

Blue Carbon Scientific Working Group Objectives

A. Detail the Global Relevance of Coastal Carbon (Storage, Sequestration, and GHG Emissions from Ecosystems)

1. Identify Coastal Blue Carbon “Hotspots” – regions/sites of high Coastal Carbon storage and sequestration
2. Where possible, for each of these “Hotspots”
 - Create inventory of coastal carbon
 - Identify main threats to carbon storage and sequestration, including rates of conversion etc. Identify areas of highest immediate risk.
 - Quantify past and ongoing emissions associated with ecosystem degradation

B. Create recommendations for quantifying and monitoring carbon storage and flux (sequestration and loss). Consider regional (eg. national or similar) and local scales.

1. Define each coastal carbon ecosystem (including physical boundaries, ecosystem characteristics, major carbon cycle components, carbon pools and other GHG sources (eg methane, N₂O?), sources of variance etc.)
2. Define a practically applicable classification system for coastal carbon ecosystems, including sub-classifications where appropriate.
3. Identify parameters/data required to locate and quantify coastal carbon
 - minimum required to identify a coastal carbon sites and estimate carbon pools
 - possible proxy indicators
 - variables essential for higher level quantification and monitoring of pools and flux
4. Recommend techniques, methods and approaches for coastal carbon quantification (including establishing baselines) and monitoring. Include approaches possible in countries with limited resources and capacity. Review existing methodologies.
5. Identify priorities for methodological development, research and field demonstration.

C. Develop coastal conservation, planning and management guidelines for coastal carbon

1. Create criteria for feasibility of management of coastal areas for carbon sequestration (including system types, system size, activities (both conservation and replanting/restoring/rewetting), needed resources and capacity)
2. Create recommendations for coastal planning and management that prioritize sequestration and storage of coastal carbon deposits

