This document was compiled by the Regional Assessment of Offshore Wind Development Secretariat. It includes an excerpt from the submission:

*Offshore Wind Regional Assessment Requests for Advice: Product Descriptions and Context for Interpretation*

*Provided by Environment and Climate Change Canada – Canadian Wildlife Service to the Committees for the Regional Assessment of Offshore Wind Development in Nova Scotia and Regional Assessment of Offshore Wind Development in Newfoundland and Labrador*

*November 30, 2023*

The full submission was provided to the Committee in confidence, as per the Committee's Confidentiality Procedures.

### 2.2.1.2 Migratory Bird Sanctuaries and National Wildlife Areas

Product Objective

This map presents the locations of Migratory Bird Sanctuaries (MBS) and National Wildlife Areas (NWA) relative to the RA Study Areas. MBS are designated areas that hold significant importance for migratory birds throughout their annual cycle. These sanctuaries are recognized at various levels, ranging from regional and international designations to the hemispheric scale, depending on factors including peak species counts and the percentage of the biogeographic population that relies on the site annually. MBS provide safe refuge for migratory birds in both the terrestrial and marine environment and comprise nearly 11.5 million hectares of habitat in 92 locations across Canada. The Migratory Bird Sanctuary Schedule describes rules and prohibitions regarding these locations. NWA are created and managed for the purposes of wildlife conservation, research, and interpretation. These are selected based on specific criteria and occur only on federal lands. Currently, NWA protect over 3.5 million hectares of habitat.

The following data source was used to produce the map:

- ECCC. 2023b. Canadian Protected and Conserved Areas Database (CPCAD).

Methodology

The locations of MBS and NWA (polygons) were retrieved from the Canadian Protected and Conserved Areas Database (CPCAD) and plotted to include a 10 km buffer, based on recommendations from species experts.

Context and Interpretation

**Spatial Distribution:** The map includes federally protected MBS (blue) and NWA (green) located in Eastern Canada (Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador). As indicated on the map, there are some MBS and NWA within or adjacent to the RA study areas. Of note is Sable Island MBS off the coast of Nova Scotia.

**Temporal Distribution:** MBS and NWA are protected year-round.

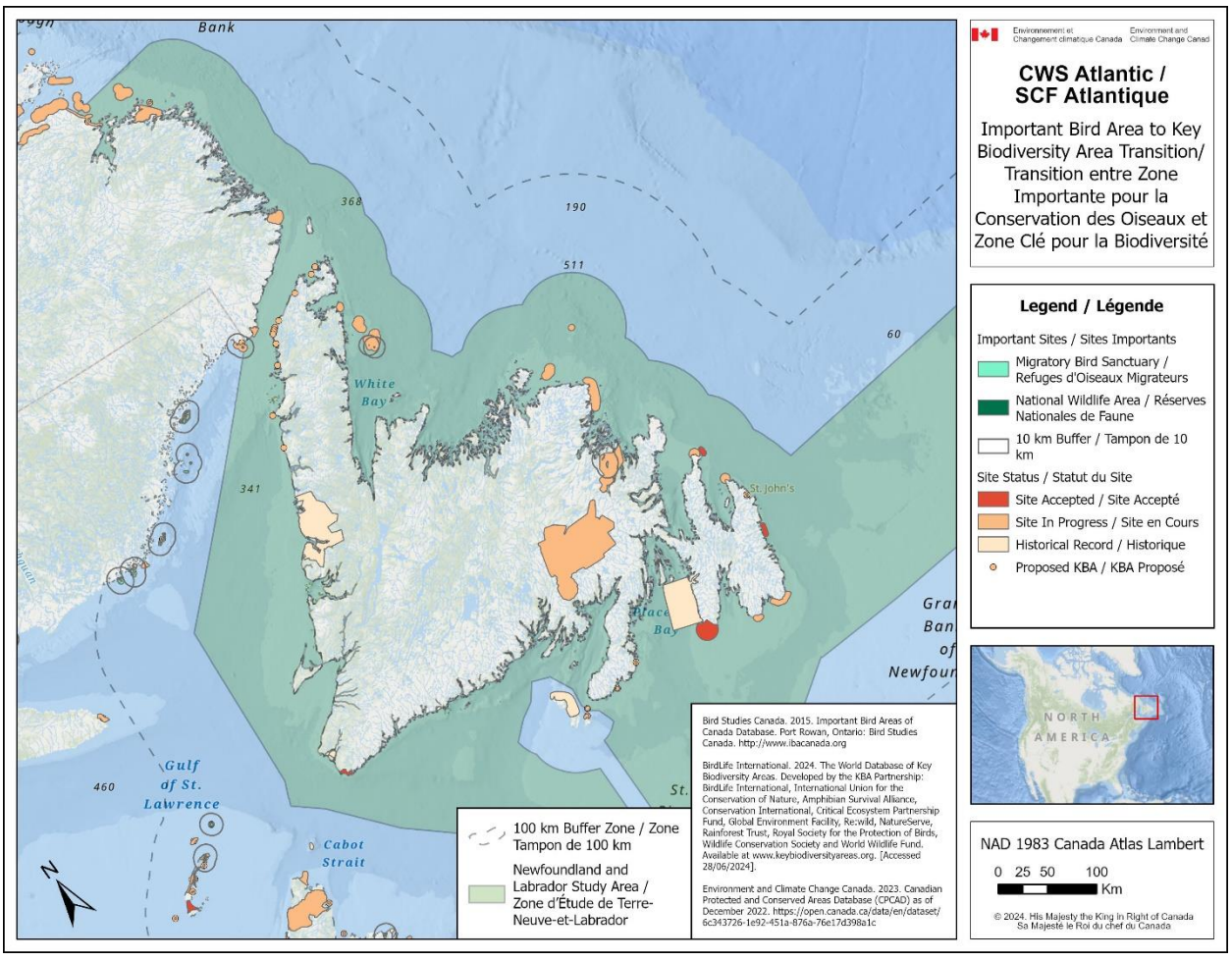
Assumptions, Caveats, and Product Updates

- The list of Canada's NWA and MBS are continuously updated as new locations are identified and designated.
- Update: This map has been updated to include Big Glace Bay, which was designated as an NWA (2022) in addition to its status as an MBS.

- Additional NWAs will be undergoing public consultation in the coming months and provided to the RA Committees once available.

- While not under federal protection or ownership, species experts recommend considering the following locations as important bird areas:

1. Little Fogo Islands, NL
2. Bird Islands, Elliston, NL
3. Lawn Islands Archipelago, NL (provincial ecological reserve)
4. Ragged Beach, Witless Bay, NL (provincial ecological reserve)



### 2.2.1.3 Important Bird Areas

Product Objective

This map indicates Important Bird Area (IBA) locations, relative to the RA Study Areas. IBAs are specific geographic regions recognized for their significance in supporting avian populations. These areas are categorized based on the importance they hold for various bird species, ranging from regional and international levels to the hemispheric scale. The designation depends on factors including peak species counts and the percentage of the biogeographic population relying on the site annually. The Study Areas are known to include highly productive waters and important habitats, including foraging habitats, for several species (MacFarlane Tranquilla *et al*. 2013; Frederucksen *et al*. 2016; Wong *et al*. 2018; van Bemmelen *et al*. 2019).

The following data source was used to produce the map:

- Birds Canada. 2015. Important Bird Areas of Canada Database.

Methodology

IBA locations (shapefiles) were acquired from BirdLife International and plotted.

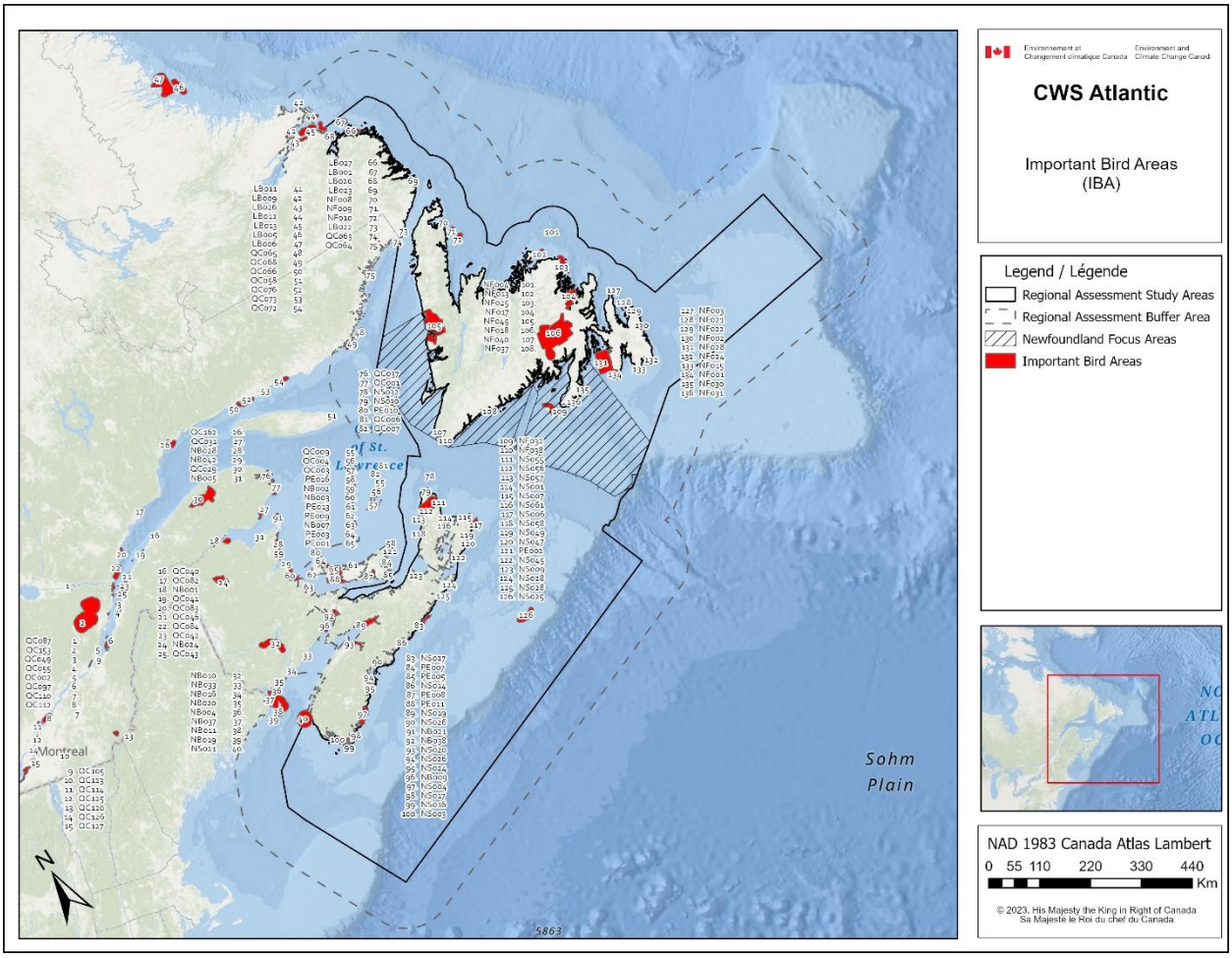
Context and Interpretation

**Spatial Distribution:** The map includes IBA locations in Eastern Canada (Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador).

**Temporal Distribution:** IBA locations will have species-specific considerations; many sites are important year-round.

Assumptions, Caveats, and Product Updates

- The map does not display marine Important Bird Areas. ECCC-CWS-ATL has requested the marine IBA layer from BirdLife International and will provide an updated map to the Committees if received (see Section 4.0). A map of marine IBAs can be found here: BirdLife Marine IBA Inventory.
- This map does not include the *draft* Key Biodiversity Areas. ECCC-CWS-ATL has requested this layer from BirdLife International and will provide an updated map to the Committees if received.
- Update: This map has been updated to include inland areas.




## 2.2.1.4 Important Shorebird Sites

Product Objective

This map indicates the locations of important shorebird sites in Eastern Canada. Western Hemisphere Shorebird Reserve Network sites are areas that have been nominated and proved as important for shorebirds in the Western Hemisphere, on a regional, international, or hemispheric scale, depending on the peak species counts and/or percentage of biogeographic population using the site annually. Important Shorebird Sites are areas identified as important for shorebirds but not yet nominated for WHSRN status or may not qualify for nomination. Note that sites that do not qualify for nomination under WHSRN could be significant areas for shorebirds on a regional or local scale. As such, regionally significant sites have also been included to demonstrate the importance of areas for consideration in offshore wind energy development that do not currently qualify for nomination under WHSRN. The network of important shorebird sites, combined with the other shorebird data, indicate potential nodes of movement for shorebirds as they move through the region. It is assumed that shorebird sites are connected and could imply

movements (and exposure to offshore wind) in the regional assessment study areas, such as between Cape Breton and the island of Newfoundland, the Gulf of Maine, within the Gulf of St. Lawrence, and along the south coast of Nova Scotia into the offshore environment for transoceanic migratory flights. Important Shorebird Sites.

The following data sources were used to produce the map:

- WHSRN. 2023a. Designated WHSRN site boundaries.
- WHSRN. 2023b. Important Shorebird Sites (Potential WHSRN sites).
- McKellar et al. 2020. Potential Western Hemisphere Shorebird Reserve Network sites in Canada: 2020 update.
- CWS. 2023a. Regionally Important Shorebird Sites (derived from ACSS data). Internal unpublished data.

Methodology

Shapefiles of Important Shorebird Sites (points) and Western Hemisphere Shorebird Reserve Network (WHSRN) sites (polygons) were obtained from WHSRN and plotted with ECCC Regionally Important Shorebird Sites (points) overlaid.

Context and Interpretation

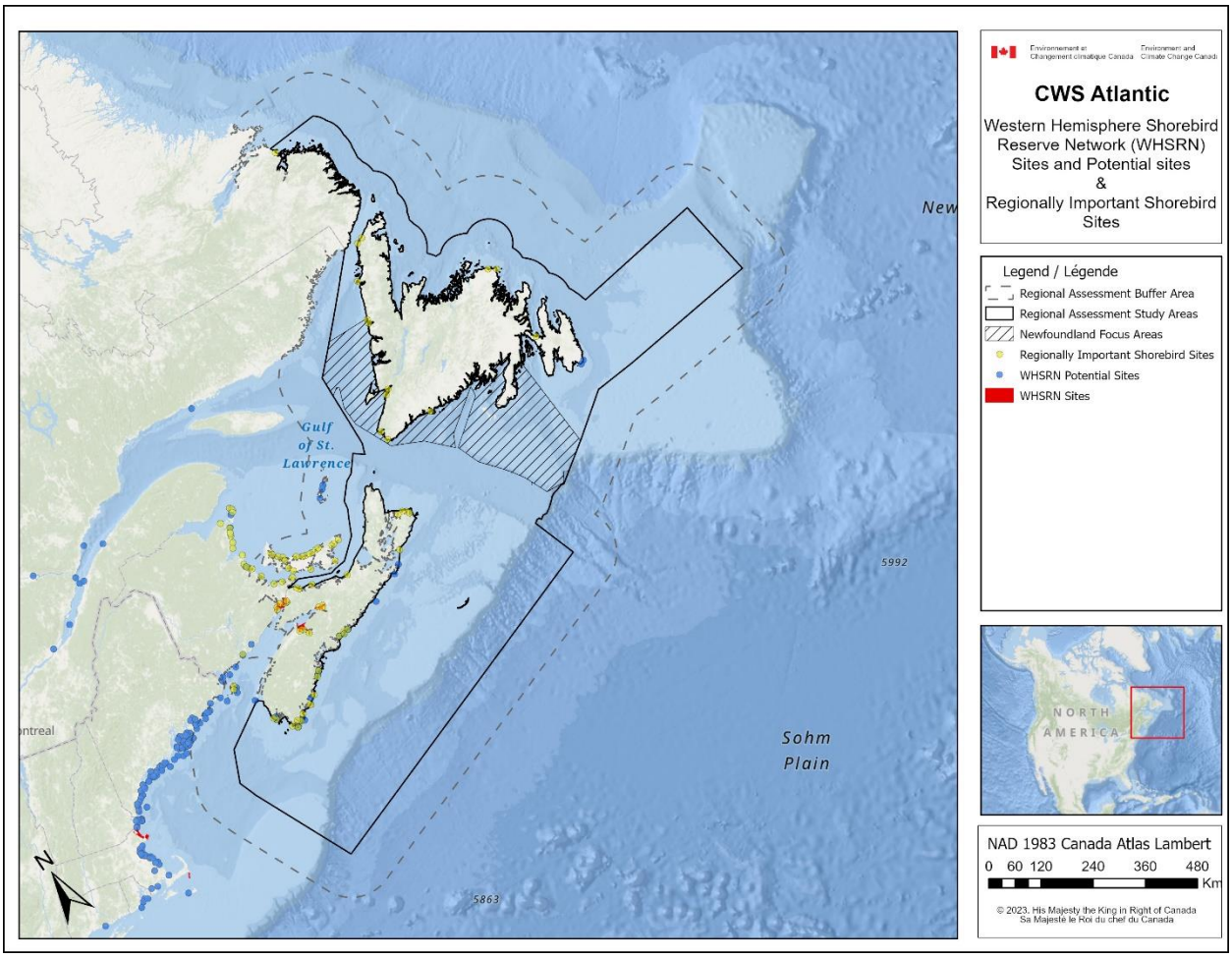
**Spatial Distribution:** The map includes important areas for shorebirds in Eastern Canada (Quebec, Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland, and Labrador). In the absence of offshore distribution or movement data for shorebirds, this information can be used alongside other data sources and expert knowledge to assess areas where shorebirds may experience higher risks with respect to offshore wind energy development.

**Temporal Distribution:** The period of highest risk for shorebirds is during migration; however, some shorebirds breed or overwinter in the region and therefore these areas could be used year-round.

Assumptions, Caveats, and Product Updates

- It is possible for additional sites to be added under WHSRN criteria, as well as additional regionally significant sites to be identified through ongoing work.
- Update: This product has been updated to include regionally significant shorebird sites, based on results of the Atlantic Canada Shorebird Survey.

- New England represents the convergence of multiple shorebird flyways, which may skew importance.




*2.2.1.5 Sea Duck Key Habitat Sites*

Product Objective

This map indicates the locations of sea duck key habitats in Eastern Canada: Sea Duck Key Habitat Sites. Sea duck key habitat sites are designated areas known for their crucial importance to sea ducks, particularly during their migration and breeding seasons. These sites are recognized and classified based on their significance to sea duck populations, with designations ranging from regional and international levels to the hemispheric scale. The specific designation depends on factors such as the number of sea ducks frequenting the area and the percentage of the biogeographic population that relies on these sites each year.

The Sea Duck Key Habitats Atlas describes 85 important sites for Sea Ducks in North America. It describes habitats critical to sea ducks during at least one season of their annual cycle.

The following data source was used to produce the map:

- Bowman et al. 2022. Atlas of sea duck key habitat sites in North America.

Methodology

Sea Duck Key Habitat Site locations (polygons) were retrieved from the North American Atlas and plotted. To produce the Sea Duck Key Habitat Site Atlas, key sites in Eastern Canada were identified using available survey data and expert knowledge:

- Wintering Common Eider (*Somateria mollissima*): georeferenced winter survey data, included the largest area where eiders were counted while meeting minimum criteria for inclusion in the atlas.

- Eastern Harlequin Duck (*Histrionicus histrionicus*): Coastal block, sites were defined by buffering polygons 500 m from all coastlines and coastal islands based on expert knowledge of habitat use.

- Expert knowledge on scoter and eider molting areas.

Refer to the Sea Duck Key Habitat Sites Atlas for additional information on site selection methodology.

Context and Interpretation

**Spatial Distribution:** The map includes sea duck key habitats in Eastern Canada (Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador).

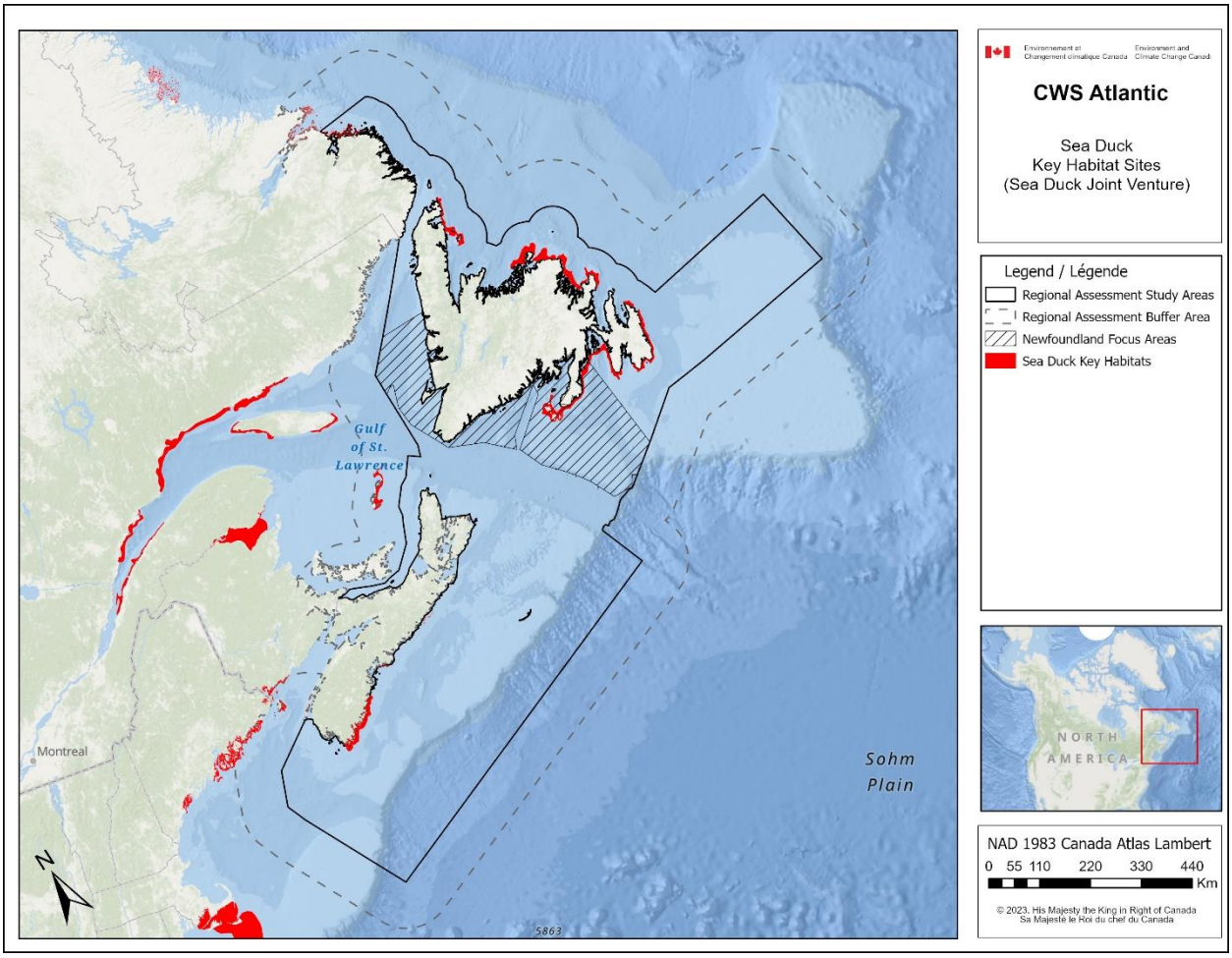
**Temporal Distribution:** Timing considerations have been included in the key habitat site descriptions in the sea duck atlas.

Assumptions, Caveats, and Product Updates

- Information on sea duck use of these sites is based on expert opinion and single or infrequent surveys. Therefore, this should not be considered a comprehensive assessment of important areas for sea ducks.

- Additional important areas for sea ducks will be shared with the Committee when/if they are identified by species experts or subsequent data analyses.

- Update: This product has been updated to include inland areas.


Environment and Climate Change Canada
Environnement et Changement climatique Canada
CWS Atlantic
Sea Duck
Key Habitat Sites
(Sea Duck Joint Venture)
Legend / Légende
Regional Assessment Study Areas
Regional Assessment Buffer Area
Newfoundland Focus Areas
Sea Duck Key Habitats
Gulf of St. Lawrence
Sohm Plain
Montreal
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