



CAPE ELEUTHERA INSTITUTE  
RESEARCH EDUCATION OUTREACH

February 3-9, 2013

## Design Build Workshop on Constructed Wetlands

### Cost:

\$1700/person

Cost includes room and board at Hallig House and course costs.

### Topics Covered:

- Water and waste water management
- Constructed wetlands
- Water conservation techniques
- Basic plumbing
- Alternative waste water treatments
- Sustainable living

This week-long workshop will be an immersion in constructed wetlands for wastewater treatment. Students will be introduced to the basic principles of domestic wastewater treatment with natural systems and explore the major design considerations including treatment requirements, process flow diagrams, and process selection. We will cover system analysis, site investigation, permitting, treatment options, design basics and material selection.

The course will also cover current design theory, and students will spend time physically constructing and installing a wetland on campus. Students are encouraged to bring specific projects to work through design considerations.

To learn more, please visit our sites at:

[www.ceibahamas.org](http://www.ceibahamas.org) and [www.islandschool.org](http://www.islandschool.org)

The Biohabitats website can be found here:

[www.biohabitats.com](http://www.biohabitats.com)



### Barton Kirk, MS, EIT

*Ecological Engineer and Planner at SEEDS*

Barton is an ecological engineer working at the nexus of energy, water, climate, and community. For the past decade, he has been helping communities develop durable decisions about their built and natural infrastructure by applying life-cycle systems analysis. He is an instructor at the Omega Institute, Yestermarrow Design/Build School, and Phipps Conservatory where he teaches hands-on courses on ecological water solutions.

### Pete A. Muñoz – PE, LEED AP

*Senior Engineer at Biohabitats*

Pete is a licensed Professional Engineer and Certified Wastewater Treatment Plant Operator. He has degrees in Biosystems and Civil/Environmental Engineering. Pete has been asked to speak around the country on topics including decentralized wastewater management, constructed wetlands, ecological design, eco-footprinting, and climate change solutions. As Senior Engineer, he oversees many of Biohabitats' engineering and design projects. Pete also teaches water-related courses at Yestermarrow Design/Build School and the Omega Institute.

Interested? Visit our site at [www.ceibahamas.org](http://www.ceibahamas.org),  
or email Sam Kenworthy at [samkenworthy@ceibahamas.org](mailto:samkenworthy@ceibahamas.org) or Karen Knight at [karenknight@ceibahamas.org](mailto:karenknight@ceibahamas.org)