlife Act* and *Wildlife Area Regulations*
- *Species at Risk Act*

To promote compliance with the *Canada Wildlife Act* and *Wildlife Area Regulations* (Appendix 2), ECCC-CWS posts signs along the perimeter of the NWA prohibiting entry to the NWA.

ECCC-WED is responsible for enforcement of federal and provincial wildlife laws, and will perform on-site inspections and investigations, patrol the NWA to promote compliance, and prevent access and prohibited activities within the NWA. A goal of the enforcement program is to control and reduce the occurrence of unauthorized and prohibited activities in the NWA.

ECCC-WED officers monitor compliance with the federal *Canada Wildlife Act*, *Wildlife Area Regulations*, *Migratory Birds Convention Act, 1994*, *Species at Risk Act*, the *Fisheries Act* as well the provincial *Fish and Wildlife Conservation Act, 1997* and the Ontario *Trespass to Property Act* and will initiate investigations when required. ECCC-WED officers will respond to violations and take appropriate enforcement actions. When necessary, charges will be laid.

9 PLAN IMPLEMENTATION

The management plan will be implemented over a 10-year period. Annual work plans will be developed in accordance with priorities and budgets, and the details of management plan implementation will be developed through Environment and Climate Change Canada’s annual work-planning process and will be implemented as human and financial resources allow. An adaptive management approach will be favoured for the implementation of the management plan. The implementation of the plan will be evaluated 5 years after its publication, on the basis of the actions identified in Table 5.

The framework by which Wellers Bay NWA is managed is clearly delineated by the *Canada Wildlife Act*. Close liaison between government agencies and non-government wildlife organizations is essential for effective long-term management of the NWA and its surrounding environment. Topics of mutual interest to the federal and provincial governments include public safety, management of game and nongame wildlife, species at risk, and production of special publications relevant to the NWA.

Table 5: Wellers Bay NWA Implementation Strategy Timeline 2016–2025

Activity	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual occupational health and safety training	x	x	x	x	x	x	x	x	x	x
Site inspection twice a year to maintain signs and public notices, and monitor threats (e.g., non-native and invasive species), and safety issues (e.g., visitor use and visual presence of UXO).	x	x	x	x	x	x	x	x	x	x
Prepare annual report on public access (authorized and unauthorized visits) and incidents of illegal activities (number, nature, mitigation).	x	x	x	x	x	x	x	x	x	x
Review collaborative arrangements, agreements and permits, revise and renew as appropriate	x	x	x	x	x	x	x	x	x	x
Review and update public outreach and education	x		x		x		x		x	
Complete a biological inventory for the NWA of migratory bird use (waterfowl, water birds, land birds, shore birds), species at risk (presence/absence) and habitat quality and extent (sand spit, dune, panne, upland deciduous forest, wetland, nearshore waters), using			x							x

Activity	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
established protocols.										
Assess and implement species at risk recovery actions		x		x		x		x		x
Continue ECCC-CWS decadal migrant waterfowl surveys (2009) – Lake Ontario (includes Wellers Bay, Wellers Bay Coastal Sand Spit and Wellers Bay NWA).						x				
Map distribution and percent cover of invasive and non-native species		x			x			x		
Assess and apply controls for invasive and non-native species	x			x			x			x

9.1 MANAGEMENT AUTHORITY AND MANDATE

ECCC-CWS (Ontario) is responsible for site management of Wellers Bay NWA.

DND is responsible for risk assessment and management of UXO on the Wellers Bay NWA and surrounding lakebed.

9.2 MANAGEMENT PLAN REVIEW

Evaluation will take the form of a review of data obtained from the monitoring, surveys, research projects and collaborative agreements outlined below. Monitoring, surveys and research at the Wellers Bay NWA will be performed within the limits imposed by financial and human resources. The data collected will be reviewed annually and used to inform future management at the NWA. Furthermore, these data will be used to evaluate federal contributions towards accomplishing the mandates specific to ECCC-CWS for which the protected area was established.

This management plan will be reviewed 5 years after its formal approval by ECCC-CWS and every 10 years thereafter. Information may be appended to the document as required to aid in site management and decision-making.

10 COLLABORATORS

Environment and Climate Change Canada works with local landowners, communities, government and non-government agencies and sector organizations to protect and conserve wildlife species and their habitats in the NWA, and contribute to conservation of the broader Wellers Bay Coastal Sand Spit and Wellers Bay.

For instance, collaborations could be developed or pursued with universities and research centres to fill scientific knowledge gaps, with the province to implement species-at-risk recovery measures, particularly for species under provincial jurisdiction, with non-governmental organizations and municipal authorities to increase public awareness of the objectives of the NWA. The main organizations likely to collaborate in the management of Wellers Bay NWA include:

1. Department of National Defence
2. Fisheries and Oceans Canada
3. Ontario Ministry of Natural Resources and Forestry
4. Quinte Conservation
5. Municipality of Prince Edward County
6. Friends of Wellers Bay
7. Private campground and tourism operators in Wellers Bay

11 LITERATURE CITED

- Bakowsky, W.D. 1996. *Appendix J: Natural Heritage Resources of Ontario: Vegetation communities of southern Ontario*. Peterborough (Ontario), Ontario Natural Heritage Information Centre, Ministry of Natural Resources. Draft. In *Significant wildlife habitat technical guide*. Peterborough, Ont.: Ontario Ministry of Natural Resources, 2000, 151 pp.
- Bakowsky, W.D. 2008. Personal communication. Peterborough (Ontario), Community Ecologist, Natural Heritage Information Centre, Ontario Ministry of Natural Resources, 2008. In White, David J. *Preliminary Upland Vegetation Survey at Wellers Bay National Wildlife Area*. London, Ont.: Report to Environment Canada – Canadian Wildlife Service.
- Brown, R. 2010. *From Queenston to Kingston: The Hidden Heritage of Lake Ontario's Shoreline*. Toronto: Dundurn, 288 pp.
- Cheskey, E.D. 1999. *Presqu'île Important Bird Area Conservation Plan*. Unpublished report for the Federation of Ontario Naturalists, Canadian Nature Federation, Bird Studies Canada. 37 pp.
- COSEWIC (Committee on the Status of Endangered Wildlife in Canada). 2016. Accessed February 2016. www.cosewic.gc.ca/eng/sct5/index_e.cfm
- COSEWIC. 2010. *COSEWIC Assessment and Status Report on the Monarch Danaus plexippus in Canada*. Ottawa: Committee on the Status of Endangered Wildlife in Canada, vii + 43 pp.
- DND (Department of National Defence). *DND Unexploded Explosive Ordnance (UXO) and Legacy Sites Program*. 2016. Accessed February 2016. Available from: www.forces.gc.ca/en/business-unexploded-ordnance/index.page
- DND (Department of National Defence). 2014. *UXO Summary Table for Wellers Bay*. Ottawa: Department of National Defence. Unpublished data.
- DND (Department of National Defence). 2011. *Record of Legacy Site Risk Management (RLSRM) Wellers Bay National Wildlife Area*. DND Wellers Bay, PEC, RLSRM-ON899-110-001.
- Dudley, N. (Editor). 2008. *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN, x + 86 pp.
- EC (Environment Canada). *Recovery Strategy for the Western Chorus Frog (Pseudacris triseriata), Great Lakes / St. Lawrence – Canadian Shield population, in Canada*. Species at Risk Act Recovery Strategy Series. Ottawa: Environment Canada, 2015, vi + 50 pp.
- EC (Environment Canada). 2011. *Environment Canada Policy when Considering Permitting or Authorizing Prohibited Activities in Protected Areas Designated Under the Canada Wildlife Act and Migratory Birds Convention Act, 1994*. Cat. No. CW66-311/2012E-PDF ISSN 978-1-100-20495-6.
- EC and OMNR (Environment Canada and Ontario Ministry of Natural Resources). 2003. *The Ontario Great Lakes Coastal Wetland Atlas: A Summary of Information (1983–1997)*.
- EC-CWS (Environment Canada – Canadian Wildlife Service). 2014. *Wellers Bay National Wildlife Area Species at Risk*. London, Ont.: Environment Canada – Canadian Wildlife Service (Ontario). Unpublished data.
- EC-CWS (Environment Canada – Canadian Wildlife Service). 2013. *Wellers Bay National Wildlife Area Bird Species*. London, Ont.: Canadian Wildlife Service (Ontario). Unpublished data.

- EC-CWS (Environment Canada – Canadian Wildlife Service). 2012a. *Mid-winter Waterfowl Survey 2012*. Ottawa: Environment Canada – Canadian Wildlife Service (Ontario). Unpublished data.
- EC-CWS (Environment Canada – Canadian Wildlife Service). 2012b. *Ontario Piping Plover *circumcinctus* subspecies (*Charadrius melodus circumcinctus*) records*. Downsview, Ont.: Environment Canada – Canadian Wildlife Service (Ontario). Unpublished data.
- EC-CWS (Environment Canada – Canadian Wildlife Service). 2012c. *Wellers Bay National Wildlife Area Amphibian and Reptile Species*. London, Ont.: Environment Canada – Canadian Wildlife Service (Ontario). Unpublished data.
- EC-CWS (Environment Canada – Canadian Wildlife Service). 2011. *Coastal Wetland Assessments in Eastern Lake Ontario, Ontario 2011*. Downsview, Ont.: Environment Canada – Canadian Wildlife Service (Ontario). Unpublished data.
- EC-CWS (Environment Canada – Canadian Wildlife Service). 2009. *Decadal Migrant Waterfowl Survey 2009*. Ottawa: Environment Canada – Canadian Wildlife Service (Ontario). Unpublished data.
- Ecological Services. 2013. *Biological Surveys of Prince Edward Point and Wellers Bay National Wildlife Areas 2013*. Toronto: Report to Environment Canada, Canadian Wildlife Service – Ontario.
- Fisheries and Oceans Canada. 2012. *Recovery strategy for the Pugnose Shiner (*Notropis anogenus*) in Canada (Proposed)*. Species at Risk Act Recovery Strategy Series. Ottawa: Fisheries and Oceans Canada, x + 75 pp.
- Government of Canada. 2002. *Species at Risk Act* S.C. c. 29, 2002. Assented to 2002-12-12.
- Government of Canada. 2016. *Species at Risk Registry. List of Wildlife Species at Risk*. Accessed February 2016. Available from: http://www.registrelep-sararegistry.gc.ca/species/schedules_e.cfm?id=1
- Government of Ontario. 2012. *Endangered Species Act, 2007*. ONTARIO REGULATION 4/12 SPECIES AT RISK IN ONTARIO LIST. Accessed February 2016. www.e-laws.gov.on.ca/html/source/regs/english/2012/elaws_src_regs_r12004_e.htm
- Hamill, S. 2008. *HERP Reconnaissance Inventory: Mississippi Lake, Wellers Bay, Prince Edward Point National Wildlife Areas*. London, Ont.: Report to Environment Canada – Canadian Wildlife Service.
- Hamill, S. 2009. *Wildlife Inventory of Mississippi Lake, Prince Edward Point and Wellers Bay National Wildlife Areas*. London, Ont.: Report to Environment Canada – Canadian Wildlife Service.
- Lévesque, H. 1986. *Management Plan Wellers Bay National Wildlife Area*. Ottawa: Canadian Wildlife Service.
- Mandrak, N.E. Fisheries and Oceans Canada. 2010. Unpublished data. In Boucher, J., M. Berubé, A. Boyko and M. Bourgeois. *Management plan for the Bridle Shiner (*Notropis bifrenatus*) in Canada [Final version]*. 2011. Species at Risk Act Management Plan Series. Fisheries and Oceans Canada, vi + 43 pp.
- NatureServe. 2015. *NatureServe Explorer: An Online Encyclopedia of Life* [web application]. Arlington, VA, U.S.A.: NatureServe. Version 7.0. Accessed February 2016. Available from:

www.natureserve.org/explorer

OMNR (Ontario Ministry of Natural Resources). 2009. *Lake Ontario Fish Communities and Fisheries: 2008 Annual Report of the Lake Ontario Management Unit*. Picton, Ont.: Ontario Ministry of Natural Resources.

Snetsinger, R. and D. Kristensen. 1993. *Southern Ontario Wetland Data Record and Evaluation-Weller's Bay Complex*. Third Edition (March). August 5, 8 and 22, 1993 and July 2, 1990, 19 pp + supplement. Manuscript.

White, D.J. 2008. *Preliminary Upland Vegetation Survey at Wellers Bay National Wildlife Area*. London, Ont.: Report to Environment Canada – Canadian Wildlife Service.

Wilson, W.G. and E.D. Cheskey. 2001. *Prince Edward County South Shore Important Bird Area Conservation Plan*. Can. Nature Fed., Bird Studies Can., Fed. of Ont. Naturalists, 41 pp.

Wilken, E. 1986. *Terrestrial Ecozones of Canada*. Ecological Land Classification Series, No. 19. Ottawa: Environment Canada.

12 ADDITIONAL INFORMATION SOURCES

Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage and A.R. Couturier (eds.). 2007. *Atlas of the Breeding Birds of Ontario, 2001–2005*. Bird Studies Canada. Toronto: Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, xxii + 706 pp.

National Defence and the Canadian Armed Forces - Unexploded Explosive Ordnance (UXO):
<http://www.forces.gc.ca/en/business-unexploded-ordnance/index.page>

Species at Risk Public Registry: www.sararegistry.gc.ca/

Species at Risk Public Registry – species recovery strategies:
www.sararegistry.gc.ca/sar/recovery/recovery_e.cfm

The American Ornithologists' Union (AOU) Nomenclature:
<http://checklist.aou.org/>

APPENDIX 1: LEGISLATION

Federal Legislation

Canada Wildlife Act (R.S.C., 1985, c. W-9)

<http://laws-lois.justice.gc.ca/eng/acts/W-9/index.html>

Fisheries Act (R.S.C., 1985, c. F-14)

<http://laws.justice.gc.ca/eng/acts/F-14/>

Migratory Birds Convention Act, 1994 (S.C. 1994, c. 22)

<http://laws-lois.justice.gc.ca/eng/acts/M-7.01/>

Species at Risk Act (S.C. 2002, c. 29)

<http://laws-lois.justice.gc.ca/eng/acts/S-15.3/page-1.html>

Species at Risk Act – Listing

<http://www.registrelep-sararegistry.gc.ca/default.asp?lang=En&n=CA7DCECA-1>

Species at Risk Public Registry

<http://www.sararegistry.gc.ca/default.asp?lang=En&n=24F7211B-1>

Wildlife Area Regulations (C.R.C., c. 1609)

http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1609/index.html

Provincial Legislation – Ontario

Endangered Species Act, 2007, S.O. 2007, c. 6

<http://www.ontario.ca/laws/statute/07e06>

O. Reg. 230/08: SPECIES AT RISK IN ONTARIO LIST

<http://www.ontario.ca/laws/regulation/080230>

Fish and Wildlife Conservation Act, 1997, S.O. 1997, c. 41

<http://www.ontario.ca/laws/statute/97f41>

Trespass to Property Act, R.S.O. 1990, c. T.21

<http://www.ontario.ca/laws/statute/90t21>

APPENDIX 2: CANADIAN WILDLIFE SERVICE (ONTARIO) CONDITIONS OF RESEARCH REQUESTS

Permission under the *Wildlife Area Regulations* of the *Canada Wildlife Act* to undertake research at National Wildlife Areas may be given subject to the following conditions:

1. All requests for research must be accompanied by a written proposal outlining the objectives; project duration; collection of data and specimens and measurements if any, number of participants, funding sources, location where work is to be undertaken, benefits to the National Wildlife Area (NWA), potential detractors and proposed mitigation measures. All proposals may be subject to a review by the Animal Care Committee of either Environment and Climate Change Canada or the submitting institution.
2. No research shall be undertaken without a permit issued under the *Canada Wildlife Act - Wildlife Area Regulations*, and the research must be consistent with the NWA management plan for the site and other relevant legislation (e.g., *Species at Risk Act*, *Migratory Birds Convention Act*, 1994).
3. All researchers must conform to regulations in effect regarding the NWA.
4. All researchers are responsible for obtaining all permits (e.g., *Species at Risk Act*, *Fisheries Act*), approvals, and permissions (e.g., land managers, landowners), prior to commencement of the research project.
5. Copies of raw data (field books and maps), preliminary reports of the research activities and a copy of the final manuscript must be provided to Environment and Climate Change Canada, Canadian Wildlife Service (ECCC-CWS) Ontario at the end of each field season.
6. Priority will be given to researchers whose work has direct management implications for the NWA and species at risk.
7. Applications to undertake a minor research study must be submitted to the ECCC-CWS Ontario office, in writing, prior to commencement of the project. **Minor proposals without problems or issues require at least seven weeks for review, processing and issuance of a permit.** Major proposals (that may require expert review, are multi-year, etc.) require a longer review period (minimum six months).
8. A statement must be provided to ECCC-CWS Ontario on why the research project cannot be undertaken elsewhere.
9. Any proposed work is subject to the *Canada Labour Code*, Part II (subject to the strictest safety certification, training, operational experience and mandatory use of appropriate safety equipment).

Note:

The Minister of Environment and Climate Change Canada may add terms and conditions governing the activity in order to protect and minimize the effects of the authorized activity on wildlife and their habitats.

All projects and activities in the NWA are subject to environmental screening and, if necessary, to further steps in the Environmental Assessment and Review Process (Environment and Climate Change Canada).

APPENDIX 3: ENVIRONMENT AND CLIMATE CHANGE CANADA WELLERS BAY NATIONAL WILDLIFE AREA PUBLIC INFORMATION NOTICE, 2013



Environment
Canada

Environnement
Canada

Canada

Public Notice

WELLERS BAY NATIONAL WILDLIFE AREA

Public Access Prohibited

Be advised that public access to Wellers Bay National Wildlife Area is prohibited to prevent disturbance to wildlife and their habitats, and to protect the public from hazards posed by unexploded explosive ordnance. This former National Defence bombing range is designated as a National Wildlife Area and provides important habitat and refuge to a variety of wildlife species. The area is clearly marked by warning signs around its perimeter.

All persons are prohibited from using the Wellers Bay National Wildlife Area for recreation, and any person found doing so may be charged under the *Wildlife Area Regulations* of the *Canada Wildlife Act*.

All unexploded explosive ordnance, new or old, partial or complete, must be considered dangerous as it may explode, causing serious injury or death.

If you have found something that might be an unexploded device, do not touch or disturb it in any way. Note the location of the object and leave the area. Call your local police and report what you have found, and where you found it.

For more information, please contact:

**Canadian Wildlife Service
Environment Canada**
Telephone: 519-472-6695

Environment Canada Inquiry Centre
Telephone: 1-800-668-6767 (in Canada
only) or 819-997-2800
TTY: 819-994-0736
Email: enviroinfo@ec.gc.ca

Avis public

RÉSERVE NATIONALE DE LA FAUNE DE LA BAIE WELLER

Accès public interdit

L'accès public à la Réserve nationale de la faune de la baie Weller est interdit afin d'empêcher que les espèces sauvages et leur habitat ne soient perturbés et afin de protéger le public des dangers liés aux munitions explosives non explosées. L'ancien secteur de bombardement de la Défense nationale est maintenant une réserve nationale de la faune et constitue un important habitat et refuge pour diverses espèces sauvages. La réserve est clairement identifiée par des panneaux d'avertissement autour de son périmètre.

Il est interdit à toute personne d'utiliser la Réserve nationale de la faune de la baie Weller à des fins de loisirs, sous peine d'accusations en vertu du *Règlement sur les réserves d'espèces sauvages* de la *Loi sur les espèces sauvages du Canada*.

Toutes les munitions explosives non explosées, qu'elles soient récentes ou vieilles, morcelées ou complètes, peuvent exploser et causer de sérieuses blessures ou même la mort.





Si vous avez trouvé quelque chose qui pourrait être un engin explosif, ne le touchez pas et ne le déplacez pas de quelque façon que ce soit. Notez l'endroit où se trouve l'objet et quittez la zone. Téléphonez au service de police local et signalez ce que vous avez trouvé et où vous l'avez trouvé.

Pour de plus amples renseignements, veuillez communiquer avec :

**Service canadien de la faune
Environnement Canada**
Téléphone : 519-472-6695

Informathèque d'Environnement Canada
Téléphone : 1-800-668-6767 (au Canada
uniquement) ou 819-997-2800
TTY : 819-994-0736
Courriel : enviroinfo@ec.gc.ca

APPENDIX 4: DEPARTMENT OF NATIONAL DEFENCE WELLERS BAY NATIONAL WILDLIFE AREA PUBLIC INFORMATION NOTICE, 2014

<p> National Defence / Défense nationale</p> <h3>Explosive Hazard Warning</h3> <p>Be advised that there is a risk of serious injury or death to persons entering The Wellers Bay National Wildlife Area. It is a former bombing range used by the Department of National Defence and unexploded explosive ordnance (UXO) continue to be found in the area.</p>  <p>If you find something that could be UXO:</p> <ol style="list-style-type: none"> 1. Do not touch it. If disturbed, UXO can explode, causing injury or death. 2. Remember the location and leave the area. 3. Contact 911 or your local police as soon as possible to report what you've found. <p>For more information on UXO, visit DND's UXO and Legacy Sites Program Website at www.uxocanada.forces.gc.ca.</p>	<h3>Avertissement – Danger explosifs</h3> <p>Sachez qu'il existe un risque de blessures graves ou de mort pour les personnes qui entrent dans la Réserve nationale de la faune de la baie Wellers. La région est un ancien secteur de bombardement qui fut utilisé par le ministère de la Défense nationale dans lequel nous y trouvons encore des munitions explosives non explosées (UXO).</p>  <p>Si vous trouvez un objet susceptible d'être une UXO :</p> <ol style="list-style-type: none"> 1. N'y touchez pas! Si les UXO sont déplacées, elles peuvent exploser, causant ainsi la mort ou des blessures. 2. Rappelez-vous de l'emplacement et quittez l'endroit. 3. Appelez le 9-1-1 ou la police locale dès que possible afin de signaler l'objet découvert <p>Pour plus d'information visitez le site Web du Programme des UXO et des anciens sites du MDN au www.uxocanada.forces.gc.ca.</p> 
---	--

<h3>Hazardous Materials Warning</h3> <p>Be advised that there is a risk of serious injury or death to persons entering <u>Wellers Bay National Wildlife Area</u>. The area is a former bombing range used by the Department of National Defence and hazards posed by unexploded explosive ordnance (UXO) continue to exist.</p> <p>Where UXO warning signs have been posted, obey the instructions and stay safe!</p> <p>If you have found something that could be UXO:</p> <ol style="list-style-type: none"> 1. Don't touch it! If disturbed, UXO can explode, causing death or injury. 2. Remember the location and leave the area Remember where you saw the object. Go back the same way you came. 3. Call 9-1-1 or local police As soon as possible, report what you found by calling 9-1-1 or contacting local police <p>New and shiny, old and rusty, clean or dirty, all UXO is dangerous!</p> <p>For more information on unexploded explosive ordnance, visit DND's UXO and Legacy Sites Program Website at www.uxocanada.forces.gc.ca</p>	<h3>Attention aux Matériaux Dangereux</h3> <p>Sachez qu'il existe un risque de blessures graves ou la mort pour les personnes entrant dans la Baie Wellers. La région est un ancien secteur de bombardement utilisé par le Ministère de la Défense Nationale et les dangers posés par les munitions explosives non explosées (UXO) continueront d'exister.</p> <p>Aux endroits où des panneaux d'avertissement ont été affichés, obéissez aux directives pour demeurer sain et sauf!</p> <p>Si vous trouvez un objet susceptible d'être une UXO :</p> <ol style="list-style-type: none"> 1. N'y touchez pas! Si les UXO sont déplacées, elles peuvent exploser, causant ainsi la mort ou des blessures. 2. Rappelez-vous de l'emplacement et quittez l'endroit. Rappelez-vous de l'endroit où vous avez aperçu l'objet. Quittez l'endroit en empruntant le même trajet qu'à votre arrivée. 3. Appelez le 9-1-1 ou la police locale. Dès que possible, signalez l'objet que vous avez découvert en appelant le 9-1-1 ou en communiquant avec la police locale. <p>Qu'elles soient neuves et étincelantes, vieilles et rouillées, propres ou sales, toutes les UXO sont dangereuses!</p> <p>Pour plus d'information visitez le site du MDN sur les UXO www.uxocanada.forces.gc.ca</p>
---	---

APPENDIX 5: CONTACTS FOR WELLERS BAY NATIONAL WILDLIFE AREA

Contacts for WELLERS BAY NATIONAL WILDLIFE AREA, Ontario Administered by Environment and Climate Change Canada – Canadian Wildlife Service (Ontario) Latitude 44°00'N/Longitude 77°36'W	
Emergency Contacts	
<p>In case of emergency, dial 911. General inquiries should be directed to local telephone numbers, not 911.</p> <p>NOTE: THERE IS NO CIVIC ADDRESS FOR WELLERS BAY NWA</p>	
Any life-threatening emergency	911
Police/fire/ambulance	911
Ontario Provincial Police	1-888-310-1122
Marine and Air Search and Rescue (emergency only)	1-800-267-7270
Royal Ontario Mounted Police (RCMP) Ontario Division	519-640-7267
<p>If an Unexploded Explosive Ordnance (UXO) is found, do not touch or disturb the UXO. Leave the area and dial 911.</p> <p>Do not use a cellphone near the UXO, as the cellphone may cause the device to explode.</p>	
DND Unexploded Explosive Ordnance (UXO) and Legacy Sites Program (General Inquiry only)	1-800-207-0599 www.UXOCanada.forces.gc.ca
To report a spill to air, land or water, call Ontario Spills Action Centre, 24/7	1-800-268-6060 or 416-325-3000
Poison Control Centres (emergencies)	1-800-268-9017
Trenton Memorial Hospital Quinte Healthcare Corporation 242 King St., Trenton ON	613-392-2540
Environment and Climate Change Canada – Ontario	
Canadian Wildlife Service (Ontario)	1-800-668-6767
Wildlife Enforcement Directorate (Ontario)	905-336-6410
General Contacts	
Ontario Ministry of Natural Resources (Conservation Officer)	1-877-847-7667
Ontario Ministry of Natural Resources (General Inquiry)	1-800-667-1940
Ontario Ministry of Natural Resources area office, Kemptville ON	613-258-8204

