

8th International
Conference on
BIG DATA
& Data Science for Official Statistics

BILBAO 2024

Informing Climate Change and
Sustainable Development Policies
with Integrated Data

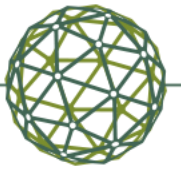
BILBAO, SPAIN | **10-14 JUNE 2024** | **#UNBigData2024**

Using the Census of Environment to report on biodiversity policies

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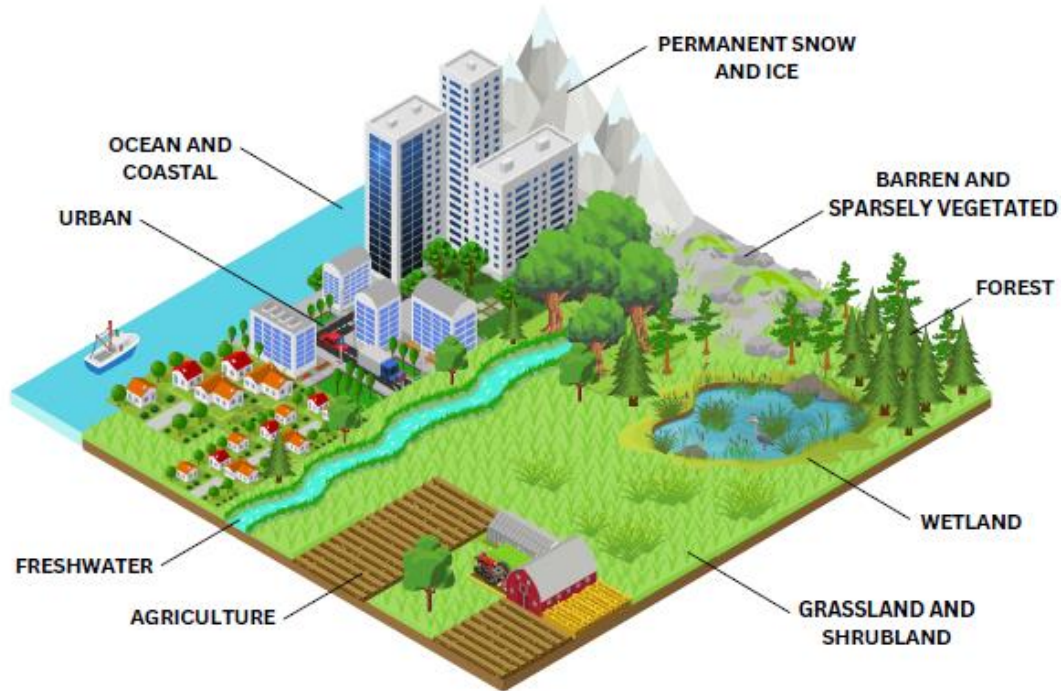
ORGANIZATION Statistics Canada





Census of Environment is:

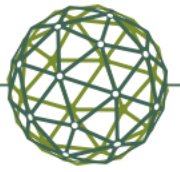
ECOSYSTEM TYPES



SCOPE OF ECOSYSTEM ACCOUNTING IN CANADA

EXTENT	CONDITION	ECOSYSTEM SERVICES	BENEFICIARIES	PRODUCTS	STANDARDS
Estimates of the area and location of ecosystems	Estimates of ecosystem health for various ecosystem characteristics	Estimates of the contributions of ecosystems to society	Users and beneficiaries of ecosystem services including businesses, governments and households	Tables, regional profiles, interactive mapping tools, spatial files and analytical articles	High level of statistical standards and data governance
					

[Census of Environment \(statcan.gc.ca\)](https://www.statcan.gc.ca)



Census of Environment and the Kunming-Montreal Global Biodiversity Framework

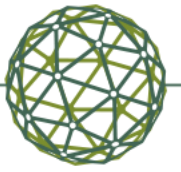
- Response led by Environment and Climate Change Canada
- National Biodiversity Strategy Action Plan and the Domestic Biodiversity Monitoring Framework (DBMF)
- DBMF includes headline indicators as well as domestic indicators
- CoE responsible for the following indicators:

Headline

- A2 Extent of natural ecosystems
- B1 Ecosystem services
- 12.1 Urban green and blue spaces for public use

Domestic

- Value of commercial provisioning services



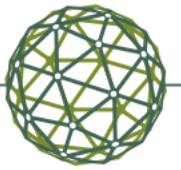
Example: Developing land cover data

- Working on a spatially based register and design-based area estimates for land cover
- This will form the basis for ecosystem extent
- Integrates data sets from various sources (federal)
- Data is available on a 30m spatial resolution

Map 2.1
Terrestrial and freshwater ecosystem extent



Source: [Accounting for ecosystem change in Canada \(statcan.gc.ca\)](https://www.statcan.gc.ca)



Using StatCan data to meet KM-GBF needs

Challenges

- Data development
- Methodology decisions (in particular with ecosystem services)
- Resources (technical and human)

Opportunities

- International policy frameworks increase visibility of data and move data higher up in list of government priorities
- Cooperation with other government departments
- National response will produce more data that can be used in CoE