



“Blue Carbon” International Scientific Working Group

Marine ecosystems – particularly coastal ecosystems such as mangroves, seagrasses, and salt marshes – have demonstrated capacity for carbon sequestration in both the biomass of the dominant plants and the sediment immediately below them. Destruction and degradation of these coastal ecosystems converts long-term natural sinks for greenhouse gases (GHGs) into major GHG sources. The magnitude of these emissions is only now becoming apparent and as yet these GHG sources are unrecognized in national accounts and unmitigated under existing climate regulation policies. There is a need to clarify the importance of coastal mangrove, wetland and seagrass conservation and restoration as a climate change mitigation strategy.

Conservation International, IUCN, IOC-UNESCO and partners are building a program to coordinate and guide establishment of coastal “blue” carbon as a conservation and management tool contributing to climate change mitigation and the development of associated conservation financing mechanisms. The objectives of this program are to:

- Assess the feasibility of coastal “blue” carbon as a conservation and management tool and its potential for climate change mitigation.
- Provide implementable recommendations for coastal marine conservation and management that maximize sequestration of carbon and avoided emissions in coastal systems.
- Produce a summary of critical information needs and data gaps required improve conservation of coastal carbon pools and connect coastal wetlands and seagrass beds to carbon incentive mechanisms (including financing).
- Design and implement a program of work for developing economic incentives, policies or other payment mechanisms through accounting of carbon sequestered or

emissions avoided in coastal system. This will include development of key tools such as baseline development, carbon accounting methodologies, monitoring, and site identification and policy development with early implementing countries and coastal regions.

- Establish a network of demonstration projects that will (1) support development and testing of coastal carbon management and conservation approaches and (2) demonstrate coastal wetlands and seagrass beds eligibility for incorporation within GHG mitigation, accounting and financing approaches. This will include networking and supporting projects from partners globally and implementing field projects in under-represented coastal geographies and/or ecosystems.
- Develop essential communication and capacity-building tools for facilitating the implementation of coastal carbon management.
- Promote and support scientific research needed to further refine the value of coastal carbon sequestration and storage and facilitate carbon accounting in these systems, including facilitating the integration of coastal carbon into the mitigation component of the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report.

Central to achieving these objectives is the formation of scientific working groups. These groups will be tasked with

- Developing coastal marine conservation and management approaches that maximize sequestration of carbon and avoided emissions in coastal systems.
- Designing and implementing the program of work for carbon accounting in coastal systems and in turn developing economic incentives
- Coordinating with and synthesizing other related existing science and policy activities
- Identifying relevant pilot field projects, and providing guidance, technical advice, and support to the pilot projects.
- Identifying essential science gaps for research programs

Two working groups are anticipated. Working Group 1 will detail the ecological and physical framework needed to achieve the working group objectives, including developing appropriate management approaches. Working Group 2 will evaluate the viability and range of financing, policy, coastal management, and social mechanisms for supporting coastal conservation and development that maximize carbon storage and sequestration. Since most components of this program follow from the work of WG 1, WG1 will be launched first.

The working groups will meet 2-3 times per year. An initial WG 1 workshop is planned for February 2011 at the UNESCO Headquarters in Paris. Selection of the working group members is now in progress.

The objectives for this first workshop will be:

- Review of the proposed Blue Carbon program, including further definition of WG1 objectives
- Detailed design of the WG1 program of work
- Assessment of current ongoing “Blue Carbon” work to form the basis of a review and needs assessment
- Identification of expertise, data and analysis needed to achieve working group objectives
- Identification of relevant ongoing work that could be published in time for inclusion in the IPCC 5th Assessment Report (published by 2011). Evaluation of mechanisms for facilitating this timeline for these projects
- First assessment of possible management approaches for coastal carbon
- Identification of information needs to be addressed before second WG1 meeting.

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