

NOAAFISHERIES

Office of Habitat Conservation

"In the long term, economic sustainability depends upon ecological sustainability."

----"America's Living Oceans," Pew Oceans Report, 2003

The Value of Habitat Conservation

We conserve habitat to sustain the nation's fisheries, but the benefits of conservation extend far beyond the natural world to stronger business growth, higher property values, lower infrastructure costs, and other values measured by economists.

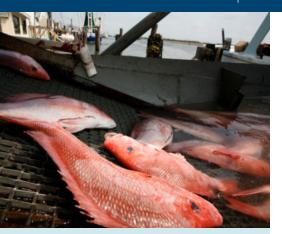
We invest in socio-economic studies (in addition to ecological research) in order to refine our conservation strategies and to calculate their full value.

Our studies have shown:

- \$36 million increase in property values resulting from habitat restoration in Huntington Beach, California costing \$13 million
- 6 to 1 return on investment to the local economy from restoration in Muskegon, Michigan
- 17-33 jobs created for every
 \$1 million invested in habitat
 restoration
- Thousands of visitors enjoy new section of Lincoln Park, New Jersey

\$9-\$20 million in reduced
maintenance costs and flood
protection for Skagit County,
Washington from \$7.7 million
investment in habitat restoration





Current socio-economic research

Restoring Recreational Fishing in California

What are the potential socio-economic effects of restoring recreational fishing to parts of the Central Valley in California?

Approximately 95% of salmonid spawning and rearing habitat in the Central Valley is blocked by dams, considered a major cause of fish declines in California.

This study, supported by the Office of Habitat Conservation (OHC), will evaluate the potential socio-economic impacts associated with **reintroducing salmonids** (fish in the salmon family) to areas above dams in the Central Valley. The results of the study will help researchers calculate the **potential economic value of adding fish passage** to these dams.

The study asks:

- Will reintroduction lead to the development of a recreational fishery?
- Will money spent by recreational anglers generate jobs and income in the local economy, and by how much?
- How will jobs and income be affected when businesses that are directly related to recreational fishing make payments to their suppliers?
- How will jobs and income be affected when individuals employed by impacted businesses spend their earnings on household goods and services?

This study will also measure what anglers would be willing to pay for the experience of fishing over and above what they actually spend.

Large-scale Oyster Restoration in Maryland

What is the effect on the economy from large-scale oyster restoration in the Choptank River watershed?

NOAA is joining with the Maryland Department of Natural Resources, the Oyster Recovery Partnership, and the US Army Corps of Engineers to **restore**377 acres of oyster reef in Harris Creek, a Habitat Blueprint regional initiative site. Additional oyster restoration projects are planned for the Tred Avon and Little Choptank.

This OHC-supported study will measure changes in the value of:

- commercial and recreational fishing
- water quality
- shoreline protection
- property value
- nitrogen removal
- tourism

and other ecosystem services resulting from oyster restoration.





Current socioeconomic research

Improving Water Quality in Cape Fear River in North Carolina

What are the benefits of improving habitat and water quality in the Cape Fear River watershed?

Poor habitat and water quality, including high concentrations of mercury, arsenic and other toxins in rivers and streams of the Cape Fear River basin, pose a threat to both fish and human health. Dams and other blockages in the watershed also prevent fish from migrating upstream to spawn (lay eggs).

Opening up these waterways can improve water quality and support the growth of fish populations, increasing environmental health as well as economic value to the region.

This OHC-supported study with the Cape Fear River Partnership will:

- calculate the economic value and impacts of Cape Fear River fisheries
- assess the relationship between fish health and survival and water quality
- determine priority areas for conservation to improve water quality

Restoring the Elwha River in Washington

How much value do local citizens place on the restoration of the Elwha's salmon, forests, and wildlife?

Removal of the Elwha and Glines Canyon Dams, scheduled to be completed in 2014, represents the largest dam removal project in U.S. history.

This OHC-supported study will improve NOAA's understanding of the value the public places on salmon, forests, and wildlife, and what they would be willing to pay to restore them.

Researchers will compare ecological values before and after the floodplain restoration and dam removal and investigate potential tradeoffs between ecological and human use values.





Citations

Industrial Economics, Incorporated. 2012. Enhance Ecosystem Services and Associated Values: Restoration of the Huntington Beach. Report prepared for Office of Response and Restoration, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (53 p).

Braun, H. (Great Lakes Commission). 2013. Final Narrative Report American Recovery and Reinvestment Act of 2009, Muskegon Lake Great Lakes Area of Concern, Habitat Restoration Project. National Oceanic and Atmospheric Administration, National Marine Fisheries Service (17 p).

Edwards, P.E.T., A.E. Sutton-Grier, and G.E. Coyle. 2012. Investing in nature: restoring coastal habitat blue infrastructure and green job creation. Marine Policy, 38:65-71.

Leggett, C. N. Scherer, and M. Donlan (Industrial Economics, Incorporated). 2012. Assessment of Visitor Use of Restored Areas of Lincoln Park, New Jersey. Report prepared for Office of Habitat Conservation, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (43 p).

EconNorthwest. 2012. Economic Benefits of the Fisher Slough Restoration Project. Report prepared for The Nature Conservancy and National Oceanic and Atmospheric Administration, National Marine Fisheries Service (33 p).

For more information about these studies or NOAA's Office of Habitat Conservation, please contact
Renata Lana
renata.lana@noaa.gov