



NOAA FISHERIES

Office of Habitat
Conservation

The Restoration Center is NOAA's only office solely devoted to restoring the nation's coastal, marine, and migratory fish habitat.

With our national network of partners, we leverage funding and develop high-quality restoration projects within four primary areas:

- 1. Recovering threatened and endangered species.**
- 2. Sustaining fisheries.**
- 3. Reversing the damage from oil spills and toxic releases.**
- 4. Strengthening the resilience of coastal communities and ecosystems.**

Habitat Restoration to Recover Threatened and Endangered Species

The NOAA Restoration Center, housed within the Office of Habitat Conservation in NOAA Fisheries, invests in habitat restoration across the country where our fisheries need it most.

Our Work Recovering Threatened and Endangered Species

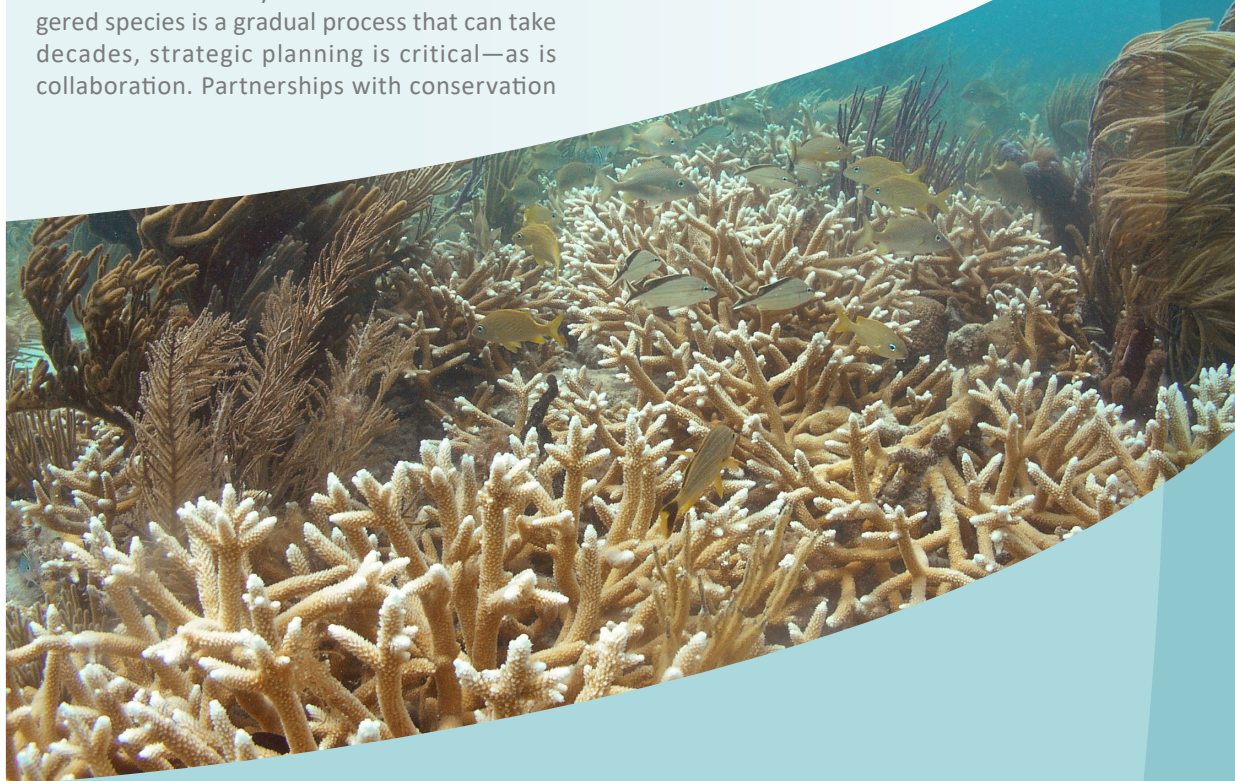
NOAA Fisheries is charged with recovering more than 165 species listed as threatened and endangered under the Endangered Species Act. These species all rely on healthy habitats to survive: for food, protection, and safe areas for spawning and rearing.

Within NOAA Fisheries, the Restoration Center plays a major role in species' survival and recovery by providing funding and technical assistance for projects that restore habitats where threatened and endangered species live, grow, and reproduce.

Because the recovery of threatened and endangered species is a gradual process that can take decades, strategic planning is critical—as is collaboration. Partnerships with conservation

groups, academia, tribes, and federal, state, and local governments are essential in our work supporting species recovery.

As we work to restore habitat for these vulnerable species, we're also supporting the local communities that rely on those habitats for clean drinking water, flood and storm protection, and industries like boating, fishing, and tourism.



Example Projects

Florida Keys Coral Population Enhancement – Florida

- Corals are extremely valuable, providing close to \$10 trillion a year globally and over \$3 billion a year domestically. They provide crucial coastal protection, habitat for fish, and other benefits.
- Despite their economic and recreational value, coral reefs are gravely threatened by damage from ocean acidification, coral bleaching, pollution, invasive species, and physical impacts like ship groundings and storms. Twenty-five species of coral are listed as endangered or threatened under the Endangered Species Act.
- Florida's coral reef habitats have declined significantly in the last several decades, particularly from the loss of staghorn and elkhorn corals, both listed as threatened under the Endangered Species Act. Over the past 15 years, planting nursery-grown corals has developed as a viable strategy to reverse this decline, restore reef habitats, and recover these populations.
- We provided funding through our Community-based Restoration Program for the Coral Restoration Foundation to plant 22,000 coral colonies in degraded reefs in the upper Florida Keys. The Foundation leveraged this funding with private donations and the use of volunteers, and the partnership led to the dissemination of techniques to the wider coral restoration community.

Snohomish Estuary and Smith Island Restoration – Washington

- Often called the “nurseries of the sea,” estuaries provide habitat to marine species that reproduce and spend the early part of their lives there—including many threatened and endangered species. In estuaries, juvenile fish spend time growing, adapting to salt water, and preparing for their ocean journeys.
- In Washington's Snohomish River Estuary, dikes, tide gates, and other barriers disconnected thousands of acres of estuary, severely limiting the habitat available for juvenile fish like Chinook salmon and steelhead trout, both listed as threatened under the Endangered Species Act.
- Through a landscape-scale partnership, we have worked toward the recovery and sustainability of salmon and steelhead in the Snohomish watershed by restoring more than 1,300 acres of estuary habitat, finding win-win solutions for competing demands on the land, and providing flood protection for local communities.

Penobscot River Restoration – Maine

- In Maine, the Penobscot River is home to eleven migratory fish species, including three listed under the Endangered Species Act: Atlantic sturgeon, shortnose sturgeon, and Atlantic salmon, a NOAA Species in the Spotlight.
- Dams, culverts, water pollution, and overfishing have almost completely eliminated many migratory fish species and their habitats from the river. As a result, commercial species like cod have lost a key food source, and tribal subsistence fishing and historically large recreational fisheries have also been affected.
- Once, Atlantic salmon returned by the hundreds of thousands to most major rivers along the northeastern United States. Today, the nation's last wild populations of Atlantic salmon return only in small numbers to rivers in Maine, including the Penobscot River.
- For more than a decade, we have provided funding and technical assistance through our Community-based Restoration Program to improve fish passage in the Penobscot River, including removal of the Veazie and Great Works Dams. Ongoing efforts such as additional dam removals, the construction of fishways, and the replacement of culverts are helping Atlantic salmon and species reach their upstream habitat.

Photo credits: page 1, USGS.