

GENERAL INFORMATION ON BIOSPHERE RESERVES

November 2025

What are Biosphere Reserves?

Biosphere Reserves (BR's) are areas recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and the Biosphere (MAB) Programme for their unique biodiversity, iconic landscapes, and engaged communities. Its World Network of Biosphere Reserves is a dynamic and interactive network of sites of excellence that foster harmony between people and nature for sustainable development through participatory dialogue; knowledge sharing; poverty reduction and human well-being improvements; respect for cultural values and society's ability to cope with change.

There are currently 759 Biosphere Reserves in 136 countries world-wide. The World Network of Biosphere Reserves operates under the UNESCO MAB Programme.

UNESCO Man and the Biosphere (MAB) Programme

The MAB Programme is an intergovernmental scientific program that aims to establish a scientific basis for enhancing the relationship between people and their environments. It combines the natural and social sciences with a view to improving human livelihoods and safeguarding natural and managed ecosystems, thus promoting innovative approaches to economic development that are socially and culturally appropriate and environmentally sustainable.

The MAB Programme has four strategic objectives:

- Conserve biodiversity, restore and enhance ecosystem services, and foster the sustainable use of natural resources.
- Build sustainable, healthy and equitable economies, societies and thriving human settlements in harmony with the biosphere.
- Facilitate biodiversity and sustainability science, education for sustainable development and capacity building.
- Empower people to mitigate and adapt to climate change and other aspects of global environmental change.

All BR's must demonstrate how these objectives are being achieved.

Canada's Involvement

Canada has been involved through the Canadian Commission for UNESCO (CCUNESCO) and the Canadian MAB National Committee since the 1970's. In Canada there are currently 19 biosphere reserves, known as biosphere regions, each serving as a collaborative innovation hub that is balancing environment conservation and economic development, while considering social and cultural needs within the local context.

As a signatory to the Convention on Biological Diversity, Canada has committed to observing global biodiversity conservation targets and has created a National Biodiversity Strategy. Canadian biosphere regions are key local actors to help meet at least 10 of the 23 targets.

Zones within a Biosphere Reserve

All BR's have three distinct zones:

- Core Zone: This consists of one or more protected areas, such as a park or ecosystem, migratory bird sanctuary or other protected terrestrial, aquatic or marine area. The Core Zone acts as a reference point on the natural state of the ecosystems that the BR represents.
- Buffer Zone: Surrounding and adjacent to the Core Zone(s), buffer zones are managed in ways that support the conservation objectives of the Core. This could include areas such as a municipally regulated floodplain; a woodland special management area, a municipally zoned area that regulates development to protect the core; or a conservation easement on private land.
- Transition Zone (or Area of Cooperation): This is usually the largest part of the BR, surrounding core and buffer zones, and is where most of the residents live and work, using natural resources in a sustainable manner.

Governance of Biosphere Reserves

The governance structure of BR's is customized to the local context and capacity. Biosphere Reserves in Canada can be governed by local committees, often constituted as non-profit corporations with a board of directors. Others have more complex governance structures which can include a board of directors populated by elected representatives of municipal and Indigenous governments as well as representatives from local and regional non-governmental organizations.

BR's do not mean that the land is set aside from human use and development, nor does the UNESCO label bring with it any new authorities over land, water or resources. Therefore, the existing powers, rights and responsibilities of governments, businesses, landowners and rights holders remain unchanged. BR's have become models to test and apply interdisciplinary approaches to understanding and managing changes in social and ecological systems, and their interaction, including conflict prevention and conservation of biodiversity. They promote scientific, traditional and Indigenous ways of knowing and provide opportunities for knowledge sharing between diverse communities.

Funding for Biosphere Reserves

UNESCO does not directly fund BR's, nor do they receive any core funding support from the Government of Canada or the CCUNESCO. Therefore, it is important that long-term and sustainable funding be considered for the long-term operation of BR's. BR's generally develop partnerships with local and provincial governments, non-governmental organizations, charitable organizations and private sector donors.

There may be occasions where funding may be provided to Canadian BR's to support initiatives that match CCUNESCO strategic priorities. Federal and provincial governments may contribute to BR's activities through project-based funding that is aligned with senior government priorities and contract delivery expectations.

Nomination and Designation Process

There is significant work required to be nominated and designated as a BR and the whole process can take several years. The nomination process requires a rigorous collection of data and extensive public consultation. See Appendix B (including Table 1) for detailed requirements for the nomination application process.

Biosphere Operation and Periodic Review

Once designated, a BR needs to meet the BR objectives and strategies of the MAB program, participate actively in the national and international networks – in Canada this occurs primarily through the Canadian Biosphere Reserves Association (CBRA). There will be an ongoing contribution of time, effort, local wisdom and knowledge, through collaboration goodwill and sharing. A key expectation for all BR's is reconciliation with Indigenous peoples.

The long-term operational fundamentals include financial stability, wherein BR organizations are required to produce annual financial reports that are reviewed, audited and accepted by the organizational board. BR's are also required to document their annual activities and track their progress in partnership with the CBRA; this reporting is key for national initiatives and funding opportunities.

A periodic review is required every 10 years to carry out a qualitative survey of the actions implemented and their results. This review provides opportunities to: discuss updating of zonation systems and assess relevance; question the objectives and means of management policies; and examine issues and problems tied to implementation. The goal of the periodic review is to improve the quality of the BR's and their functioning as sites for testing and demonstrating approaches to sustainable development.