

CONSERVATION
INTERNATIONAL



Intergovernmental
Oceanographic
Commission

International Blue Carbon Policy Working Group

3rd workshop

10-12 July 2012

Guayaquil, Ecuador



J. Tamelander

What is Blue Carbon?

- Carbon stored, sequestered or released by coastal and marine ecosystems

→ Focus on coastal ecosystems

Mangroves

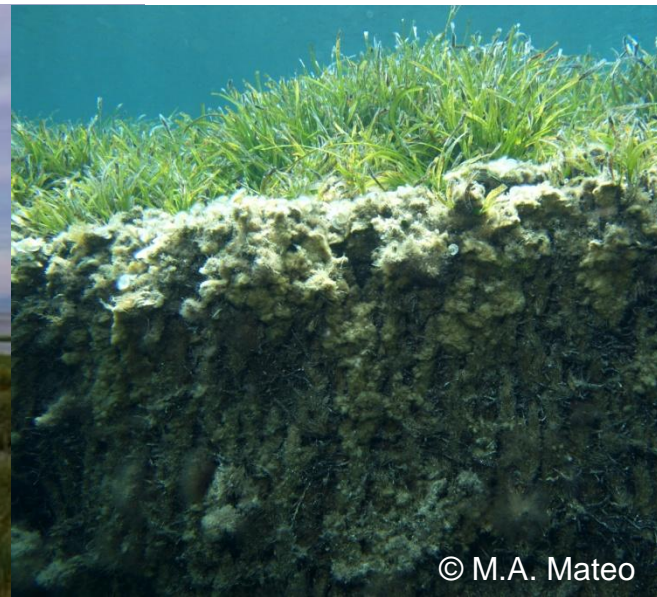


© CI/ E. Pidgeon

Salt marshes



Seagrass beds



© M.A. Mateo

Why be concerned about Blue Carbon?

- Storage & ongoing sequestration of carbon in plants and sediment
- High rates per unit area – especial in sediment
- Emissions due to rapid loss of these ecosystems through human pressures
- Lack of comprehensive accounting of coastal carbon sinks and sources in national and international climate change efforts



Opportunities & benefits of Blue Carbon activities

- Incentive for climate change mitigation activities
- Enhanced and more sustainable management of these systems
- Local communities engagement, employment
- Climate Change Adaptation
- Conservation of biodiversity



What needs to be done?

- Need for a **comprehensive approach to natural carbon management** for climate change mitigation
- Provide **scientific knowledge base and technical methods**
- Develop **policy and incentives mechanisms** supporting these activities
- Explore opportunity to **access** currently largely unused **climate change mitigation finance** for coastal Blue Carbon activities
- Identify **other incentive and finance opportunities** for coastal Blue Carbon activities
- Create a **comprehensive and coordinated global platform**

The Blue Carbon Initiative

Overarching goal: Increased conservation, restoration and sustainable management of coastal Blue Carbon ecosystems



THE BLUE CARBON INITIATIVE: The Importance of Coastal Ecosystems for Mitigating Climate Change

Human-caused carbon in the atmosphere and oceans is the most significant cause of global climate change. Curbing climate change means both removing carbon from the atmosphere and oceans and avoiding new carbon emissions. An important piece of this solution is preserving and restoring coastal ecosystems.

What is "Blue Carbon"?

Blue Carbon is the carbon stored by coastal and ocean ecosystems. In particular, coastal ecosystems such as tidal marshes, mangroves, and seagrasses remove carbon from the atmosphere and ocean, storing it in plants and depositing it in the sediment below them by natural processes. These coastal ecosystems are very efficient at sequestering and storing carbon - each square mile of these systems can remove carbon from the atmosphere and oceans at rates higher than each square mile of mature tropical forests. Furthermore, coastal ecosystems have been found to store huge quantities of carbon in organic rich sediments - up to 5 times more carbon than many temperate and tropical forests. These ecosystems are found in all continents, except Antarctica.



© Jeff Yonover

Minimizing Carbon Emissions and Maximizing Carbon Sequestration and Storage by Seagrasses, Tidal Marshes, Mangroves

Recommendations from the International Working Group on Coastal "Blue" Carbon

The natural coastal ecosystems of seagrasses, tidal marshes, and mangroves sequester and store large quantities of carbon in both the plants and in the sediment below them. If destroyed, degraded or lost these coastal ecosystems become sources of carbon dioxide emitted into the ocean and atmosphere. Much of this emitted carbon is thousands of years old and other processes in the ecosystem do not balance its rapid release into the oceans and atmosphere. Given the large quantity of carbon in coastal ecosystems relative to their area, these emissions are likely of global significance. This loss of a globally significant carbon pool is additional to the other recognized critical ecosystem services provided by coastal ecosystems.

Seagrasses, tidal marshes, and mangroves are being degraded and destroyed at a rapid pace along the world's coastlines. There is a need for active and effective measures to protect the large and vulnerable carbon pools stored in these systems, and to restore and reestablish their carbon sequestration capacity. **Immediate steps can be taken now by coastal communities, managers, policy makers and the scientific community.**

03/11

- International Blue Carbon Science Working Group
- **International Blue Carbon Policy Working Group**
- Blue Carbon research projects
- Demonstration projects
- Capacity building

International Blue Carbon Policy Working Group

- Provide guidance for Blue Carbon policy and incentives mechanisms that support and finance management of coastal ecosystems for climate change mitigation:
 - Identify opportunities, limits and risks of advancing Blue Carbon in different international, regional and national climate, coastal and ocean fora;
 - Identify activities and stakeholders;
 - Identify important milestones for achieving policy change;
 - Identify areas of current policy and economic research gaps.



Blue Carbon Policy Framework



Workshop Objectives

- I. Revise & update recommendations for the UNFCCC and other international processes, as relevant
- II. Identify priority activities and products to support integration of Blue Carbon into international and national policy fora and activities
- III. Identify possible ways to address the challenges and gaps for national Blue Carbon policy development and implementation
- IV. Finalize guidance for Blue Carbon field demonstration projects

Workshop Products

- **Workshop report**
 - Workshop background information
 - General discussion from the workshop & immediate activities
 - Discussion not for attribution
- **Blue Carbon Policy Framework** (general background – longer-term)
accompanied by **policy/info briefs** (short-term/to be updated more regularly):
 - Targeted recommendations for UNFCCC
 - Recommendations for fast-tracking national implementation
 - Guidance for Blue Carbon field-based/site demonstration projects