



INTERNATIONAL SYMPOSIUM ON CAPACITY BUILDING FOR SUSTAINABLE OCEANS

19-20 JULY 2016 | THE CAPITOL HOTEL TOKYU | TOKYO, JAPAN

SESSION THREE: SCIENCE FOR DECISION MAKING

Photo credit: Nick Hall

Oyster Goals Project

Coastal communities, USA

1) What is the focus of this project?

Oyster reefs are the most globally imperiled marine habitat on Earth, having experienced an estimated 85% loss globally. Their restoration has emerged as an important objective for coastal communities, particularly in the USA, where there is a strong focus on returning a range of the ecosystem benefits of oyster reefs, including fish production, shoreline protection, and water quality improvement. The National Oceanic and Atmospheric Administration (NOAA) Community-based Restoration Program and The Nature Conservancy formed a National Partnership that helped to build the capacity of communities and local managers to undertake restoration projects, using ecosystem services as a means to achieve meaningful objectives for these projects.

2) Which organizations and other partners are involved?

The National Partnership between the NOAA Community-based Restoration Program and The Nature Conservancy (TNC) was formed in 2001 to jointly support on-the-ground marine habitat restoration projects in coastal communities around the USA. Between 2001 and 2015, more than 85 oyster reef restoration projects were supported, leveraging federal (NOAA) funds with private and non-federal (TNC and partners) funds.

There are dozens of partners involved in this community of practice, including local and regional conservation organizations, resource management agencies (typically states, but sometimes local resource districts), academic research institutions, and private sector partners such as engineering and coastal contracting firms.

3) What activities or tools have proven successful in building capacity?

Oyster reef restoration projects have been instrumental in raising awareness of habitat loss and, more specifically, the benefits that can be returned through restoration. A range of approaches has been used to raise awareness and build capacity, including published materials, webinars, and hands-on training. The primary audiences for this capacity building have been community organizations, oyster fishery regulators and habitat managers at local/state level. The community education that is a part of the work touches various parts of communities, from school children to the beneficiaries of the ecosystem services such as recreational fishers and commercial fishers - those who rely on clean bays and estuaries for fun and livelihoods.

A new online calculator has been constructed to accompany a new manager’s guide for setting oyster reef management objectives around ecosystem services. These resources will be used in the coming years in direct outreach and training with community organizations as well as government regulators and resource managers.

4) What challenges have been experienced, specifically related to maintaining a focus on capacity building and/or replicating the project in other areas?

Until recently, the science necessary to describe oyster reef benefits has been under-developed or entirely lacking. TNC and the Oyster Goals project has addressed this gap, but there remain some areas where additional research and development are required (e.g. around pollution reduction benefits).

A second complicating factor is the lack of awareness that oyster reefs provide so many benefits and that those benefits decrease as the habitat is degraded. A persistent perspective among fishers and some managers is that the oyster harvest is the only (or most important) benefit to be derived from oyster reefs.

5) What are the next steps for the project?

TNC, NOAA and many partners continue to expand oyster reef restoration throughout the United States, at ever larger scales. Funding from the RESTORE Act is likely to support significant restoration around the Gulf of Mexico in the coming years, but there are ambitious restoration goals for other coastal areas as well, including Chesapeake Bay, Puget Sound, Hudson Raritan Bay, among others. The new tools for estimating ecological and socio-economic benefits from restoration will be useful for designing projects in these locations that return benefits at socially and ecologically relevant scales. TNC and partners are also taking the lessons learned in the USA and applying them in other countries, including Australia, China and Great Britain; evidence of the growth of a truly global movement around the restoration of this globally imperiled habitat.

An online toolkit and resource library are available at the Mapping Ocean Wealth website:

<http://oceanwealth.org>

A database of restoration projects is available at:

<http://projects.tnc.org/coastal/#>

The screenshot shows the 'NATURAL INFRASTRUCTURE RESTORATION PROJECTS' website. At the top, there is a navigation bar with the title and 'The Nature Conservancy' logo. Below the navigation bar is a map of the United States with several project locations marked with red pins. To the right of the map is a 'Summary' section for the 85/199 projects shown on the map, listing 761 Acres Restored (69), 19,900 Volunteers (51), 5 Miles Restored (3), and 54,817 Volunteer Hours (60). Below the summary are two project listings: '100-1000: Restore Coastal Alabama - Alabama Port Project' and '100-1000: Restore Coastal Alabama - Coffee Island Project'. Each listing includes a 'View Project Details' button and a 'Highlight on Map' button. The bottom of the page features a search and filter section with fields for 'Project name', 'General' (Implementation / Modification), 'Ecology' (Oyster Reef / Shell Bottom), and 'Collaboration' (Risk reduction demo site, Partner(s)).