



## Biodiversity Conservation and Freshwater Services



### Background and Rationale

In the increasingly critical mission to build a sustainable economy and support local livelihoods, the conservation of freshwater systems is a paramount but often elusive goal. As the world's population grows and develops, freshwater ecosystem degradation will worsen, increasing species extinctions and water related competition and conflict. Stronger water policy and integrated resource management are critical for resolving the water crisis problem, as are new techniques for valuing freshwater services. Innovations in a range of sciences and related fields have the potential to make major advances in the proper management of freshwater ecosystem services. This workshop will highlight cutting-edge ideas and tools in order to foster a dialogue about where and how these might be implemented. We will showcase innovative projects that integrate biology, hydrology and economics, as well as those that bridge science and other disciplines. This cross-disciplinary approach will help generate ideas about how to move forward in freshwater conservation and ecosystem services.

### Workshop Structure

The workshop will begin with presentations of one or two Case Studies given by each of the workshop partners, Conservation International, The Nature Conservancy, and Wetlands International. The presentations will last 20 minutes each (allowing time for questions) and will describe innovative approaches to conserving freshwater by integrating the interests of multiple stakeholders.



The following Case Studies will be featured:

- Financial Mechanisms for Ecosystem Protection: Water Funds in the Northern Tropical Andes, presented by Veronica Arias (The Nature Conservancy)
- Conservation and Management of Loktak Lake: Making the Link Between Biodiversity and Freshwater Services, presented by Ritesh Kumar (Wetlands International)
- Towards More Sustainable and Market-based Payment for Ecosystem Services – a Pilot Project in Lijiang, China, presented by Lu Zhi (East and Southeast Asia Field Division, Conservation International)
- Ecosystem-based Management for Holistic Conservation and Development: an Emerging Pacific Islands model, presented by Aaron Jenkins (Wetlands International)

The results and lessons learned from these Case Studies will be discussed, as well as the challenges encountered while working toward the multiple goals of maintaining freshwater services, conserving biodiversity and providing benefits to the community.

Each presenter will be asked to address the following questions:

- What are the key problems/challenges associated with freshwater biodiversity and management of ecosystem services in the region discussed in the Case Study?
- What new tools, ideas or approaches are being used?
- What methods were used for evaluating freshwater services and what are the requirements for determining value?
- How was freshwater ecosystem function and resilience monitored and assessed in order to sustain provision of services?
- Which aspects of the project have worked and which have not?
- What are the recommendations for scaling up and producing comprehensive freshwater resource management plans?
- What are the recommendations for ensuring both biodiversity and community benefits?
- What is the potential transferability/replicability of the methods to other regions?

A 30-minute open discussion, moderated by Jane Madgwick (CEO, Wetlands International), will follow the Case Study presentations. Our aim is to engage audience participation and

debate as much as possible. This will be an opportunity to review how the Case Studies have informed some of the key questions listed above and how the lessons learned can be applied to successful projects elsewhere. An outcome of this discussion session may also be the identification of priorities for action in other locations and what the specific objectives of those projects should be.



## Outputs

The main goal of this symposium is to transfer information among presenters and attendees to generate new ideas from this exchange. The workshop organizers also intend to publish a report based on the recommendations raised in the workshop and

provide guidelines for connecting biodiversity and freshwater services.

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