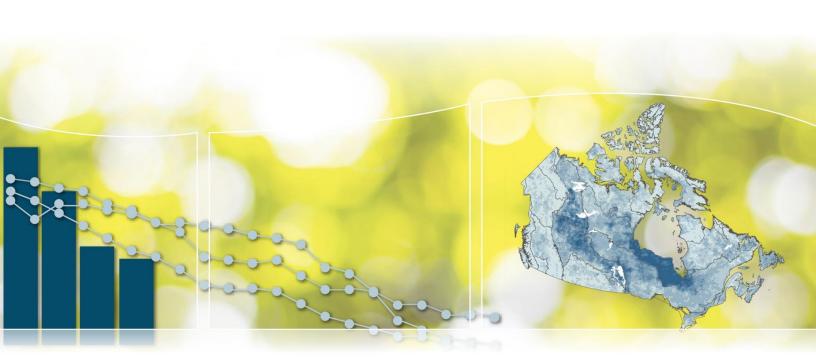




# Canadian Environmental Sustainability Indicators Habitat Secured for Waterfowl





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February 2016

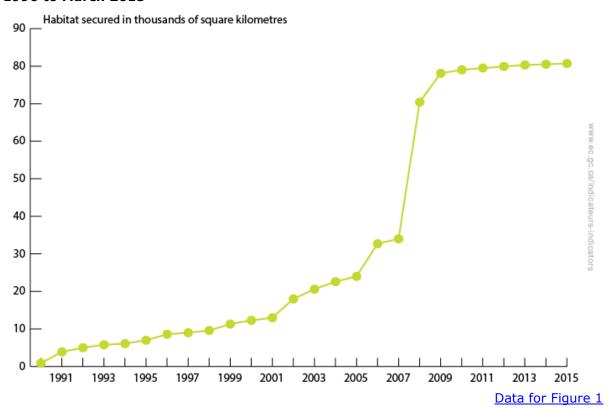
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# Part 1. Habitat Secured for Waterfowl Indicator

As of 2015, approximately 80 700 square kilometres (km<sup>2</sup>) of habitat for waterfowl had been secured in Canada through the <u>North American Waterfowl Management Plan</u> (NAWMP). The large increase in 2008 is the result of the securement of habitat in the Western Boreal Forest region through Crown designation.

Figure 1. Cumulative waterfowl habitat secured in Canada by NAWMP partners, 1990 to March 2015



**Note:** The line tracks the cumulative habitat secured under the NAWMP in Canada between the inception of the program in 1986 until 2015. For each year, the cumulative habitat secured is calculated by adding the area of newly secured habitat to the existing securement base and subtracting the area for which agreements have expired. The 2015 total includes only habitat secured by March of that year.

**Source:** Environment and Climate Change Canada (2015) Canadian Wildlife Service, Habitat Conservation Unit.

In Canada, 45 species of waterfowl rely on healthy wetlands for living and for raising their young. In the mid-1980s, North American waterfowl populations had plummeted to record lows, largely because of human activities that resulted in the loss and/or degradation of wetlands. Recognizing this problem, and the fact that migratory waterfowl habitat needs are international in scope, the NAWMP was launched. The NAWMP is a tri-national (Canada, United States of America, and Mexico) partnership, composed of federal, state, provincial and municipal governments, non-governmental organizations, industry, and private individuals. Its aim is to return waterfowl populations to their 1970s levels by securing and restoring, and sustainably managing wetland and associated upland habitat. Actions under the NAWMP are

<sup>&</sup>lt;sup>1</sup> North American Wetlands Conservation Council (Canada) (2010) <u>Strategic Plan 2010–2020</u>. Retrieved on 4 July, 2013.

conducted by government and non-governmental partners in Canada, the United States of America and Mexico.

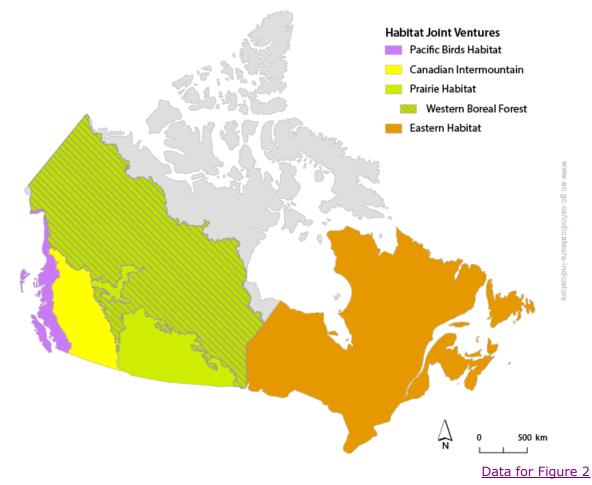
The NAWMP aims to conserve important wetlands and related habitat for the benefit of waterfowl and other wetland-dependent wildlife. The highest priority landscapes are identified through the use of long-term monitoring datasets and scientific models. Then these priority landscapes are secured through a variety of tools, such as agreements, easements, and purchases. The NAWMP considers habitat to be "secured" when it has been protected, either through purchase or with legally binding agreements of at least 10 years duration.

While the accomplishments under the NAWMP are significant, waterfowl habitat is under increasing pressure from urban sprawl, agriculture, invasive species and climate change.

# Regional habitat secured for waterfowl

The NAWMP operates through a series of joint ventures, some of which plan and implement regional habitat conservation programs and projects. A joint venture is a multi–stakeholder partnership, including governments at all levels, industry, Aboriginal groups, nongovernment organizations, universities and landowners. The NAWMP habitat joint venture activities in Canada are coordinated by the <a href="North American Wetlands Conservation Council (Canada)">North American Wetlands Conservation Council (Canada)</a>. Four habitat joint ventures actively secure habitat for waterfowl in Canada according to regional implementation plans.

Figure 2. Scope of habitat joint ventures in Canada, 2015



**Note:** The regions outlined on the map represent the areas associated with each Canadian habitat joint venture. For the Pacific Birds Habitat Joint Venture, <sup>2</sup> only the Canadian portion of this international joint venture is shown.

Source: North American Wetlands Conservation Council (Canada) (2010) Strategic Plan 2010-2020.



This indicator is used to measure progress toward <u>Target 4.3: Terrestrial Ecosystems and Habitat Stewardship; Contribute to the proposed national target that by 2020, at least 17% of terrestrial areas and inland water are conserved through networks of protected areas and other effective area-based conservation measures of the <u>Federal Sustainable Development Strategy 2013–2016</u>.</u>

<sup>2</sup> The Pacific Birds Habitat Joint Venture was previously known as the Pacific Coast Joint Venture.

# Part 2. Data Sources and Methods for the Habitat Secured for Waterfowl Indicator

## Introduction

The <u>Habitat Secured for Waterfowl</u> indicator is part of the <u>Canadian Environmental</u> <u>Sustainability Indicators</u> (CESI) program, which provides data and information to track Canada's performance on key environmental sustainability issues. This indicator is also used to measure progress towards the goals and targets of the <u>Federal Sustainable Development</u> Strategy.

# **Description and rationale of the Habitat Secured for Waterfowl indicator**

## **Description**

The Canadian Environmental Sustainability Indicators (CESI) reports the amount of Canadian wetland and associated upland habitat that has been secured through the <u>North American</u> Waterfowl Management Plan (NAWMP) for the benefit of waterfowl.

The indicator is the total waterfowl habitat area secured under NAWMP to March 2015 by the four Canadian habitat joint ventures: Pacific Birds Habitat (Canadian portion), Canadian Intermountain, Eastern Habitat, and Prairie Habitat (including the Western Boreal Forest region).

The NAWMP is a tri-national (Canada, United States of America and Mexico) partnership composed of federal, state, provincial and municipal governments, non-governmental organizations, industry, and private individuals. NAWMP habitat securement activities are planned and delivered by habitat joint ventures, which involve partners from different organizations. In addition to securement, the partners enhance and restore habitat to increase, manage and maintain its carrying capacity for wetland-associated migratory birds and other wildlife.

#### **Rationale**

The Habitat Secured for Waterfowl indicator provides a view of progress in protecting habitat that supports a particular group of species where development pressures are significant. The indicator is also useful as a measure of Canada's efforts to protect migratory birds. While the NAWMP focuses on the links between loss of wetland habitat and waterfowl declines, it also recognizes the other benefits of maintaining these valuable and productive ecosystems. These habitats support a wide variety of species and provide many other environmental benefits. Wetland conservation helps maintain waterfowling traditions, biodiversity and ecosystem processes.

#### Recent changes to the indicator

Data for previous years have been adjusted following continuing data quality improvements of the NAWMP tracking system.

#### **Data**

#### **Data source**

Environment and Climate Change Canada's Habitat Conservation Unit uses the North American Waterfowl Management Plan (NAWMP) National Tracking System to track hectares secured through the NAWMP partnership. The tracking system is updated by partners each quarter and figures are published annually in <u>Habitat Matters Canadian NAWMP Report</u>.

#### Spatial coverage

The indicator is national. The Pacific Birds Habitat Joint Venture is international in scope; however, only the area secured in Canada is included here.

#### **Temporal coverage**

Data are collected quarterly and published annually.

## **Data completeness**

The indicator provides a cumulative total of all securement accomplishments for the four Canadian habitat joint ventures: Pacific Birds Habitat (Canadian portion only); Canadian Intermountain; Eastern Habitat; and Prairie Habitat, including the Western Boreal Forest Region.

#### **Data timeliness**

The indicator is current to March 2015.

### **Methods**

Under the North American Waterfowl Management Plan (NAWMP), secured wetland and upland habitat is protected, either through land acquisition or through long-term (at least 10 years) legally binding agreements with landowners. Examples of securement include land purchases, donations, easements and transfers of title from the Crown to management agencies.

Habitat secured under NAWMP is recorded and tracked using the NAWMP National Tracking System. The indicator is the sum of the waterfowl habitat area (in km²) secured by the four Canadian habitat joint ventures: Pacific Birds Habitat (Canadian portion only); Canadian Intermountain; Eastern Habitat; and Prairie Habitat, including the Western Boreal Forest region.

For each year, the amount of habitat secured is calculated by adding the area that is newly secured and subtracting the area of expired agreements.

#### Caveats and limitations

Partners are responsible for reporting the number of hectares secured through their projects to the North American Waterfowl Management Plan (NAWMP) National Tracking System. Annual cumulative habitat secured may differ from that previously reported as adjustments are made.

The Pacific Birds Habitat Joint Venture is international in scope, but only the area secured in Canada is reported here.

Though habitat securement, enhancement and management are carried out with the goal of waterfowl population recovery and/or sustainability, these indicators do not measure waterfowl populations. For further information on waterfowl populations in Canada, see Population Status of Migratory Game Birds in Canada.

Though habitat secured through joint venture activities is based on conservation importance or "priority," this indicator is simply a measure of the quantity of habitat secured with no specific reference to its state (e.g., pristine, requiring restoration). Within the habitat secured, some areas may require additional conservation activities.

# Part 3. Annexes

# Annex A. Data tables for the figures presented in this document

Table A.1. Data for Figure 1. Cumulative waterfowl habitat secured in Canada by NAWMP partners, 1990 to March 2015

Year	Habitat secured (thousands of km²)
1990	0.9
1991	3.9
1992	5.0
1993	5.8
1994	6.1
1995	7.0
1996	8.6
1997	9.0
1998	9.6
1999	11.3
2000	12.3
2001	13.0
2002	18.0
2003	20.6
2004	22.6
2005	24.0
2006	32.7
2007	34.0
2008	70.4
2009	78.1
2010	79.0
2011	79.5

Year	Habitat secured (thousands of km²)
2012	79.9
2013	80.3
2014	80.5
2015 <sup>[A]</sup>	80.7

**Note:** For each year, the cumulative habitat secured is calculated by adding newly secured area to the existing securement base and subtracting the area of expired agreements. Entries are the cumulative total from the inception of the North American Waterfowl Management Plan (NAWMP) program in 1986. <sup>[A]</sup> Cumulative habitat secured for 2015 reflects securement until 31 March, 2015.

**Source:** Environment and Climate Change Canada (2015) Canadian Wildlife Service, Habitat Conservation

Table A.2. Data for Figure 2. Scope of habitat joint ventures in Canada, 2015

Habitat joint venture	Area of habitat secured (square kilometres)
Pacific Birds Habitat (Canada portion)	522
Canadian Intermountain	1425
Prairie Habitat (including Western Boreal Forest region)	72 953
Western Boreal Forest region (included in the Prairie Habitat total above)	45 482
Eastern Habitat	5791

**Note:** See <u>habitat joint ventures</u> websites and implementations plans, along with the annual <u>Habitat Matters Canadian NAWMP Report</u> for further details on each region. Adjustments have been made as the NAWMP tracking system improves; habitat secured for each region may differ from other published reports. **Source:** Environment and Climate Change Canada (2015) Canadian Wildlife Service, Habitat Conservation Unit

## Annex B. References and additional information

#### References and further reading

Environment Canada (2015) <u>Population Status of Migratory Game Birds in Canada – November 2014</u>. Retrieved on 2 September, 2015.

North American Bird Conservation Initiative-Canada [NABCI-Canada] (2012) <u>State of Canada's Birds 2012</u>. Retrieved on 5 July, 2013.

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North American Waterfowl Management Plan (2012) What is NAWMP? Retrieved on 5 July, 2013.

North American Waterfowl Management Plan (2015) <u>Canadian Habitat Matters 2014 Annual</u> Report. Retrieved on 2 September, 2015.

North American Wetlands Conservation Council (Canada) (2015) The North American Wetlands Conservation Act. Retrieved on 5 July, 2013.

United States Fish and Wildlife Service (no date) <u>North American Wetlands Conservation Act</u>. Retrieved on 2 September, 2015.

#### Related information

Environment and Climate Change Canada - Habitat Joint Ventures

<u>Environment and Climate Change Canada – North American Bird Conservation Initiative</u> (NABCI)

Environment and Climate Change Canada - Wetlands

North American Waterfowl Management Plan (NAWMP) in Canada

North American Wetlands Conservation Council (Canada) (NAWCC)

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