



Data Sources and Methods for the Habitat Secured for Waterfowl Indicator

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1 Introduction

The Habitat Secured for Waterfowl indicator is a part of the Canadian Environmental Sustainability Indicators (CESI) program (http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=47F48106-1), which provides data and information to track Canada's performance on key environmental sustainability issues.

2 Description and rationale of the Habitat Secured for Waterfowl indicator

2.1 Description

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

The indicator is the total waterfowl habitat area secured between 1990 and 2012 by the four Canadian habitat joint ventures: Pacific Coast (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.

2.2 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.

2.3 Changes since last report

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

Reporting has been changed from hectares to square kilometers to improve alignment among CESI indicators.

For reporting beginning in 2012 (securement to the end of 2011), secured habitat within the Western Boreal Forest (WBF) region administered by the Prairie Habitat Joint Venture have been included. The total area of habitat secured in the WBF is 45 482 km² (57% of total secured areas as of 2012). Previously, the waterfowl indicator did not include the WBF due to a review of the WBF program. While the review is still ongoing, the WBF has been included to provide a more complete view of securement by the NAWMP in Canada.

3 Data

3.1 Data source

Environment Canada's Wetlands Office 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 Canadian Habitat Matters (http://nawmp.wetlandnetwork.ca/publications/).

3.2 Spatial coverage

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

3.3 Temporal coverage

Data are collected quarterly and published annually.

3.4 Data completeness

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

3.5 Data timeliness

The indicator is current to December 2012.

4 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 Coast (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.

5 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. A review and update of the tracking system by Environment Canada's Wetlands Office was completed in 2012. As a result, annual cumulative habitat secured differs from that previously reported as adjustments have been made to annual securement totals for each joint venture over the reporting period.

- The Pacific Coast 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 (http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=3EA967E4-4EA3-4E26-92B4-4A095436FD42).
- 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.

6 References and further reading

6.1 References

Environment Canada (2012) Population Status of Migratory Game Birds in Canada - November 2012. Retrieved on 5 July, 2013. Available from:

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http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm

6.2 Further reading

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[NABCI-Canada] North American Bird Conservation Initiative-Canada (2012) State of Canada's Birds 2012. Retrieved on 5 July, 2013. Available from: http://www.stateofcanadasbirds.org/

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