

CANADA'S CONSERVED AREAS

CANADIAN ENVIRONMENTAL SUSTAINABILITY INDICATORS



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CANADIAN ENVIRONMENTAL SUSTAINABILITY INDICATORS CANADA'S CONSERVED AREAS

May 2022

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Canada's conserved areas

Conserved areas safeguard biodiversity for present and future generations by reducing stresses from human activities. They also provide opportunities for people to connect with nature. Conserved areas include protected areas and other effective area-based conservation measures.¹ Protected areas include national/provincial/territorial parks, Indigenous protected areas, national wildlife areas, migratory bird sanctuaries and marine protected areas. Other effective area-based conservation measures (OECMs) are areas that do not meet the formal definition of protected area but are managed in a way that conserves biodiversity over the long term. Examples of OECMs can include: Indigenous territories, watersheds or resource management areas, and areas with restricted access, such as those used by the military. The indicators track the amount and proportion of area recognized as conserved in Canada.

National conserved areas

Key results

- At the end of 2021, Canada had conserved
 - 13.5% of its terrestrial area (land and freshwater), including 12.6% in protected areas
 - 13.9% of its marine territory, including 9.1% in protected areas
- Terrestrial area conserved has increased by 75% in the last 20 years and by 19% in the last 5 years
- Marine area conserved has increased by more than 2 700% in the last 20 years and by almost 900% in the last 5 years. However, marine area conserved increased very little in 2020 and 2021

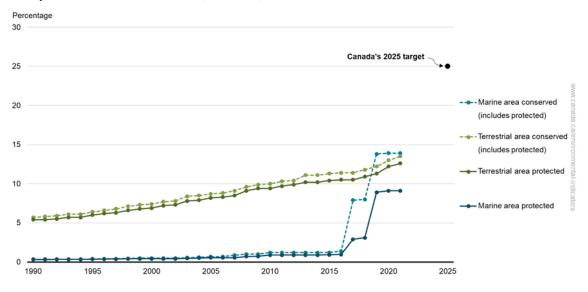


Figure 1. Proportion of area conserved, Canada, 1990 to 2021

Data for Figure 1

Note: Terrestrial area includes both land and freshwater. Area conserved includes area protected as well as other effective area-based conservation measures. In Canada, marine and terrestrial other effective area-based conservation measures were formally recognized in 2017 and 2018, respectively. Trends are estimated based on site establishment dates rather than when they were formally recognized. For more information on the definition of protected areas and other effective area-based conservation measures, please refer to the <u>Data sources and methods</u>. Canada's terrestrial territory is 9 984 670 square kilometres (km²) and its marine territory is approximately 5 750 000 km². Overlaps among protected areas and among other effective area-based conservation measures were accounted for. Data are current as of December 31, 2021.

¹ For more information on the definition of protected areas and other effective area-based conservation measures, please refer to the <u>Data sources and methods</u>.

Canada is currently aiming to conserve 25% of our lands and 25% of our oceans by 2025, and 30% of each by 2030. In 2015, Canada established its 2020 Biodiversity Goals and Targets for Canada. Target 1 states: "By 2020, at least 17 percent of terrestrial areas and inland water, and 10 percent of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures." At the time, 10.5% of Canada's terrestrial area and around 1% of its marine area were recognized as protected. Marine OECMs were first formally recognized in 2017 and terrestrial OECMs in 2018.²

Trends are estimated based on the date a site was established, rather than the date when it was recognized as a Protected Area or OECM. For example, the Sahtu Regional Land Use Plan (a terrestrial area) was established in 2013; the OECMs within the plan were recognized for the first time in 2018. Another example is the Northeast Channel Coral Conservation Area, a marine refuge that was established as a fishery area closure in 2002 and recognized as an OECM in 2017. As such, the totals for a previous year may change as data are updated.

The distribution and size of conserved areas is variable. Larger terrestrial conserved areas tend to be located in northern Canada, where there is less intensive use of land for agriculture, settlements, and road networks. Larger marine conserved areas tend to be located in offshore areas or in northern Canada, where human uses are often less intensive. In landscapes and seascapes with competing uses, conserved areas tend to be smaller but more numerous.

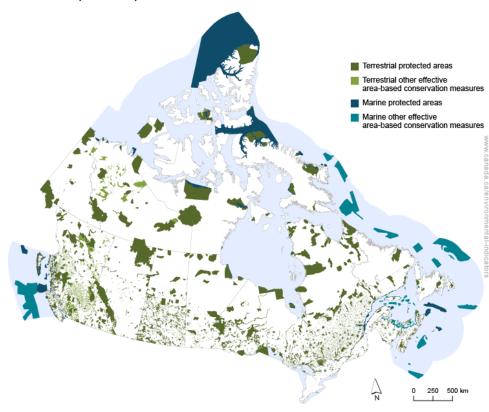


Figure 2. Conserved areas, Canada, 2021

Navigate data using the interactive map

Note: Terrestrial area includes land and freshwater. Data are current as of December 31, 2021.

² Federal, provincial and territorial governments began assessing and recognizing other effective area-based measures upon securing agreement from all jurisdictions to count these areas and developing guidelines and tools for counting them.

Conserved areas, by ecological area

Canada's territory can be divided into 31 terrestrial and marine ecozones. Terrestrial ecozones are further divided into 215 terrestrial ecoregions. A representative conserved areas network should conserve biodiversity across all of Canada's ecological areas.

Conserved areas, by ecozone

An ecozone is a broad area of the Earth's surface that has a distinct climate and biodiversity.

Key results

- All of Canada's ecozones have some level of protection, ranging from less than 1% to almost 40% of the ecozone being conserved
- Six (6) terrestrial ecozones, the Tundra Cordillera, the Taiga Cordillera, the Pacific Maritime, the Montane Cordillera, the Arctic Cordillera and the Southern Arctic, have more than 20% of their area conserved
- Three (3) marine ecozones, the Arctic Basin, the Offshore Pacific and the Eastern Arctic, have more than 20% of their area conserved
- 13.4% of the Canadian area of the Great Lakes is conserved

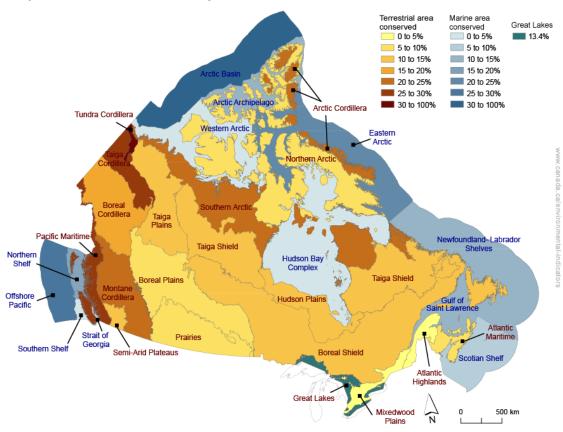


Figure 3. Proportion of area conserved, by ecozone, Canada, 2021

Data for Figure 3

Note: Area conserved includes area protected as well as area conserved with other measures. Data are current as of December 31, 2021. **Source:** Environment and Climate Change Canada (2021) <u>Canadian Protected and Conserved Areas Database</u>.

Terrestrial ecozones with high levels of urbanization and development or widespread agriculture tend to have small proportions of conserved area. For example, the Mixedwood Plains (in southern Ontario and along the St. Lawrence River) has only 2.4% of its area conserved and the Prairies has 6.1%. On the other hand, terrestrial ecozones with a high proportion of conserved area tend to be remote or have high recreation value. For example, ecozones in the western mountain ranges have 19% or more of their area conserved.

Recent efforts have rapidly increased the amount of area conserved in some marine ecozones. <u>Tuvaijuittuq Marine Protected Area</u> in the Arctic Basin is the largest marine protected area in Canada, increasing the proportion of the ecozone protected from less than 1% to 37.8%. Marine refuges in the Offshore Pacific, Newfoundland-Labrador Shelves and Gulf of St. Lawrence have helped to conserve more than 10% of each of these ecozones. However, the Hudson Bay Complex, Western Arctic and Southern Shelf ecozones have less than 5% of their area conserved.

Each ecozone is unique, and conservation involves the inclusion of areas that are representative of different parts of the ecozone and sites of special value. Challenges to establishing conserved areas include competition from other uses, such as agriculture, industry or urban development, and limitations on the extent of ecologically intact areas available within the ecozone.

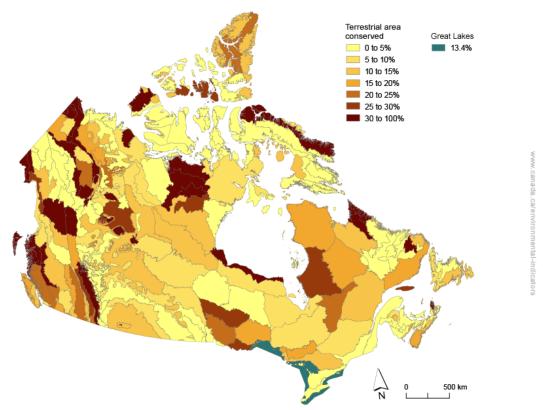
Conserved areas, by ecoregion

Ecoregions are subdivisions of ecozones characterized by distinctive regional attributes. These include climate, landforms, vegetation, soil, flora and fauna.

Key results

- 93% of Canada's ecoregions have some level of protection, ranging from less than 1% to 100% of the ecoregion being conserved
- Of the 215 ecoregions in Canada,
 - 72% (155 ecoregions) have less than 17% of their area conserved
 - o 12% (25 ecoregions) have between 17% and 30% of their area conserved
 - o 16% (35 ecoregions) have more than 30% of their area conserved

Figure 4. Proportion of area conserved, by ecoregion, Canada, 2021



Data for Figure 4

Note: Area conserved includes area protected as well as area conserved with other measures. Data are current as of December 31, 2021. **Source:** Environment and Climate Change Canada (2021) <u>Canadian Protected and Conserved Areas Database</u>.

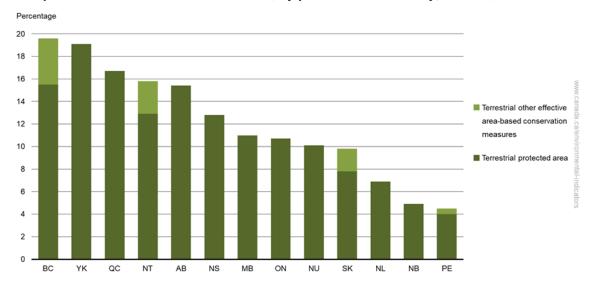
The area conserved varies greatly among ecoregions. Ecoregions that have the highest proportion of area conserved are associated with large protected areas. For example, the Peace-Athabasca Delta ecoregion has 94.4% of its area conserved (Wood Buffalo National Park) and the Mount Logan ecoregion has 100% of its area conserved (Kluane National Park and Reserve). On the other hand, ecoregions in urban or agricultural landscapes have the lowest proportion of area conserved. The Lake Simcoe and Lake Erie - Lake Ontario ecoregions each have less than 3% of their area conserved.

Terrestrial conserved areas, within each province and territory

Key results

- The proportion of terrestrial area (land and freshwater) conserved varies by province and territory. It ranges from 4.5% in Prince Edward Island to 19.6% in British Columbia
- Additions in 2021 include:
 - o over 50 new protected areas in Quebec, with 8 862 km² reported³
 - o 6 new conserved areas in Yukon, totalling 35 419 km²

Figure 5. Proportion of terrestrial area conserved, by province and territory, Canada, 2021



Data for Figure 5

Note: Terrestrial area includes land and freshwater. Data are current as of December 31,2021. **Source:** Environment and Climate Change Canada (2021) Canadian Protected and Conserved Areas Database.

Each province and territory has set aside areas for conservation. Compared to the previous year, the following provinces increased terrestrial areas conserved:

- British Columbia, from 19.5% to 19.6%
- Yukon, from 11.8% to 19.1%
- Quebec, from 12.9% to 16.7%
- Prince Edward Island, from 4.2% to 4.5%

³ Quebec saw an increase of 58 574 km² between the December 31, 2020 and December 31, 2021 versions of the Canadian Protected and Conserved Areas Database. The discrepancy between this increase and the 8 832 km² increase is due to areas with a 2020 protection date that were only included in the database in 2021.

An increasing number of Indigenous protected areas and OECMs are being established. Recent examples include:

- Central Purcell Mountains Indigenous Protected and Conserved Area in British Columbia
- <u>Tłycho Lands Indigenous Conserved Area</u> and <u>Edéhzhíe Indigenous Protected Area</u> in the Northwest Territories
- Thaidene Nëné Wildlife Conservation Area, <u>Thaidene Nene National Park Reserve</u> and <u>Thaidene Nëné Territorial Protected Area</u> in the Northwest Territories
- Kitaskino Nuwenëné Wildland Provincial Park in Alberta

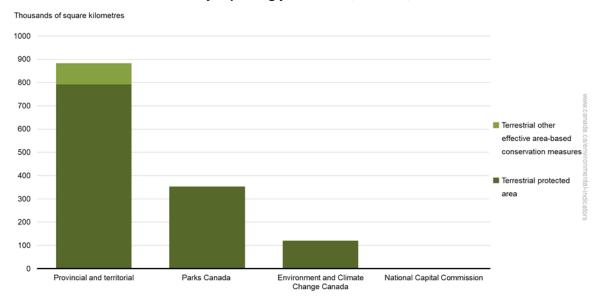
These areas are managed cooperatively between jurisdictions and Indigenous people, or by Indigenous people.

Terrestrial conserved areas, by reporting jurisdiction

Key results

- Over 65% of all terrestrial areas conserved are reported by provincial and territorial jurisdictions
- Parks Canada and Environment and Climate Change Canada are responsible for over 26% and almost 9% of Canada's terrestrial conserved areas, respectively

Figure 6. Terrestrial area conserved, by reporting jurisdiction, Canada, 2021



Data for Figure 6

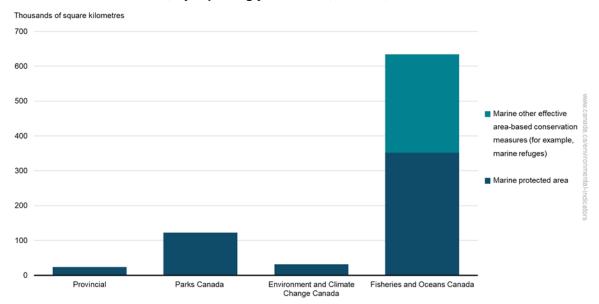
Note: Terrestrial area includes land and freshwater. Terrestrial area protected under the jurisdiction of the National Capital Commission is too small to see in the figure. Data are current as of December 31, 2021.

Marine conserved areas, by reporting jurisdiction

Key results

- In 2021, no additional marine conserved areas were recognized
- At the end of 2021, marine refuges covered about 275 000 km² of Canada's marine territory⁴
- Fisheries and Oceans Canada and Parks Canada are responsible for 79% and 15% of Canada's marine conserved areas, respectively

Figure 7. Marine area conserved, by reporting jurisdiction, Canada, 2021



Data for Figure 7

Note: Data are current as of December 31, 2021.

Source: Environment and Climate Change Canada (2021) Canadian Protected and Conserved Areas Database.

In 2019, Canada surpassed its 2020 marine conservation target of 10%, by conserving 13.8% of its marine territory. This was largely due to the addition of the Tuvaijuittuq Marine Protected Area which added 319 411 km² of protected area. In 2020, marine area recognized as conserved increased to 13.9%.

<u>Marine refuges</u> are long-term fisheries area closures that have been assessed as meeting Canada's criteria for marine other effective area-based conservation measures (OECMs).

Fisheries and Oceans Canada, Parks Canada and Environment and Climate Change Canada each have specific but complementary mandates for establishing marine protected areas:

- Oceans Act marine protected areas (Fisheries and Oceans Canada) are established to maintain
 ecological integrity and to conserve marine species and their habitats. This includes species that are
 fished, endangered or threatened marine species, as well as unique habitats and areas of high biological
 productivity or biodiversity
- <u>National marine conservation areas</u> (Parks Canada) are established to conserve representative examples
 of Canada's natural and cultural marine heritage and to provide opportunities for public education and
 enjoyment
- <u>National wildlife areas</u> and <u>migratory bird sanctuaries</u> (Environment and Climate Change Canada) are established to conserve habitat for a variety of wildlife including migratory birds and endangered species

⁴ Ten (10) of Québec's territorial reserves for protected area purposes overlap with Fisheries and Oceans Canada's marine refuges in the marine waters of the Estuary and Gulf of St. Lawrence. Also, the Banc-des-Américains marine protected area is protected under both Canada's *Oceans Act* and Québec's *Natural Heritage Conservation Act*.

Areas established by these departments, along with provincially established areas, contribute to the <u>conservation</u> <u>network</u>. The primary goal of this network is to provide long-term conservation of marine biodiversity, ecosystem function and special natural features.

The different jurisdictions conserve areas for different purposes,⁵ and control the amount of human activity (such as transportation, fishing or recreation) that is allowed. Marine conservation efforts include a wide range of management and stewardship activities. Examples include support for the recovery of species at risk, prevention and mitigation of the impact of aquatic invasive species, and strengthening of Canada's response to ship-source marine pollution.

About the indicators

What the indicators measure

These indicators report the amount and proportion of Canada's terrestrial (land and freshwater) and marine area that is recognized as conserved. Conserved areas are lands and waters where human use is limited. They include protected areas as well as other effective area-based conservation measures. Canada recognizes the international definitions of protected areas and other effective area-based conservation measures (One with
Nature 2018 [PDF; 2.12 MB] and Canada's Marine Protection Standards). Land and/or water access and use within protected areas are controlled primarily for the purpose of conserving nature (for example, a park, a conservation area or a wildlife reserve). Other effective area-based conservation measures are also managed over the long term in ways that result in the effective conservation of biodiversity. However, other effective area-based conservation measures might have been established for other purposes. In some cases, certain commercial activities and harvesting of biological resources may be allowed so long as there is no major negative impact to the conservation objectives of the area.

Why these indicators are important

Well-managed conserved areas are one way to protect wild species and their habitats for present and future generations. Habitat conservation is a measure of human response to the loss of biodiversity and natural habitat. As the area conserved in Canada increases, more lands and waters are withdrawn from direct human development stresses, thereby contributing to biodiversity conservation and improving the health of ecosystems. In turn, healthy ecosystems provide benefits such as clean water, mitigation of climate change, pollination and improved human health.

Many countries use protected areas as the core of their programs to preserve biodiversity, ecosystems and ecosystem services. The parties to the <u>Convention on Biological Diversity</u>, among them Canada, set an aspirational target to conserve at least 17% of terrestrial areas and inland waters, and 10% of marine areas, by 2020. This is the 11th of 20 targets collectively known as the <u>Aichi Biodiversity Targets</u>, established in October 2010.

As part of its work towards achieving Target 1 of the 2020 Biodiversity Goals and Targets for Canada, Canada has conserved new areas and recognized previously existing areas. The Pathway to Canada Target 1 initiative focusses on terrestrial and freshwater areas, while Fisheries and Oceans Canada leads on meeting marine conservation targets. In 2015, when the Biodiversity Goals and Targets were established for Canada, 10.5% of Canada's terrestrial area and around 1% of its marine area were recognized as protected.

A new area-based target has been set for Canada, conserving 25% of our lands and 25% of our oceans by 2025, and working towards 30% of each by 2030.

⁵ <u>The Role of the Canadian Government in the Oceans Sector</u> (PDF; 460 kB) and <u>The Role of the Provincial and Territorial Governments in the Oceans Sector</u> (PDF; 934 kB).



Healthy coasts and oceans

These indicators track progress on the 2019 to 2022 Federal Sustainable Development Strategy, supporting the target: By 2020, 10% of coastal and marine areas are conserved through networks of marine protected areas and other effective area-based conservation measures. As of the end of 2021, 13.9% of Canada's coastal and marine areas was recognized as conserved through a network of marine protected areas and other effective area-based conservation measures, including 9.1% in protected areas.

These indicators are being proposed to track progress in the draft <u>2022 to 2026 Federal Sustainable Development Strategy</u>.



Sustainably managed lands and forests

These indicators track progress on the <u>2019 to 2022 Federal Sustainable Development Strategy</u>, supporting the target: 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. As of the end of 2021, 13.5% of Canada's terrestrial areas and inland water was recognized as conserved through a network of protected areas and other effective area-based conservation measures, including 12.6% in protected areas.

These indicators are being proposed to track progress in the draft <u>2022 to 2026 Federal Sustainable Development Strategy</u>.

In addition, the indicators contribute to the <u>Sustainable Development Goals of the 2030 Agenda for Sustainable Development</u>. They are linked to Goal 14, Life Below Water and Target 14.5, "By 2020, conserve at least 10% of coastal and marine areas, consistent with national and international law and based on the best available scientific information." They are also linked to Goal 15, Life on Land and Target 15.1, "By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements."

The indicators will also contribute towards reporting on the Post-2020 Global Biodiversity Framework that is currently being negotiated.

Related indicators

The <u>Ecological integrity of national parks</u> indicator reports on the condition of ecosystems within national parks, an important element of Canada's conserved area network.

The Global trends in conserved areas indicator compares Canada's conserved area to a peer group of countries.

Data sources and methods

Data sources

Data are taken from the <u>Canadian Protected and Conserved Areas Database</u> (the database). Data from federal, provincial and territorial jurisdictions, the authoritative data sources, are compiled by Environment and Climate Change Canada.

More information

Protected areas and other effective area-based conservation measures

Protected areas together with other effective area-based conservation measures are referred to as conserved areas. Protected areas are areas recognized as meeting the <u>international definition</u> for a protected area. The International Union for Conservation of Nature defines a protected area as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values."

Other effective area-based conservation measures (OECMs) must meet the Convention on Biodiversity definition to be recognized. The Convention on Biodiversity defines an "other effective area-based conservation measure" as "a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity." ⁶ Canada implements the Convention on Biodiversity's OECM definition in a manner that reflects national circumstances. Guidance for assessing sites as Protected Areas or OECMs in Canada is provided through the Pathway to Canada Target 1 Decision Support Tool. ⁷ Guidance for assessing federal marine OECMs is provided through the Marine OECM guidance. ⁸

Data description

The database contains data consolidated from all jurisdictions with responsibilities for conserved areas in Canada. Data are current as of December 31, 2021.

At least once each year, federal, provincial and territorial departments and agencies submit geospatial and ancillary data for conserved areas under their administrative control. Data on areas controlled by Indigenous or non-governmental organizations, such as the Nature Conservancy of Canada and Ducks Unlimited Canada, are included where a jurisdiction has recognized and reported those areas.

The data include the name of the area, its geospatial location, boundaries, official area, biome (terrestrial/marine), International Union for Conservation of Nature management category, managing jurisdiction, and protection date, among other information.

In cases where the same attribute information does not apply to the entire conserved area, the area is divided into zones for reporting. For example, a single protected area that crosses a provincial border is divided into zones corresponding to the different provinces. Similarly, a protected area that is later expanded is treated as several zones, each with its own protection date. Terrestrial and marine sections are treated as separate zones; freshwater is included in the terrestrial zone. Ancillary data are maintained independently for each zone. Conserved areas that are undivided are treated as a single zone.

Work is ongoing to capture and incorporate data on additional privately held protected areas and on areas being conserved through means other than formal protection.

Jurisdictional area

 For Canada and for all provinces and territories except Quebec: Natural Resources Canada (2005) Canada Centre for Remote Sensing, <u>Land and freshwater area</u>, by province and territory

⁶ Convention on Biological Diversity (2018) Conference of the Parties to the Convention on Biological Diversity Decision 14/8.

⁷ Pathway to Canada Target 1 Initiative (2018) <u>One with Nature. A Renewed Approach to Land and Freshwater Conservation in Canada.</u>
<u>Appendix 2 Pan-Canadian Definition for Recognizing and Reporting on Other Effective Area-Based Conservation Measures</u> (PDF; 2.12 MB).

⁸ At time of publication, all existing marine OECMs have been identified using Fisheries and Oceans Canada's 2016 <u>Operational Guidance for Identifying 'Other Effective Area-Based Conservation Measures' in Canada's Marine Environment.</u> Efforts are underway to develop updated marine OECM Guidance that reflects policies put in place since the publication of the 2016 guidance.

- For Quebec: Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques
- Canada's marine territory: Fisheries and Oceans Canada (2013) departmental analysis based on National Resources Canada (2009) Atlas of Canada 1:1,000,000 National Frameworks Data, Administrative Boundaries

National boundaries

Natural Resources Canada (2019) CanVec Series 1:1,000,000 Geopolitical Region, Administrative Boundaries.

Ecozones and ecoregions

Environment and Climate Change Canada (2019) Canadian Terrestrial Ecological Framework. Marine ecozones are based on Fisheries and Oceans Canada (2016) Federal Marine Bioregions (Canadian Science Advisory Secretariat, Science Advisory Report 2009/056).

Methods

The area conserved is estimated by means of a geographical analysis based on reported boundaries, accounting for overlaps. Separate estimates are made for protected areas and other effective area-based conservation measures (OECMs).

More information

Calculating Canada's conserved area

The <u>Canadian Protected and Conserved Areas Database</u> (the database) contains information on the protection (or conservation) date for each zone. For some zones, it also contains a delisting date.

To estimate the terrestrial protected area trend over time:

- 1. All polygons representing terrestrial protected areas that were protected in 1990 or earlier were selected from the database
- 2. The selected polygons were dissolved into a single polygon (removing overlaps), and the resulting area calculated using Albers Equal Area Conic projection
- 3. The process was repeated for each subsequent year (delisted areas were removed from the analysis starting in the year they were delisted)
- 4. Estimates were divided by the total terrestrial area of Canada to determine the proportion protected

To estimate the marine protected area, a similar process was followed, selecting protected marine polygons at each step. The process was repeated for OECMs, for both terrestrial and marine. Total area conserved was calculated by summing area protected and OECM area.

Within the database, 3% of sites have an unknown conservation date. If a polygon with an unknown conservation date was described as "interim," it was assigned a conservation date based on the year it was first reported to the database (1% of total sites); otherwise it was treated as having been conserved prior to 1990.

Terrestrial conserved areas, within each province and territory

The database contains information on the province or territory in which a conserved area is located. Using methodology similar to that used for reporting trends in the national indicator, for each province and territory, terrestrial protected area polygons were combined into a single polygon and the area calculated. The analysis was repeated for terrestrial OECMs. Only overlaps within a province or territory are removed. Overlaps between provinces and territories can occur, due to unavoidable uncertainties in spatial data. They are not accounted for in the table, Proportion of terrestrial area conserved, by province and territory.

Terrestrial and marine conserved areas, by reporting jurisdiction

The database also contains information on the jurisdiction responsible for each conserved area. As with the national indicator, for each jurisdiction, protected areas polygons were combined into a single polygon and the total area was calculated. Additional analysis was conducted to estimate the area for OECMs.

Conserved areas, by ecological area

The database does not contain information on ecological areas. To generate an estimate of conserved area within each ecozone and ecoregion, a geospatial analysis was conducted. However, national ecozone and ecoregion boundaries are more generalized than local conserved areas boundaries, and this has the potential to affect estimates in coastal areas. To avoid this problem, marine conserved area polygons that mapped outside a marine ecozone were assigned to the nearest marine ecozone. Similarly, terrestrial conserved areas that mapped outside a terrestrial ecozone were assigned to the nearest terrestrial ecozone. The steps followed were:

- 1. A working layer containing generalized ecozone boundaries was developed
 - i. Marine ecozone boundaries were copied from the national ecozone coverage, and marine ecozone polygons were extended inland to include adjacent terrestrial regions
- 2. The marine protected area polygons were selected from the database
- 3. The working layer and the marine protected area polygons were combined into a single layer
 - i. Marine protected areas that crossed ecozone boundaries were divided at the boundary
- Protected area polygons were selected from the combined layer, and the overlap-corrected area was calculated for each generalized ecozone, resulting in marine areas being assigned to the correct ecozone
- 5. The process was repeated for marine OECMs
- The process was repeated for terrestrial protected areas and terrestrial OECMs

To be consistent with the projection used in the database, the ecozone layer was re-projected to Albers Equal Area Conic. The total area of each ecozone was then calculated from its geospatial boundaries. The Newfoundland-Labrador Shelves ecozone area was corrected for the territorial area of St Pierre and Miquelon. The total area conserved per ecozone was divided by the total area of the ecozone in order to generate a percentage.

For the terrestrial ecoregion analysis, a geospatial analysis calculated the overlap-adjusted protected area and OECM area within each ecoregion. Terrestrial conserved areas falling outside the ecoregion boundaries were assigned to the nearest ecoregion.

Caveats and limitations

In 2018, the Conservation Areas Reporting and Tracking System was converted to the <u>Canadian Protected and Conserved Areas Database</u> and brought formally within Environment and Climate Change Canada.

Data are regularly reviewed and updated. The completeness of the database is continuously being improved as existing conserved areas are reviewed and added to the database if appropriate. Information on the protection date for sites with previously unreported dates may influence trend calculations.

Trends are estimated based on the date a site was established, rather than the date when it was recognized as a Protected Area or other effective area-based conservation measure (OECM). As such, the totals for a previous year may change as data are updated.

Comparisons with previous reports should be made with caution, as data quality and completeness continue to improve. Privately protected land and OECMs contribute to achievement of Canada's targets, but many are not yet captured within the database.

More information

The area protected or conserved calculated using polygon boundaries may differ from the "official area" reported in the <u>Canadian Protected and Conserved Areas Database</u>.

Responsibility for source data accuracy and completeness lies with the jurisdictions. Jurisdictional work is guided by the federal, provincial and territorial report One with Nature (PDF; 2.12 MB). Guidance material and decision support tools were adapted from, and in collaboration with, the Canadian Council on Ecological Areas. Nonetheless, some differences in the approach jurisdictions take in recognizing protected areas and OECMs can be expected.

Areas that are no longer recognized as protected or conserved ("decommissioned" or "delisted") are not captured comprehensively and may be missing from the database. Decommissioned or delisted areas are counted from their establishment date until their delisting date.

Complex boundaries, such as coastlines and ecological areas, must be generalized for mapping purposes. In nature, ecozones or ecoregions do not have sharp boundaries. Due to the uncertainty of such boundaries, results should be seen as estimates rather than precise measurements. The mismatch in scale between conserved areas, mapped with fine detail, and national-scale geographic frameworks, mapped at a broad scale, may lead to minor differences across the various summaries because of the measurement uncertainty inherent in this type of analysis. Differences in the delineation of coastlines may result in a small amount of overlap between marine and terrestrial conserved area polygon boundaries; these overlaps have not been addressed.

Ecozones and ecoregions are ecologically based frameworks and should not be considered an expression of sovereignty. The 2019 updates to the ecozone and ecoregion frameworks have been completed for the purpose of reporting on ecological representation for the Pathway to Canada Target 1 initiative, and do not represent an official update of the 1995 National Ecological Framework. While the 2019 framework contains the most up-to-date information from jurisdictions, it should be noted that a different methodology was used by each data provider to determine the boundaries of the ecozones and ecoregions and that this national layer may differ from the provincial and territorial layers.

Protection is a designation, and the indicators do not provide information on the effectiveness of protection, the degree to which the ecological functioning of the area is intact, or the degree to which pressures outside a conserved area might affect the biodiversity within it. For example, an OECM such as a marine refuge restricts certain activities without limiting others.

Resources

References

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Fisheries and Oceans Canada (2009) <u>Development of a Framework and Principles for the Biogeographic Classification of Canadian Marine Areas</u>. Canadian Science Advisory Secretariat, Science Advisory Report 2009/056. Retrieved on March 7, 2022.

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Stolton S, Shadie P and Dudley N (2013) <u>Guidelines for applying protected area management categories including IUCN WCPA best practice guidance on recognising protected areas and assigning management categories and governance types</u> (combined volume). Best Practice Protected Area Guidelines Series No. 21, Gland, Switzerland, section 2. Retrieved on March 7, 2022.

Related information

2020 Biodiversity Goals and Targets for Canada

Canadian Council on Ecological Areas

Convention on Biological Diversity

Interactive map of Quebec's protected areas (French only)

Pathway to Canada Target 1

ProtectedPlanet.net

Annex

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

Table A.1. Data for Figure 1. Proportion of area conserved, Canada, 1990 to

Year	Terrestrial area protected (square kilometres)	Percentage of terrestrial area protected	Terrestrial area conserved (square kilometres)	Percentage of terrestrial area conserved	Marine area protected (square kilometres)	Percentage of marine area protected	Marine area conserved (square kilometres)	Percentage of marine area conserved
1990	534 169	5.4	573 314	5.7	18 455	0.32	20 249	0.35
1991	534 674	5.4	573 821	5.8	18 474	0.32	20 268	0.35
1992	550 104	5.5	589 251	5.9	18 898	0.33	20 693	0.36
1993	564 759	5.7	603 905	6.1	19 144	0.33	20 938	0.36
1994	568 286	5.7	607 432	6.1	19 148	0.33	20 943	0.36
1995	600 604	6.0	639 751	6.4	20 916	0.36	22 711	0.39
1996	618 020	6.2	657 166	6.6	21 777	0.38	23 570	0.41
1997	629 818	6.3	677 798	6.8	21 799	0.38	23 593	0.41
1998	658 878	6.6	706 859	7.1	23 781	0.41	25 651	0.45
1999	681 719	6.8	729 699	7.3	24 014	0.42	27 974	0.49
2000	691 604	6.9	739 584	7.4	24 112	0.42	28 073	0.49
2001	719 717	7.2	767 696	7.7	24 144	0.42	28 105	0.49
2002	727 121	7.3	775 099	7.8	24 347	0.42	28 699	0.50
2003	782 963	7.8	836 884	8.4	27 547	0.48	31 914	0.56
2004	792 392	7.9	846 313	8.5	29 946	0.52	34 330	0.60
2005	819 068	8.2	872 978	8.7	31 368	0.55	38 559	0.67
2006	825 801	8.3	879 711	8.8	31 719	0.55	38 910	0.68
2007	851 954	8.5	905 864	9.1	31 912	0.55	49 525	0.86
2008	903 958	9.1	957 879	9.6	40 790	0.71	58 403	1.0
2009	935 450	9.4	989 370	9.9	41 344	0.72	58 957	1.0
2010	942 455	9.4	996 376	10.0	50 532	0.88	68 145	1.2
2011	966 933	9.7	1 024 250	10.3	50 618	0.88	68 231	1.2
2012	983 610	9.9	1 040 927	10.4	50 620	0.88	68 233	1.2
2013	1 017 590	10.2	1 105 026	11.1	51 267	0.89	69 617	1.2
2014	1 019 608	10.2	1 107 043	11.1	51 268	0.89	69 749	1.2
2015	1 042 741	10.4	1 130 181	11.3	52 614	0.92	71 121	1.2
2016	1 045 650	10.5	1 133 090	11.4	54 971	0.96	82 325	1.4
2017	1 048 114	10.5	1 135 553	11.4	168 413	2.9	451 116	7.9
2018	1 090 975	10.9	1 178 413	11.8	179 871	3.1	462 572	8.0
2019	1 129 523	11.3	1 217 190	12.2	511 855	8.9	794 558	13.8
2020	1 214 109	12.2	1 301 778	13.0	524 306	9.1	798 861	13.9

Year	Terrestrial area protected (square kilometres)	Percentage of terrestrial area protected	Terrestrial area conserved (square kilometres)	Percentage of terrestrial area conserved	Marine area protected (square kilometres)	Percentage of marine area protected	Marine area conserved (square kilometres)	Percentage of marine area conserved
2021	1 254 278	12.6	1 345 067	13.5	524 306	9.1	798 861	13.9

Note: Terrestrial area includes both land and freshwater. Area conserved includes area protected as well as other effective area-based conservation measures. In Canada, marine and terrestrial other effective area-based conservation measures were formally recognized in 2017 and 2018, respectively. Trends are estimated based on site establishment dates rather than when they were formally recognized. For more information on the definition of protected areas and other effective area-based conservation measures, please refer to the Data sources and methods. Canada's terrestrial territory is 9 984 670 square kilometres (km²) and its marine territory is approximately 5 750 000 km². Overlaps among protected areas and among other effective area-based conservation measures were accounted for. Data are current as of December 31, 2021.

Table A.2. Data for Figure 3. Proportion of area conserved, by ecozone, Canada, 2021

Ecozone name	Ecozone code	Ecozone area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Arctic Cordillera	CL01	229 513	51 891	22.6	0	51 891	22.6
Northern Arctic	CL02	1 479 561	105 630	7.1	0	105 630	7.1
Southern Arctic	CL03	958 299	186 150	19.4	6 772	192 922	20.1
Taiga Plains	CL04	553 374	61 138	11.0	18 199	79 377	14.3
Taiga Shield	CL05	1 322 962	169 620	12.8	1 032	170 652	12.9
Boreal Shield	CL06	1 902 001	216 895	11.4	36	216 931	11.4
Atlantic Maritime	CL07	110 590	9 517	8.6	48	9 565	8.6
Mixedwood Plains	CL08	115 395	2 764	2.4	43	2 807	2.4
Boreal Plains	CL09	780 010	65 249	8.4	5 026	70 275	9.0
Prairies	CL10	464 422	18 477	4.0	9 664	28 141	6.1
Montane Cordillera	CL11	436 791	82 673	18.9	17 069	99 742	22.8
Pacific Maritime	CL12	217 022	52 423	24.2	7 439	59 862	27.6
Boreal Cordillera	CL13	557 860	96 630	17.3	9 675	106 305	19.1
Taiga Cordillera	CL14	231 266	55 277	23.9	10 505	65 782	28.4
Hudson Plains	CL15	348 406	50 136	14.4	0	50 136	14.4
Tundra Cordillera	CL16	28 887	8 138	28.2	3 197	11 335	39.2
Atlantic Highlands	CL17	93 012	4 395	4.7	0	4 395	4.7
Semi-Arid Plateaus	CL18	56 464	5 343	9.5	2 084	7 427	13.2
Strait of Georgia	CW19	8 969	425	4.7	32	458	5.1
Southern Shelf	CW20	28 158	785	2.8	0	785	2.8
Offshore Pacific	CW21	315 724	10 547	3.3	82 431	92 977	29.4
Northern Shelf	CW22	101 663	16 647	16.4	0	16 647	16.4
Arctic Basin	CW23	752 053	284 091	37.8	0	284 091	37.8
Western Arctic	CW24	539 807	12 060	2.2	0	12 060	2.2
Arctic Archipelago	CW25	268 792	38 923	14.5	0	38 923	14.5
Eastern Arctic	CW26	782 636	115 296	14.7	58 725	174 021	22.2
Hudson Bay Complex	CW27	1 244 670	8 684	0.7	0	8 684	0.7
Newfoundland- Labrador Shelves	CW28	1 041 588	12 577	1.2	105 916	118 493	11.4
Scotian Shelf	CW29	416 296	6 000	1.4	19 734	25 733	6.2
Gulf of Saint Lawrence	CW30	246 648	18 270	7.4	7 718	25 988	10.5
Great Lakes	CW31	89 236	11 932	13.4	0	11 932	13.4

Note: Area conserved includes area protected as well as other effective area-based conservation measures. Data are current as of December 31, 2021.

Table A.3. Data for Figure 4. Proportion of area conserved, by ecoregion, Canada, 2021 Error! Reference source not found.

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Ellesmere and Devon Island Ice Caps	CL01R01	113 244	14 120	12.5	0	14 120	12.5
Baffin Mountains	CL01R02	87 928	27 592	31.4	0	27 592	31.4
Baffin Islands Coastal Lowlands	CL01R03	9 159	476	5.2	0	476	5.2
Torngat Mountains	CL01R04	19 182	9 764	50.9	0	9 764	50.9
Ellesmere Mountains	CL02R01	53 112	6 197	11.7	0	6 197	11.7
Eureka Hills	CL02R02	75 769	15 492	20.4	0	15 492	20.4
Polar Islands	CL02R03	21 353	0	0	0	0	0
Sverdrup Islands Lowland	CL02R04	28 971	0	0	0	0	0
Lancaster Plateau	CL02R05	102 430	78	0.1	0	78	0.1
High Arctic	CL02R06	25 939	3 687	14.2	0	3 687	14.2
Central Melville Upland	CL02R07	15 210	0	0	0	0	0
Parry Islands Plateau	CL02R08	43 593	12 266	28.1	0	12 266	28.1
Mid Arctic West	CL02R09	42 701	26 585	62.3	0	26 585	62.3
Mid Arctic East	CL02R10	91 488	362	0.4	0	362	0.4
Low Arctic North	CL02R11	9 859	859	8.7	0	859	8.7
Shaler Mountains	CL02R12	26 327	0	0	0	0	0
Amundsen Gulf Lowlands	CL02R13	49 141	22	0	0	22	0
Victoria Islands Lowland	CL02R14	123 129	0	0	0	0	0
Prince of Wales Island Lowland	CL02R15	17 150	0	0	0	0	0
Boothia Peninsula Plateau	CL02R16	35 701	0	0	0	0	0
Gulf of Boothia Plain	CL02R17	24 426	13	0.1	0	13	0.1
Borden Peninsula Plateau	CL02R18	31 473	11 822	37.6	0	11 822	37.6
Melville Peninsula Plateau	CL02R19	111 290	11	0	0	11	0
Baffin Island Uplands	CL02R20	79 703	1 597	2.0	0	1 597	2.0
Wager Bay Plateau	CL02R21	250 876	18 440	7.4	0	18 440	7.4
Foxe Basin Plain	CL02R22	56 549	6 574	11.6	0	6 574	11.6
Meta Incognita Peninsula	CL02R23	77 447	1 223	1.6	0	1 223	1.6

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Pangnirtung Upland	CL02R24	34 271	40	0.1	0	40	0.1
Hall Peninsula Upland	CL02R25	35 389	0	0	0	0	0
Baffin Upland	CL02R26	16 265	301	1.9	0	301	1.9
Yukon Coastal Plain	CL03R01	4 652	2 478	53.3	0	2 478	53.3
West Lowlands	CL03R02	24 729	1 178	4.8	0	1 178	4.8
Central Lowlands	CL03R03	14 847	335	2.3	0	335	2.3
East Lowlands	CL03R04	5 112	101	2.0	0	101	2.0
East Highlands	CL03R05	22 546	16 696	74.1	0	16 696	74.1
Coronation Hills	CL03R06	77 972	2 085	2.7	3 652	5 737	7.4
Bathurst Hills	CL03R07	8 986	1	0	0	1	0
Takijua Lake Upland	CL03R08	126 102	1 543	1.2	915	2 457	1.9
Queen Maud Gulf Lowland	CL03R09	66 172	43 449	65.7	0	43 449	65.7
Chantrey Inlet Lowland	CL03R10	21 959	2 163	9.9	0	2 163	9.9
Garry Lake Lowland	CL03R11	98 928	29 029	29.3	2 206	31 235	31.6
Back River Plain	CL03R12	33 117	14 989	45.3	0	14 989	45.3
Dubawnt Lake Plain and Upland	CL03R13	54 322	14 869	27.4	0	14 869	27.4
Maguse River Upland	CL03R14	78 598	257	0.3	0	257	0.3
Southampton Island Plain	CL03R15	37 903	1 463	3.9	0	1 463	3.9
Ottawa Islands	CL03R16	410	0	0	0	0	0
Belcher Islands	CL03R17	3 214	0	0	0	0	0
Ungava Peninsula	CL03R18	240 236	39 313	16.4	0	39 313	16.4
Northern Labrador Highlands	CL03R19	38 496	16 202	42.1	0	16 202	42.1
Mackenzie Delta	CL04R01	9 373	0	0	130	130	1.4
Low Subarctic Northern Plains	CL04R02	55 550	8 751	15.8	2 216	10 967	19.7
Northern Uplands	CL04R03	54 532	808	1.5	6 920	7 728	14.2
High Subarctic Northern Plains	CL04R04	82 597	666	0.8	2 020	2 685	3.3
Central Highlands	CL04R05	38 262	3 307	8.6	2 699	6 006	15.7
Central Uplands	CL04R06	17 973	109	0.6	16	125	0.7
Central Plains	CL04R07	20 851	1 128	5.4	3 149	4 277	20.5
Lac Grandin Plain	CL04R08	26 097	1 317	5.0	523	1 840	7.1
West-central Uplands	CL04R09	10 647	683	6.4	0	683	6.4

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Mackenzie Plain	CL04R10	18 388	1 439	7.8	0	1 439	7.8
Bulmer Plain	CL04R11	17 255	1 370	7.9	0	1 370	7.9
Horn Plateau	CL04R12	9 404	6 946	73.9	0	6 946	73.9
Great Slave Lake Plain	CL04R13	15 877	116	0.7	0	116	0.7
Northern Alberta Upland	CL04R14	31 212	481	1.5	527	1 008	3.2
Southern Uplands	CL04R15	15 675	0	0	0	0	0
Northern Mixedwood	CL04R16	92 264	24 663	26.7	0	24 663	26.7
Lower Boreal Highlands North	CL04R17	11 745	1 926	16.4	0	1 926	16.4
Boreal Subarctic	CL04R18	14 006	5 844	41.7	0	5 844	41.7
Slave Lowlands	CL04R19	11 667	1 583	13.6	0	1 583	13.6
High Subarctic West	CL05R01	60 726	3 155	5.2	950	4 105	6.8
Low Subarctic North	CL05R02	58 734	4 831	8.2	82	4 913	8.4
High Boreal	CL05R03	111 755	15 043	13.5	0	15 043	13.5
Slave Plain	CL05R04	7 579	11	0.1	0	11	0.1
Selwyn Lake Upland	CL05R05	196 275	22 463	11.4	0	22 463	11.4
Kazan River Upland	CL05R06	183 946	24 006	13.1	0	24 006	13.1
La Grande Hills	CL05R07	171 951	48 030	27.9	0	48 030	27.9
Nord-du-Québec Central Plateau	CL05R08	177 618	28 818	16.2	0	28 818	16.2
McPhayden Plateau	CL05R09	9 461	7	0.1	0	7	0.1
Ungava Bay Basin	CL05R10	109 785	13 361	12.2	0	13 361	12.2
Kingurutik-Fraser	CL05R11	52 915	11	0	0	11	0
Coastal Barrens	CL05R12	13 520	856	6.3	0	856	6.3
Michikamau- Smallwood	CL05R13	86 549	1 531	1.8	0	1 531	1.8
Nipishish-Goose	CL05R14	23 259	0	0	0	0	0
Mecatina River	CL05R15	41 289	2	0	0	2	0
Eagle Plateau – Mealy Mountains	CL05R16	17 599	7 496	42.6	0	7 496	42.6
Athabasca Plain	CL06R01	87 467	6 466	7.4	0	6 466	7.4
Churchill River Upland	CL06R02	196 603	11 598	5.9	36	11 634	5.9
Hayes River Upland	CL06R03	131 805	4 697	3.6	0	4 697	3.6
Big Trout Lake	CL06R04	146 897	5 611	3.8	0	5 611	3.8
Lake St. Joseph	CL06R05	91 057	25 600	28.1	0	25 600	28.1
Lake Wabigoon	CL06R06	75 331	15 680	20.8	0	15 680	20.8

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Lake of the Woods	CL06R07	16 390	761	4.6	0	761	4.6
Lake Nipigon	CL06R08	89 192	14 773	16.6	0	14 773	16.6
Pigeon River	CL06R09	20 468	5 175	25.3	0	5 175	25.3
Abitibi Lowlands	CL06R10	211 625	20 917	9.9	0	20 917	9.9
Lake Temagami	CL06R11	41 758	6 264	15.0	0	6 264	15.0
Georgian Bay	CL06R12	74 501	7 881	10.6	0	7 881	10.6
Mistassini Highlands	CL06R13	97 165	22 528	23.2	0	22 528	23.2
Southern Laurentides Highlands	CL06R14	158 761	13 021	8.2	0	13 021	8.2
Central Laurentides Highlands	CL06R15	205 129	26 773	13.1	0	26 773	13.1
Lake Melville	CL06R16	17 668	461	2.6	0	461	2.6
Paradise River	CL06R17	17 160	1 900	11.1	0	1 900	11.1
Middle and Lower Côte-Nord Plateau	CL06R18	104 282	17 069	16.4	0	17 069	16.4
Anticosti Island	CL06R19	7 937	2 253	28.4	0	2 253	28.4
Strait of Belle Isle Barrens	CL06R20	1 783	42	2.3	0	42	2.3
Northern Peninsula Forest	CL06R21	8 508	505	5.9	0	505	5.9
Long Range Barrens	CL06R22	16 589	1 598	9.6	0	1 598	9.6
Western Newfoundland Forest	CL06R23	9 874	561	5.7	0	561	5.7
Central Newfoundland Forest	CL06R24	28 731	537	1.9	0	537	1.9
North Shore Forest	CL06R25	5 483	133	2.4	0	133	2.4
Maritime Barrens	CL06R26	37 734	4 038	10.7	0	4 038	10.7
Avalon Forest	CL06R27	555	16	2.9	0	16	2.9
Eastern Hyper-Oceanic Barrens	CL06R28	1 545	44	2.9	0	44	2.9
Valley Lowlands	CL07R01	20 310	722	3.6	0	722	3.6
Eastern Lowlands	CL07R02	39 021	1 795	4.6	10	1 805	4.6
Grand Lake Lowlands	CL07R03	3 780	153	4.0	0	153	4.0
Central Uplands East	CL07R04	1 408	212	15.0	0	212	15.0
Fundy Coast	CL07R05	3 633	264	7.3	0	264	7.3
Prince Edward Island	CL07R06	5 932	228	3.8	25	253	4.3
Îles-de-la-Madeleine	CL07R07	232	26	11.2	0	26	11.2
Avalon Uplands	CL07R08	4 793	393	8.2	13	406	8.5

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Triassic Lowlands	CL07R09	1 367	2	0.1	0	2	0.1
Western Meguma Interior	CL07R10	17 129	2 890	16.9	0	2 890	16.9
Eastern Meguma Interior	CL07R11	6 136	787	12.8	0	787	12.8
Cape Breton Highlands	CL07R12	2 460	1 282	52.1	0	1 282	52.1
Cape Breton Taiga	CL07R13	302	227	75.2	0	227	75.2
Atlantic Coast	CL07R14	4 088	536	13.1	0	536	13.1
St. Lawrence Lowlands	CL08R01	44 124	1 520	3.4	0	1 521	3.4
Lake Simcoe	CL08R02	49 405	1 018	2.1	42	1 060	2.1
Lake Erie - Lake Ontario	CL08R03	21 865	220	1.0	0	220	1.0
Muskwa Plateau	CL09R01	26 169	857	3.3	1	857	3.3
Mid Boreal Uplands	CL09R02	307 570	40 308	13.1	2 141	42 449	13.8
Lower Boreal Highlands South	CL09R03	69 089	3 039	4.4	559	3 598	5.2
Upper Boreal Highlands	CL09R04	11 894	2 331	19.6	0	2 331	19.6
Dry Mixedwood	CL09R05	58 592	939	1.6	180	1 118	1.9
Peace River Parkland	CL09R06	3 122	20	0.6	0	20	0.6
Lower Foothills	CL09R07	51 105	457	0.9	191	648	1.3
Upper Foothills	CL09R08	22 460	600	2.7	30	631	2.8
Peace-Athabasca Delta	CL09R09	5 539	5 227	94.4	0	5 227	94.4
Boreal Transition	CL09R10	91 799	3 488	3.8	1 636	5 124	5.6
Mid Boreal Lowland	CL09R11	92 890	6 411	6.9	284	6 696	7.2
Interlake Plain	CL09R12	39 782	1 572	4.0	5	1 576	4.0
Aspen Parkland	CL10R01	170 223	4 507	2.6	2 085	6 592	3.9
Foothills Parkland	CL10R02	3 928	243	6.2	0	243	6.2
Foothills Fescue	CL10R03	13 642	49	0.4	0	49	0.4
Moist Mixed Grassland	CL10R04	82 833	3 836	4.6	1 103	4 939	6.0
Mixedgrass	CL10R05	17 599	180	1.0	0	180	1.0
Dry Mixedgrass	CL10R06	133 416	8 636	6.5	5 655	14 291	10.7
Cypress Mixedgrass	CL10R07	7 517	252	3.4	822	1 074	14.3
Cypress Hills Montane	CL10R08	309	206	66.7	0	206	66.7
Southwest Manitoba Uplands	CL10R09	2 188	178	8.1	0	178	8.1
Lake Manitoba Plain	CL10R10	32 768	388	1.2	0	388	1.2

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Skeena Mountains	CL11R01	24 427	882	3.6	525	1 407	5.8
Omineca Mountains	CL11R02	34 083	2 960	8.7	1 111	4 070	11.9
Fraser Basin	CL11R03	43 017	1 522	3.5	403	1 925	4.5
Central Canadian Rocky Mountains	CL11R04	37 273	4 032	10.8	2 487	6 518	17.5
Eastern Hazelton Mountains	CL11R05	13 535	5 992	44.3	1 098	7 090	52.4
Chilcotin Ranges	CL11R06	15 784	6 476	41.0	363	6 839	43.3
Fraser Plateau	CL11R07	82 038	5 175	6.3	6 010	11 185	13.6
Columbia Highlands	CL11R08	29 572	3 194	10.8	2 371	5 565	18.8
Selkirk-Bitterroot Foothills	CL11R09	7 646	876	11.5	55	932	12.2
Northern Columbia Mountains	CL11R10	53 493	12 036	22.5	1 142	13 177	24.6
Southern Rocky Mountain Trench	CL11R11	8 498	609	7.2	152	761	9.0
Purcell Transitional Ranges	CL11R12	8 108	1 196	14.8	4	1 200	14.8
Western Continental Ranges	CL11R13	23 382	6 501	27.8	113	6 614	28.3
Northern Continental Divide	CL11R14	5 916	437	7.4	880	1 317	22.3
Eastern Continental Ranges	CL11R15	50 020	30 785	61.5	356	31 142	62.3
Mount Logan	CL12R01	12 925	12 923	100	0	12 923	100
Chugach Mountains and Icefields	CL12R02	2 338	2 338	100	0	2 338	100
Boundary Ranges	CL12R03	21 426	1 318	6.2	10	1 328	6.2
Nass Ranges	CL12R04	27 323	1 279	4.7	1 447	2 726	10.0
Gwaii Haanas	CL12R05	10 049	4 820	48.0	8	4 828	48.0
Coastal Gap	CL12R06	45 187	16 907	37.4	631	17 538	38.8
Western Vancouver Island	CL12R07	20 165	2 815	14.0	794	3 610	17.9
Eastern Vancouver Island	CL12R08	12 333	1 547	12.5	210	1 756	14.2
Georgia-Puget Basin	CL12R09	1 668	150	9.0	3	153	9.2
Lower Mainland	CL12R10	4 290	219	5.1	49	268	6.2
Pacific Ranges	CL12R11	59 317	8 108	13.7	4 287	12 395	20.9
St. Elias Mountains	CL13R01	18 708	15 693	83.9	0	15 693	83.9

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Wellesley Lake	CL13R02	3 983	0	0	0	0	0
Ruby-Nisling Ranges	CL13R03	18 885	10	0.1	0	10	0.1
Klondike Plateau	CL13R04	36 520	0	0	0	0	0
Yukon Plateau-Central	CL13R05	24 030	110	0.5	0	110	0.5
McQuesten Highlands	CL13R06	23 592	771	3.3	0	771	3.3
Yukon Plateau-North	CL13R07	49 503	1 770	3.6	0	1 770	3.6
Selwyn Mountains	CL13R08	35 697	1	0	0	1	0
Mid-Boreal Highlands	CL13R09	24 120	12 638	52.4	2	12 640	52.4
High Boreal Highlands	CL13R10	23 759	18 135	76.3	0	18 135	76.3
High Boreal Lowlands	CL13R11	9 561	1 042	10.9	0	1 042	10.9
Yukon-Stikine Highlands	CL13R12	23 468	6 654	28.4	0	6 654	28.4
Yukon Southern Lakes	CL13R13	50 133	5 846	11.7	0	5 846	11.7
Pelly Mountains	CL13R14	46 960	140	0.3	0	140	0.3
Boreal Mountains and Plateaus	CL13R15	79 123	20 760	26.2	4 322	25 081	31.7
Liard Basin	CL13R16	28 926	620	2.1	0	620	2.1
Hyland Highland	CL13R17	19 609	378	1.9	0	378	1.9
Northern Canadian Rocky Mountains	CL13R18	41 282	12 062	29.2	5 352	17 414	42.2
Davidson Mountains	CL14R01	5 191	3 302	63.6	0	3 302	63.6
Old Crow Basin	CL14R02	14 923	5 794	38.8	0	5 794	38.8
North Ogilvie Mountains	CL14R03	40 613	7 096	17.5	0	7 096	17.5
Eagle Plains	CL14R04	21 985	1 619	7.4	0	1 619	7.4
Mackenzie Mountains	CL14R05	31 568	18 399	58.3	0	18 399	58.3
Low Subarctic Lowlands	CL14R06	43 421	15 769	36.3	1 833	17 602	40.5
High Subarctic Highlands	CL14R07	24 526	154	0.6	1 652	1 806	7.4
Low Subarctic Highlands	CL14R08	49 040	3 145	6.4	7 020	10 165	20.7
Coastal Hudson Bay Lowland	CL15R01	57 236	26 576	46.4	0	26 576	46.4
Hudson Bay Lowland	CL15R02	138 825	13 362	9.6	0	13 362	9.6
James Bay Lowlands	CL15R03	152 345	10 198	6.7	0	10 198	6.7
British-Richardson Mountains	CL16R01	28 887	8 138	28.2	3 197	11 335	39.2

Ecoregion name	Ecoregion code	Ecoregion area (square kilometres)	Area protected (square kilometres)	Percentage of region protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of region conserved
Appalachian Mountains	CL17R01	69 073	3 133	4.5	0	3 133	4.5
Central Uplands West	CL17R02	12 393	378	3.0	0	378	3.0
Northern New Brunswick Uplands	CL17R03	8 724	601	6.9	0	601	6.9
New Brunswick Highlands	CL17R04	2 822	283	10.0	0	283	10.0
Interior Transition Ranges	CL18R01	14 026	2 235	15.9	1 217	3 453	24.6
Northern Cascade Ranges	CL18R02	9 479	1 652	17.4	194	1 847	19.5
Thompson-Okanagan Plateau	CL18R03	31 596	1 253	4.0	657	1 909	6.0
Okanagan Highland	CL18R04	1 363	203	14.9	15	218	16.0
Great Lakes	CW31	89 236	11 932	13.4	0	11 932	13.4

Note: Area conserved includes area protected as well as other effective area-based conservation measures. Data are current as of December 31, 2021.

Table A.4. Data for Figure 5. Proportion of terrestrial area conserved, by province and territory, Canada, 2021

Province or territory	Provincial or territorial area (square kilometres)	Area protected (square kilometres)	Percentage of province or territory protected	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)	Percentage of province or territory conserved
British Columbia	944 735	146 284	15.5	38 477	184 761	19.6
Yukon	482 443	92 227	19.1	0	92 227	19.1
Quebec	1 512 418	253 160	16.7	0	253 160	16.7
Northwest Territories	1 346 106	173 140	12.9	39 181	212 321	15.8
Alberta	661 848	101 596	15.4	0	101 596	15.4
Nova Scotia	55 284	7 078	12.8	23	7 101	12.8
Manitoba	647 797	71 331	11.0	231	71 561	11.0
Ontario	1 076 395	115 258	10.7	43	115 300	10.7
Nunavut	2 093 190	211 373	10.1	0	211 373	10.1
Saskatchewan	651 036	50 938	7.8	12 812	63 750	9.8
Newfoundland and Labrador	405 212	28 141	6.9	0	28 141	6.9
New Brunswick	72 908	3 565	4.9	0	3 565	4.9
Prince Edward Island	5 660	228	4.0	25	253	4.5

Note: Terrestrial area includes land and freshwater. Area conserved includes area protected as well as other effective area-based conservation measures. Data are current as of December 31, 2021.

Source: Environment and Climate Change Canada (2021) Canadian Protected and Conserved Areas Database.

Table A.5. Data for Figure 6. Terrestrial area conserved, by reporting jurisdiction, Canada, 2021

Jurisdiction	Area protected (square kilometres)	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)
Provincial and territorial subtotal	792 140	91 102	883 243
Quebec	251 832	0	251 832
British Columbia	140 181	38 475	178 656
Ontario	101 839	43	101 881
Northwest Territories	43 110	39 181	82 291
Manitoba	57 590	231	57 821
Saskatchewan	44 635	13 125	57 759
Alberta	46 082	0	46 082
Nunavut	36 534	0	36 534
Yukon	56 032	0	56 032
Nova Scotia	5 675	23	5 698
Newfoundland and Labrador	5 333	0	5 333
New Brunswick	3 097	0	3 097
Prince Edward Island	202	25	227
Parks Canada	353 082	0	353 082
Environment and Climate Change Canada	119 946	2	119 948
National Capital Commission	463	0	463
Correction for overlaps among jurisdictions	-11 353	-315	-11 668
Grand total	1 254 278	90 789	1 345 067

Note: Terrestrial area includes land and freshwater. Area conserved includes area protected area as well as other effective area-based conservation measures. Data are current as of December 31, 2021.

Table A.6. Data for Figure 7. Marine area conserved, by reporting jurisdiction, Canada, 2021Figure 7. Marine area conserved, by reporting jurisdiction, Canada,

Jurisdiction	Area protected (square kilometres)	Other effective area-based conservation measures (square kilometres)	Area conserved (square kilometres)
Provincial subtotal	23 716	0	23 716
Quebec	18 833	0	18 833
British Columbia	4 630	0	4 630
Atlantic provinces	173	0	173
Manitoba	80	0	80
Fisheries and Oceans Canada	351 517	282 766	634 283
Parks Canada	122 089	0	122 089
Environment and Climate Change Canada	31 072	0	31 072
Correction for overlaps among jurisdictions	-4 088	-8 211	-12 299
Grand total	524 306	274 555	798 861

Note: Area conserved includes area protected as well as other effective area-based conservation measures. Data are current as of December 31, 2021.

Additional information can be obtained at:

Environment and Climate Change Canada Public Inquiries Centre 12th Floor Fontaine Building 200 Sacré-Coeur Blvd Gatineau QC K1A 0H3

Telephone: 1-800-668-6767 (in Canada only) or 819-938-3860

Email: enviroinfo@ec.gc.ca