

Ecosystem Management as a Strategy for Intergenerational Equity



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**Workshop on Promotion of Intergenerational Equity for Sustainable
Development**

UN DESA – CEPA Principles of Effective Governance

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Ecosystems

An ecosystem is “**a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.**” UN Convention on Biodiversity

- Broad term:
 - individual organisms → communities → local ecosystems → biomes → ecosphere
 - Wild, undeveloped protected areas → agricultural landscapes → urban areas
- For ecosystem management, typically relatively undeveloped areas or protected areas at the local ecosystem or landscape scale

Ecosystem management

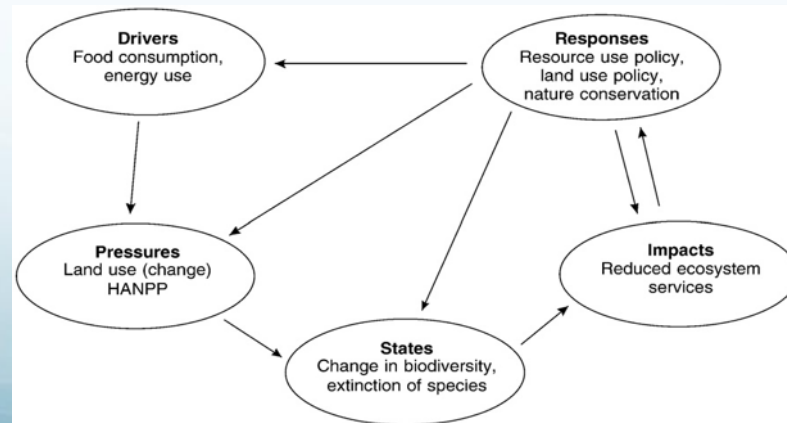
- First coined in 1992; applies to diverse contexts
- Core elements:
 - **Intentional and goal-driven**, typically with a focus on sustainability of interconnected social and ecological systems.
 - Grounded in **systems-based approaches** and requires understanding of feedbacks, systems dynamics, etc.
 - Ecosystem management involves **adaptive approaches**; to attain goals, adjustments are made based on monitoring.
 - incorporates **collaborative decision-making**; accounts for values, capabilities and interests of affected individuals and communities in establishing and working toward goals.
 - Involves an understanding of how to sustain **ecological functions, structures and processes**.
- Includes **ecological and eco-cultural restoration**

Trends and links to SD agenda

- Ecosystem Management, including restoration, is key element of public sector response to local-to-global sustainability challenges & policy responses reflected in:
 - SDGs (especially SDGs 14 and 15, but also 2 and 6)
 - IPCC reports
 - IPBES reports
 - CBD and the post-Aichi goals and targets
 - Planetary boundaries research
 - 2005 Millenium Ecosystem Assessment
 - Regional and national assessments
 - Rights of nature
 - Indigenous co-management (where applicable)
 - Ecosystem services frameworks

National policy and planning

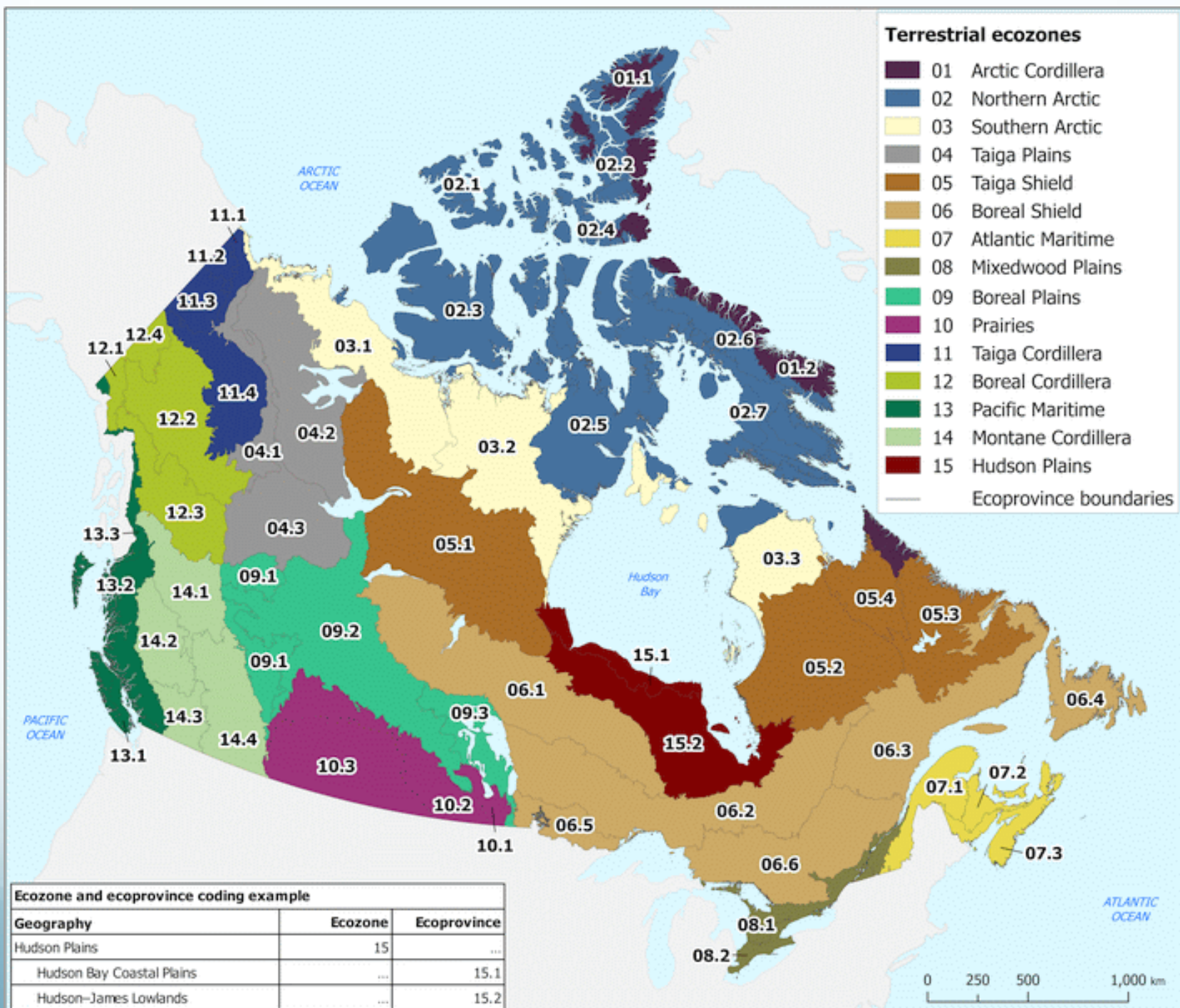
- **Knowledge base:** EM requires detailed understanding of terrestrial and aquatic ecosystems under national jurisdiction, including those that transcend borders
 - how ecosystems relate to each other,
 - their role in sustaining human and natural communities,
 - how they fit into larger regional biomes and the biosphere as a whole,
 - internal and external pressures and harm that human society imposes on them.





Terrestrial ecozones

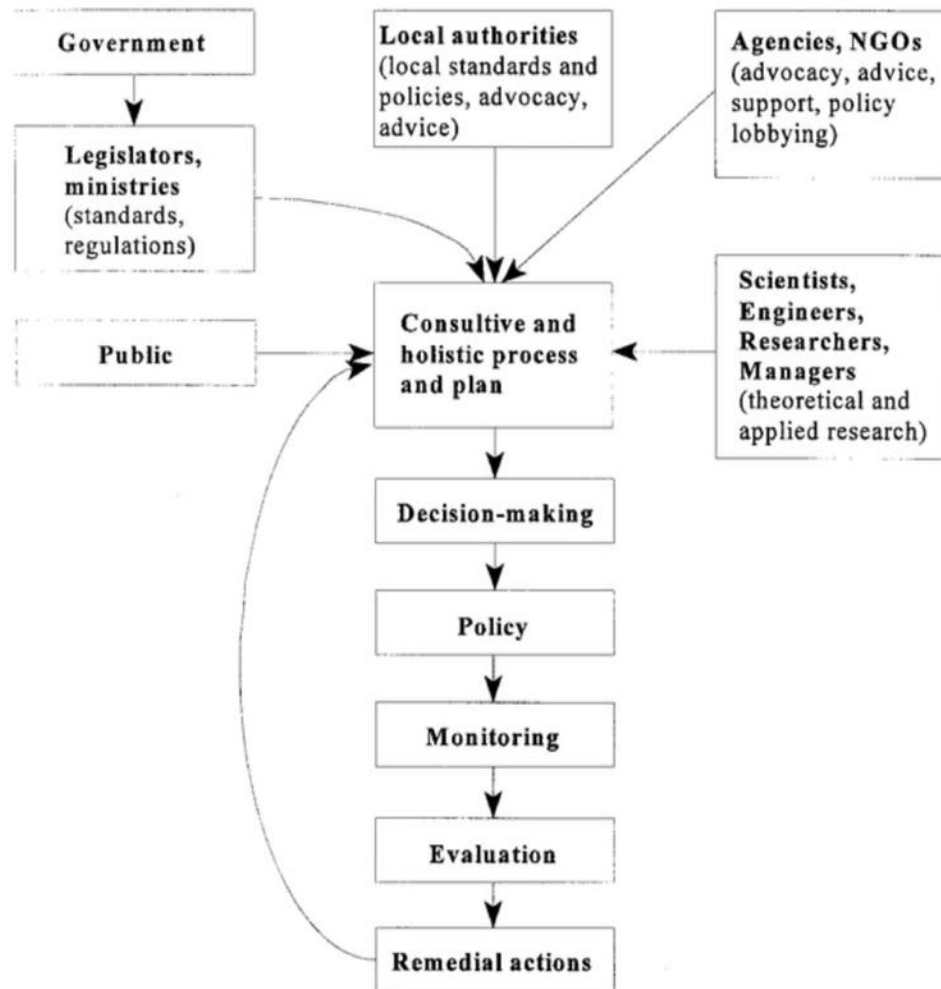
- 01 Arctic Cordillera
- 02 Northern Arctic
- 03 Southern Arctic
- 04 Taiga Plains
- 05 Taiga Shield
- 06 Boreal Shield
- 07 Atlantic Maritime
- 08 Mixedwood Plains
- 09 Boreal Plains
- 10 Prairies
- 11 Taiga Cordillera
- 12 Boreal Cordillera
- 13 Pacific Maritime
- 14 Montane Cordillera
- 15 Hudson Plains
- Ecoprovince boundaries



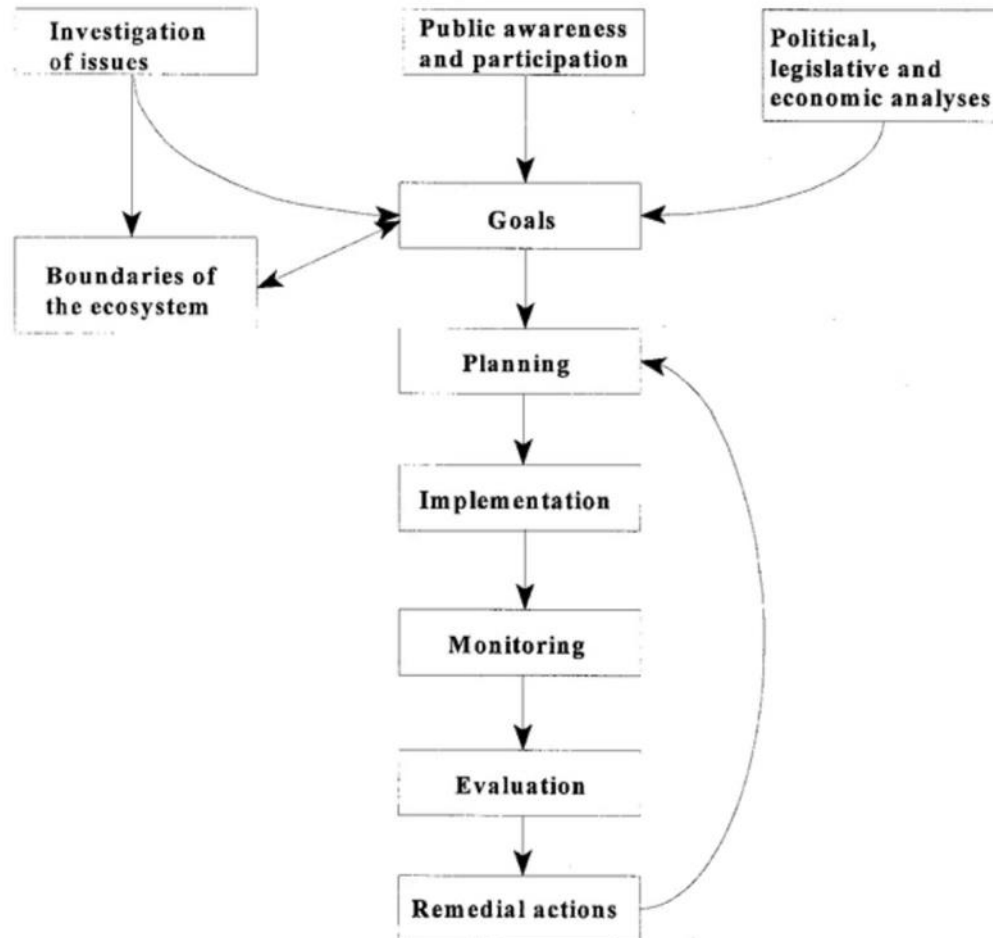
Ecozone and ecoprovince coding example

Geography	Ecozone	Ecoprovince
Hudson Plains	15	...
Hudson Bay Coastal Plains	...	15.1
Hudson-James Lowlands	...	15.2

Integrated Ecosystem Management Policy Framework



Case-specific Application of Ecosystem Management Approach



Resources

- CBD - <https://www.cbd.int/programmes/>
- UNEP - <https://www.unep.org/explore-topics/ecosystems>
- IPBES – <https://www.unep-wcmc.org/featured-projects/national-ecosystem-assessments>
- UN Decade on Ecosystem Restoration (2021-31) - <https://www.decadeonrestoration.org>
- IUCN – Global Ecosystem Management Programme <https://www.iucn.org/theme/ecosystem-management/our-work>
- More listed in the strategy guidance note

Thank you!

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