



Blue carbon habitats mapped and assessed to better determine their capacity to remove greenhouse gases

2013–2014 Project

North America's Blue Carbon: Assessing the Role of Coastal Habitats in the Continent's Carbon Budget

This first CEC project on blue carbon advances the conservation and restoration of coastal blue carbon habitats by improving data, mapping and approaches necessary to fill gaps in our knowledge of carbon dynamics in salt marsh, mangrove, and seagrass ecosystems.

Key Accomplishments

- Establishment of a North American blue carbon community of practice to increase collaboration and knowledge exchange between blue carbon experts in the three countries
- A joint dataset on blue carbon habitats, including maps, carbon accounts, and sequestration and emissions potential, as well as documented methods, data and results. Information will be displayed through the North American Environmental Atlas
- First step completed in developing an internationally recognized methodology for including blue carbon conservation projects in voluntary carbon markets
- New information and methods from several scientific studies that filled gaps in our knowledge of the carbon dynamics in blue carbon habitats, including both healthy and disturbed sites

Products

- First set of blue carbon maps for North America, showing 47,776 km² of blue carbon habitat mapped to date
- One trilateral blue carbon community of practice workshop, and one workshop with blue carbon, forest carbon and land cover experts
- *Greenhouse Gas Offset Methodology Criteria for Tidal Wetland Conservation* and recommendations
- Five coastal blue carbon research projects:
 - a. Response of marsh and coastal forest carbon accumulation rates to sea-level rise
 - b. Blue carbon in northern marshes: assessing processes, stocks and rates in undisturbed, drained and restored marshes
 - c. Ecosystem carbon stocks of mangroves and salt marshes from the largest wetland in Mesoamerica: the Pantanos de Centla, Mexico
 - d. Seagrass carbon stocks across a range of environmental conditions and seagrass bed types to determine the amount of carbon deposited
 - e. Spatial variability in carbon storage within and across marshes of the National Estuarine Research Reserve System (NERRS), USA: a comparison of methodologies and coastal regions

Partners, Stakeholders and Beneficiaries

North American Blue Carbon Steering Committee, Parks Canada; Natural Resources Canada—Canadian Forest Service; National Oceanic and Atmospheric Administration; US Environmental Protection Agency; US Geological Survey; US Forest Service; Restore America's Estuaries; *Comisión Nacional de Áreas Naturales Protegidas*; *Comisión Nacional Forestal*; *Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*; *Instituto Nacional de Estadística y Geografía*.

About the CEC

The Commission for Environmental Cooperation (CEC) was established by the governments of Canada, Mexico and the United States through the North American Agreement on Environmental Cooperation, the environmental side agreement to NAFTA. An intergovernmental organization, the CEC is composed of a Council of cabinet-level environmental officials from the three countries, a Joint Public Advisory Committee and a Secretariat that provides operational support for cooperative work between the three countries. The organization brings together citizens and experts from governments, nongovernmental organizations, scientists, researchers and businesses to seek solutions to protect North America's shared environment while supporting sustainable economic development.

