

# Coastal Marine EBM Tools Training

April 19-22, 2016  
San Juan, Puerto Rico

## Overview

This training event is sponsored by the [EBM Tools Network](#), a global network of thousands of coastal-marine EBM practitioners, researchers, and tool developers. The training was designed in partnership with many organizations (see logos below) and with input from discussions, interviews, and surveys of practitioner needs. This training is intended for all coastal-marine conservation and management practitioners and will complement the many other training offerings consistently provided by our partners. The event is being held in conjunction with NatureServe's [Biodiversity Without Boundaries \(BWB\) conference](#) that begins on April 18. Combined registration for both events is available at substantial savings. Please note that technical training sessions will require participants to bring a laptop (or share) and may require preloading software. Specific requirements will be provided to registrants in advance of the meeting if not already noted.

## Contact us

If you have any questions, please email [samantha\\_coccia@natureserve.org](mailto:samantha_coccia@natureserve.org).

## Our partners



|  |                           |
|--|---------------------------|
|  | - Optional BWB attendance |
|  | - Tools Training events   |

## Tentative Calendar

| Monday<br>04/18  | Tuesday<br>04/19  | Wednesday<br>04/20   | Thursday<br>04/21   | Friday<br>04/22  |
|--|---|--|---|--|
| <p>8:30AM – 5:00PM<br/>BWB – Plenary and Breakout Sessions</p>   | <p>8:30AM – 5:00PM<br/>BWB – Plenary and Breakout Sessions</p>                  | <p><b>8:30AM – 10:30AM</b><br/>Introduction, EBM framework, Caribbean climate change</p>                 | <p><b>8:30AM – 1:00PM</b><br/>Technical Training in the 3 themes – Choose 1.</p> <ul style="list-style-type: none"> <li>• Integrated Land-Sea Planning</li> <li>• Marine Spatial Planning/MPA Planning</li> </ul> | <p><b>8:30AM – 1:00PM</b><br/>Continuation of Technical Training in the 3 themes - (same as previous day).</p> |
|  |   | <p><b>10:30 – 11:00AM</b><br/>Break</p>  |   |  |
| <p>5:30PM – 7:00PM<br/>BWB – Welcome Reception</p>               | <p><b>1:00PM – 2:30PM</b><br/>Thematic Group Lunches – choose any to attend</p> | <p><b>1:00PM – 2:30PM</b><br/>Thematic Group Lunches – choose any to attend</p>                          | <p><b>1:00PM – 2:30PM</b><br/>Thematic Group Lunches – choose any to attend</p>   | <p><b>1:00PM – 2:30PM</b><br/>Thematic Group Lunches – choose any to attend</p>                                |
|  | <p><b>4:00PM – 6:00PM</b><br/>EBM Tools Café</p>                                | <p><b>2:30PM – 4:30PM</b><br/>Theme Introductions<br/>Breakout Session #2 – Choose 1 theme to attend</p> | <p><b>2:30PM-5PM</b><br/>Continuation of Technical Training in the 3 themes</p>   | <p><b>2:30PM-5PM</b><br/>Continuation of Technical Training in the 3 themes</p>                                |
| <p>7:00PM – 9:00PM<br/>NatureServe Conservation Award Dinner</p> | <p>7:00PM – 9:00PM<br/>NatureServe Conservation Award Dinner</p>                | <p><b>5:00PM – 6:30PM</b><br/>Social hour</p>  | <p><b>5:30PM – 7:00PM</b><br/>Social Hour and BWB Network Awards Social</p>   | <p><b>5PM</b><br/>Event concludes</p>  |
|  |   | <p><b>6:30PM</b><br/>Thematic Dinner Groups meet</p>   | <p><b>7:00PM on</b><br/>Thematic Dinners and Trainers Office Hours</p>  |  |

## Detailed Agenda

### Tuesday, April 19 (optional attendance)

#### **Tool Café** (4-6 pm, Miramar Foyer, joint event with BWB)

Come join trainers and other participants for tool introductions at the Tools Café. Participants can circulate among trainer stations for informal discussion of their training themes and tool demonstrations. Optionally, afterwards join the BWB Conference Awards Dinner (see registration options).

### Wednesday, April 20

#### **Introduction- All Participants** (8:30-10:30 am, Miramar Ballroom 1)

- 8:30-9 am- Welcome and introductions of organizers and trainers
- 9-10 am- Coastal-marine EBM and the role of tools (UNEP representative and Patrick Crist of the EBM Tools Network)
- 10-10:30 am- Overview of Caribbean climate data and trends (US Southeast Climate Science Center)

#### **Break** (10:30-11 am)

#### **Theme Introductions: Breakouts Session #1- Participants select one to attend** (11 am-1 pm)

Note: Introductions are offered twice so participants can participate in their main theme of interest plus a secondary theme. Sessions will focus on the major concepts, objectives, and workflows of processes and how tools fit into the workflows. These are introductions to the technical sessions that follow on Days 2 and 3.

#### **Theme 1: Integrated land-sea planning/Ridge to reef planning (includes climate change planning and adaptation)** (Miramar Ballroom 1)

**Description:** This theme addresses the technical process for coordinating assessment and planning across linked terrestrial and marine domains. It includes the ability to assess land-based stressor impacts on the marine environment, threats to terrestrial resources and development from flooding from storm surge and sea level rise, and coordinating planning to maximize effectiveness and efficiency across the linked domains. An initial two hour overview session on the first day will describe the case for integrated land-sea planning; an overview of the key concepts, methods, and steps; necessary data and technical team composition; and illustration of projects applying these concepts and illustrating some key tools. A two-day technical training will follow that will present in-depth the methods and steps, hands-on engagement with [NatureServe Vista](#) and [OpenNSPECT](#), and discussion of alternative methods in lower data or capacity situations.

**Theme Trainers:** Dr. Patrick J. Crist, NatureServe; Dr. David Eslinger, NOAA. Please see biographies in Appendix.

## Theme 2: Marine spatial planning and marine protected area (MPA) planning and management (Location – Miramar Ballroom 2/3)

**Part 1 – MSP.** Marine Spatial Planning (MSP) is a participatory public process for the science-based design of EBM plans. At each step of the MSP process, decisions must be made about how to engage with relevant stakeholders and bring the best-available science to the table. This is true for designing multi-sector zoning plans as well as networks of marine reserves. A variety of tools, ranging from process frameworks, modelling tools, mapping platforms, and plain old well-designed web pages, can be employed to facilitate each of these steps. In this 'theme', we will dive into each of the key steps of MSP, the various types of tools that can support those steps, and how to determine the best tool for your process needs. We will provide hands-on exercises to explore case studies of the implementation of SeaSketch, a software tool used to support this type of work in varied contexts around the world. SeaSketch ([seasketch.org](http://seasketch.org)) is a web-based mapping platform to support diverse participation in data collection, plan design, and evaluation of those plans based on the best available science.

**Part 2 – MPA.** The use of MPAs has become increasingly popular in the wider Caribbean region as a tool to conserve marine biodiversity, address overfishing impacts, decrease user conflicts, and provide economic alternatives to local coastal communities. This has resulted in substantial knowledge gained on MPA management – issues such as optimal site selection and design, successful outreach approaches, effective management strategies, and appropriate methods to evaluate their effectiveness. Difficulties in exchanging information on lessons learned continue to constrain informed decision-making due to the geographic, socioeconomic, and cultural complexities of the Caribbean region. At the same time, communication among professionals has become progressively more vital given the increasing scientific interest in the examination of biophysical connectivity across the region. The Caribbean Marine Protected Areas Managers (CaMPAM) was created in 1997 to help to reduce this gap. It brings together MPA researchers, administrators, managers, and educators from governmental entities and non-governmental organizations as well as the private sector in an inclusive network to exchange ideas and lessons learned through a variety of mechanisms.

The course will be aimed at providing an introduction into the longer 11-day training sessions that CaMPAM leads for MPA managers. It will in addition provide (i) working experience on the management and governance of MPAs from CaMPAM MPA mentors who have done the training and have hands-on experience; (ii) provide and demonstrate some of the critical tools MPA managers have found useful in their operations; (iii) introduce key management strategies for MPA management.

**Theme Trainers:** Grace Goldberg, University of California at Santa Barbara; Karen McDonald Gayle, United Nations Environment Program. Please see biographies in appendix.

## Thematic Group Lunches (1-2:30 pm)

The learning will continue over lunch. Trainers and participants in the thematic groups are encouraged to attend lunch together to continue conversations to share knowledge and form partnerships. Lunch cost is not included.

## Theme Introduction Session #2- Participants select a different session to attend (2:30-4:30 pm)

Theme 1: Integrated land-sea planning/Ridge to reef planning (includes climate change planning and adaptation) (Miramar Ballroom 1)

Theme 2: Marine spatial planning including marine protected area (MPA) planning and management (Miramar Ballroom 2/3)

## Thematic Group Dinners (Meet at 6:30 pm)

Network with trainers and other participants to share knowledge and form partnerships. Four separate dinner groups will be formed, one for each of the themes (dinner cost not included):

- Theme 1: Integrated land-sea planning/Ridge to reef planning- meet at Location TBA
- Theme 2: Marine spatial planning including marine protected area planning- meet at Location TBA

## Thursday and Friday, April 21-22

### Technical Training Sessions

Each theme will conduct a detailed, two-day training session that will explore the theme in-depth and may include hands-on training with tools (computer tools will require participants to bring their own laptops, pre-loaded with the software and training data sets—further details will be provided).

Theme 1: Integrated land-sea planning /Ridge to reef planning (Miramar Ballroom 1)

- Description: **See full description above (under Wednesday, April 20<sup>th</sup>)**
- Technical requirements: participants will be using NatureServe Vista, a free ArcGIS 10.x extension ([see here for information and links to download](#)); and OpenNSPECT, [see here to download](#).

Theme 2: Marine spatial planning including marine protected area (MPA) planning (Miramar Ballroom 2/3)

- Description: **See full description above (under Wednesday, April 20<sup>th</sup>)**

## Thematic Group Lunches (Thursday and Friday, 1-2:30 pm)

The learning will continue over lunch. Trainers and participants in the thematic groups are encouraged to attend lunch together to continue conversations to share knowledge and form partnerships. Lunch cost is not included.

## Social Hour (and a Half) (Thursday, 5:30-7 pm in conjunction with the BWB Network Awards Social)

Enjoy social time with the trainers and other participants. This social hour will give participants an opportunity to informally discuss their particular situations with the trainers and other participants or network with the broader conservation community of the BWB conference.

### Thank you to our sponsors:



## Theme 1: Integrated land-sea / Ridge-to-reef planning

### Trainers and Bios

Theme Lead/Trainer: Dr. Patrick J. Crist, Director of Conservation Planning and Ecosystem Management, and PI for the EBM Tools Network. Dr. Crist is an originator of integrated land-sea methods and toolkits, having led projects in the Caribbean and all main U.S. coasts. He led development of the free NatureServe Vista decision support system which will be used in the training.

Co-Trainer: Dr. Dave Eslinger is an oceanographer with the NOAA Office for Coastal Management. At NOAA, Dr. Eslinger does a variety of activities, all, in general, aimed at making technical information more accessible and usable by coastal managers. These include leading the design and development of, and training on, GIS tools for examining impacts of land use change on imperviousness, water quality, and erosion; and displaying historical tropical storm information with the Historical Hurricane Track tool. He has been the driving force behind the NSPECT software since 2004, when it was first released as an Esri Extension.

## Theme 2: Marine spatial planning including marine protected area planning and management

### Trainers and Bios

Theme Lead/Trainer:

Grace Goldberg is Projects Manager in the McClintock Lab at the University of California Santa Barbara's Marine Science Institute. She is trained as a scientist, interested in research questions that include human users in marine ecosystems, with relevance to spatial management and real conservation goals. Grace received her M.S. in Marine Systems and Conservation from Stanford University, where she spent time at Hopkins Marine Station as a scientific diver, and in the Earth Systems Program, which focuses on interdisciplinary environmental problem solving, systems thinking, and communication.