U.S. Fish and Wildlife Service

2021 Coastal Program Accomplishment Report

Note from the
Chief of Refuges

The U.S. Fish and Wildlife Service's Coastal Program has completed another year of important conservation work. In 2021, the Coastal Program helped fund and coordinate more than 150 projects in 22 states and territories.

Species recovery, infrastructure and habitat management, public access and recreation, and engagement and urban conservation are fundamental to the Coastal Program. By providing technical and financial assistance, the program delivers a range of project types – from improving fish passage to creating outdoor classrooms in urban communities. They all support fish, wildlife, and plant species across coastal communities.

Working collaboratively with partners allows our conservation efforts to reach beyond national wildlife refuges to urban and state parks as well as private lands. Through partnerships with government, private, and nonprofit organizations, the Coastal Program conserved more than 31,000 acres and leveraged $32 for every Coastal Program dollar spent.

I am proud of the Coastal Program's commitment to helping wildlife and people thrive. This accomplishment report celebrates not only the 159 projects, but also the Fish and Wildlife Service employees and the partners we work with who continue to demonstrate passion, creativity and innovation. Their work inspires me and is important to the future of our nation.

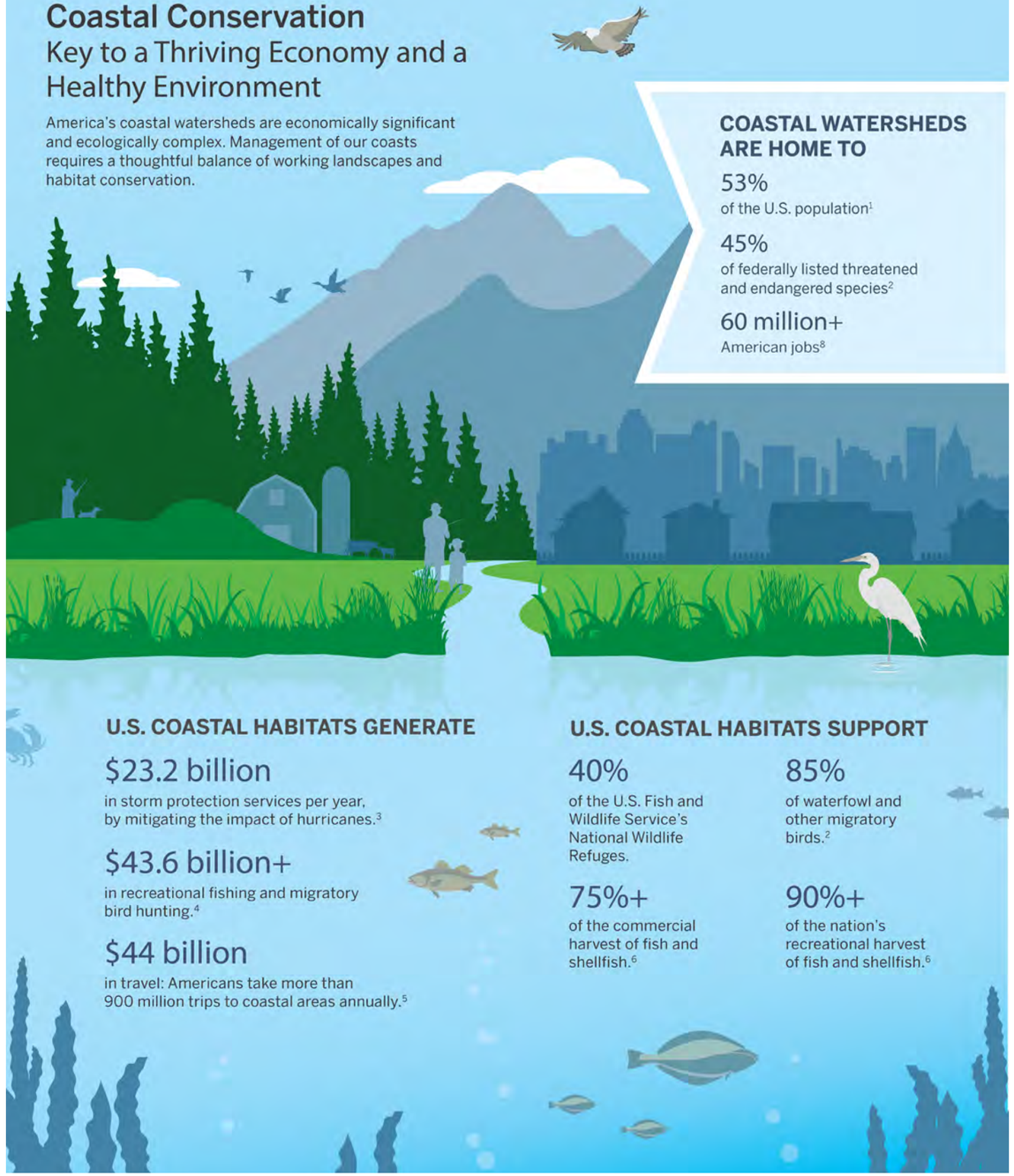
Cynthia Martinez
Chief of the National Wildlife Refuge System

Cynthia Martinez,Chief of the National Wildlife Refuge System / USFWS

Benefits of Coastal Ecosystems

Coastal Conservation
Key to a Thriving Economy and a Healthy Environment

America's coastal watersheds are economically significant and ecologically complex. Management of our coasts requires a thoughtful balance of working landscapes and habitat conservation.



Citations available at https://bit.ly/3nlPRyL

The Coastal Program

A Conservation Leader

that works with communities to voluntarily protect and improve habitats that benefit fish, wildlife, and people. We also develop resources for decision makers, land managers, and restoration practitioners to better manage and deliver habitat conservation. By working together, we sustain the people and wildlife that rely on coastal and marine ecosystems.

Our Mission

is to achieve voluntary habitat conservation by providing technical and financial assistance, in collaboration with partners, for the benefit of federal trust species.

Working with Communities

along our nation's coasts, we conserve habitat on public and private lands to deliver landscape conservation, build resilient coasts and communities, and maintain habitat connectivity and continuity, from headwater streams to the ocean.

Find the Coastal Program online:

Webpage
bit.ly/3Q0leLf

Facebook
facebook.com/coastalprogram/

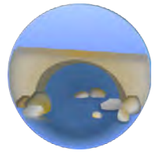
YouTube
bit.ly/3dihu7A

U.S. Fish and Wildlife Service

Priorities

Species Conservation

Conserving habitats that recover and sustain federal trust species.



Coastal Resiliency & Habitat Connectivity

Building resilient ecosystems and communities, protecting infrastructure, and supporting habitat connectivity on national wildlife refuges and other public and private lands.

Access & Recreation

Enhancing the visitor experience at national wildlife refuges and building a legacy of stewardship by expanding public access and recreation on public lands and elsewhere.

Engagement & Urban Conservation

Working with Tribes, states, and others to promote the North American Wildlife Conservation Model and urban habitat conservation.

Department of the Interior & Service Priorities

America the Beautiful
Build Back Better
Climate Change
COVID
Racial Equity
Wildlife Conservation

In 2021, we conserved more than 31,000 acres of land and waters that support *Wildlife Conservation* while strengthening the health and resiliency of human communities. Our voluntary habitat protection and improvement efforts also expand and improve the quality of our nation's conservation estate — achievements that support the *America the Beautiful* initiative.

We support local economies and the *Build Back Better* framework by employing local businesses and services when delivering on-the-ground conservation. Our conservation work provides many ecological benefits such as clean water, carbon sequestration, and flood protection that build coastal resiliency and reduce *Climate Change* impacts. When possible, we also improve public access and recreational opportunities to ease the effects of isolation and social distancing tied to the *COVID* pandemic. Finally, to ensure a diverse coalition of stakeholders, we seek to engage underrepresented and underserved peoples, including Tribes and minority communities that support *Racial Equity*.

2021 Project
Statistics

159
Projects

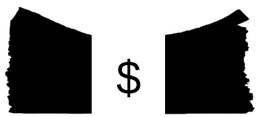
237
Project Partners

22
States and Territories

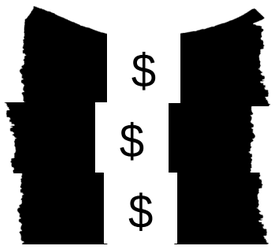
22,181
Acres Protected

8,899
Acres Restored

28
Projects on or adjacent to Federal Lands



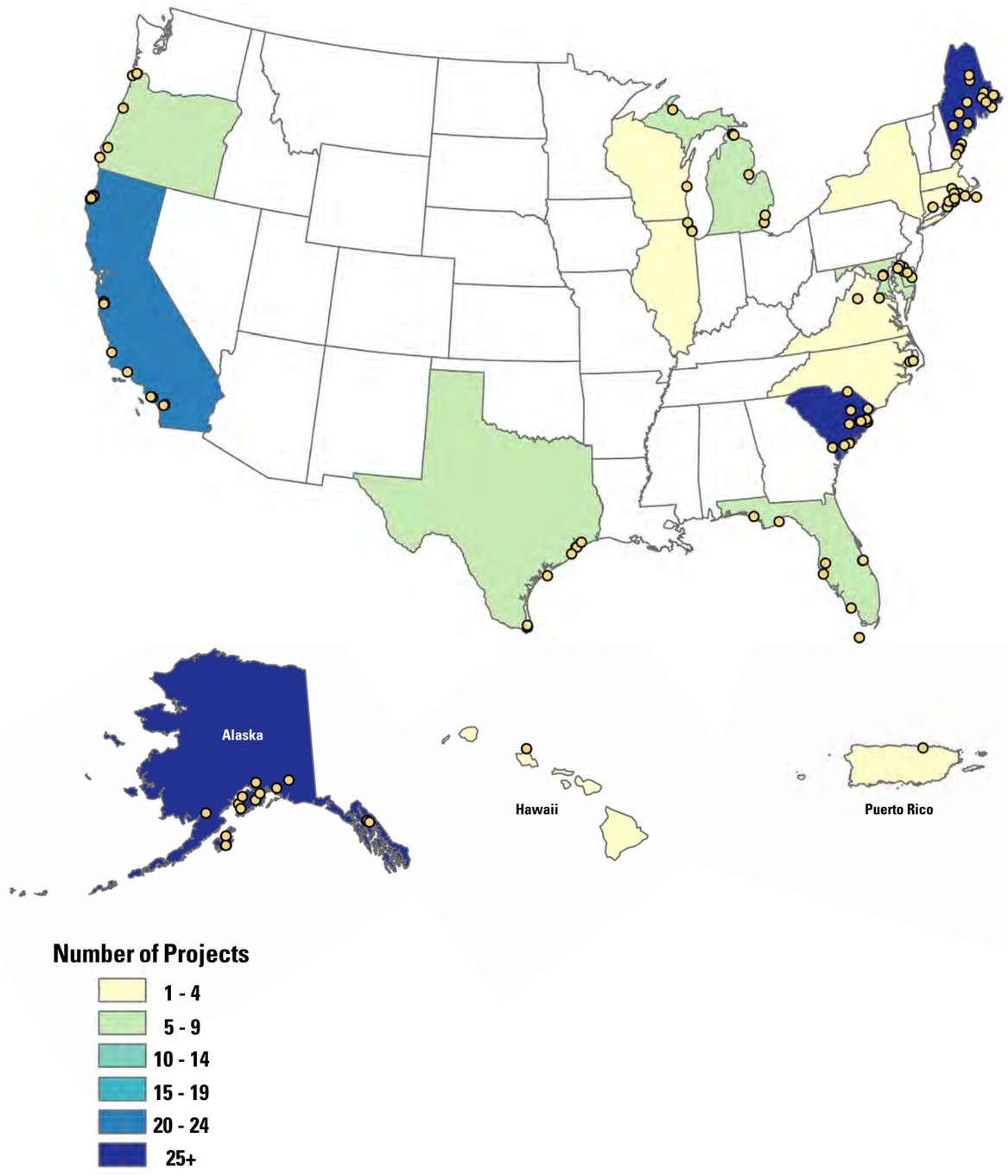
More than
$1,946,000
in Coastal Program Contributions



More than
$63,195,000
in Partner Contributions

$1 to $32
Coastal Program to Partner Contributions

2021 Project
Map



Project Statistics

Projects for Migratory Birds

Projects for Threatened and Endangered Species

Projects for Interjurisdictional Fish

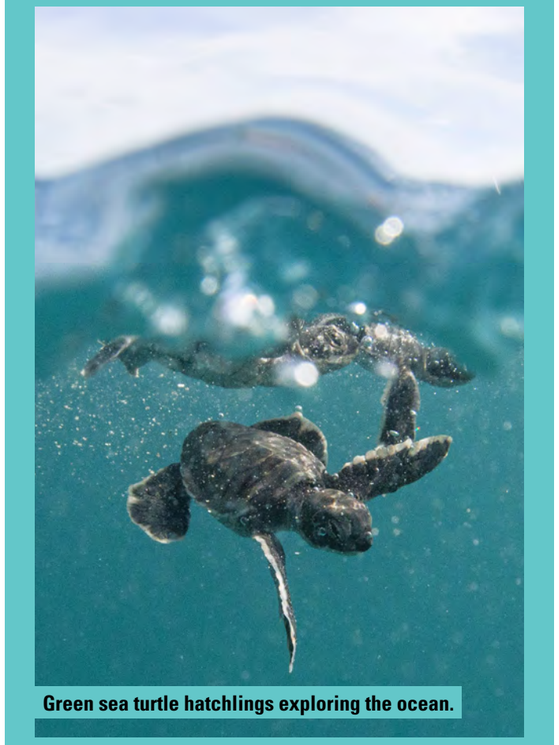
Preventing Species Extinction

More than 50 forest bird species once inhabited the Hawaiian Islands. Only 20 species remain today. Their extinction is being accelerated by avian malaria, a disease transmitted by invasive mosquitoes.

As experts research the use of a naturally occurring bacteria to control the mosquitoes' reproduction, the Coastal Program is working with captive-breeding specialists, translocation experts, and community members to identify other conservation actions to stem the further loss of critically endangered forest birds.

'Akiapola'au. Jack Jeffrey, USFWS

Biological Monitoring
Hawaii



Green sea turtle hatchlings exploring the ocean.

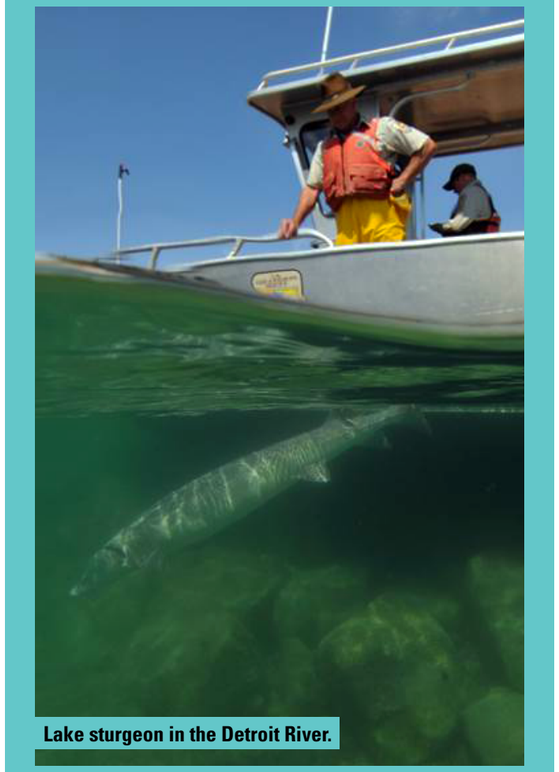
The Coastal Program, North Shore Community Land Trust, Turtle Bay Resort, Hawaii Marine Animal Response, and other partners restored nearly 40 acres of rare dune habitat at Kalaeokauna'oa on the North Shore of O'ahu.

After completing the restoration project, the Coastal Program led a monitoring effort to evaluate the success of the project. Monitoring the success of our projects is important to improving the science and delivery of conservation.

Monitoring has documented a 90 percent drop in predation by the invasive Indian mongoose, a 300 percent increase in Laysan Albatross nests, and 15 Hawaiian green sea turtle nests — the first documented on this beach for the federally threatened turtle.

Green Sea Turtles / Koa Matsuoka, NOAA

Sturgeon Conservation
Michigan



Lake sturgeon in the Detroit River.

Lake sturgeon are listed as threatened by nearly all states in their historic range. On the Detroit River, experts identified the area adjacent to Fort Wayne Park as having nearly ideal sturgeon spawning conditions, except for the channel bed substrate being too fine.

Recently, the Coastal Program, U.S. Geological Survey, U.S. Army Corps of Engineers, and others built a four-acre sturgeon spawning reef that complements other constructed reefs in the area. Monitoring of the reefs has documented spawning sturgeon and eggs.

The partnership coordinated with the Lake Carriers Association and others to position the reef so it would not interfere with cargo ships and recreational activities.

Lake Sturgeon tagging / Andrew Muir

Salmon Conservation
Oregon

Young Chinook salmon gathering in a slough.

Pacific salmon face many challenges before they go to sea to mature. Estuaries provide a safe place for salmon to grow and prepare - feeding and acclimating to saltwater to increase their chance of survival at sea.

Oregon has lost an estimated 24 percent of its estuarine habitats to agriculture and development.[1] The Coastal Program worked with the Confederated Tribes of Siletz Indians, the Bureau of Land Management, Oregon Watershed Enhancement Board, Lower Rogue Watershed Council, and others to help reverse this trend by restoring nearly five acres of estuarine habitat along the Lower Rogue River.

Located in southern Oregon, the Rogue River is designated a National Wild and Scenic River and identified as a high-priority region for habitat conservation by the Southern Oregon/Northern California Coast Salmon Recovery Plan.

The project improved year-round habitat for the federally threatened coho and other Pacific salmon by adding large woody debris and native trees along sloughs and other areas of slow-moving water — perfect places for young salmon to grow. This habitat is also used by other wildlife, including peregrine falcons, river otters, black bears, and Northern red-legged frogs.

More than a half million visitors a year come to the Rogue River for outdoor recreation, including white water rafting, camping, hiking, fishing, and wildlife viewing.[2]

Read more here: https://bit.ly/3oGguPe

Chinook smolt / Oregon Department of Fish and Wildlife

1. Good, J.W. 2000. Summary and current status of Oregon's estuarine ecosystems. pp. 33-44 in: The Oregon State of the Environment Report 2000. 214 p. Oregon Progress Board, Salem.
2. https://www.rivers.gov/rivers/rogue.php

Project Statistics

2,498
Acres treated with Prescribed Fire

2,870
Acres treated for Invasive Species

46
Miles of Restored Streams

Improving Habitat Connectivity

The Coastal Program works with a wide range of partners to conserve natural habitats. For example, the Coastal Program worked with the Pee Dee Land Trust to prioritize habitats for conservation in Chesterfield County, South Carolina. The Land Trust used this information and funding from the Coastal Program to permanently protect 286 acres of wetland and forest on a privately owned property.

The protected land adds to a natural corridor along the Pee Dee River that benefits the federally endangered Carolina heelsplitter, a mussel species, and several at-risk species, including the robust redhorse (pictured), spotted turtle, and Carolina-birds-in-a-nest, a plant species.

The protected land also preserves a suite of ecological services, such as flood control and ground water recharge, and traditional land uses, including farming, hunting, and silviculture.

Robust redhorse / Brian Gratwicke, Flickr

Resilient Habitats
California

Excavator breaching the levee.

Since 2015, the Coastal Program has worked to restore 40 acres of coastal wetlands on the Humboldt Bay National Wildlife Refuge, California. The restored freshwater, brackish, and salt marshes support a wide range of fish, wildlife, and plants, including the federally endangered tidewater goby and federally threatened Chinook and coho salmon.

The marshes also protect U.S. Route 101 and other roads from storm flooding and sea-level rise. The project design and construction supported the local economy and the Build Back Better framework by employing local contractors and non-profit organizations. The Coastal Program, California State Coastal Conservancy, and the U.S. Geological Survey are investigating whether the restored marshes have increased carbon sequestration.

Humboldt Bay National Wildlife Refuge / Conor Shea, USFWS

Conservation Science
California

Installation of solarization plastic tarp.

The Coastal Program works with partners to improve the science of habitat restoration. For example, the Coastal Program evaluated eradication techniques for the invasive European and Algerian sea lavenders. The results were shared with land managers, private landowners, and others to prevent these plants from becoming a regional problem.

In Southern California, sea lavenders are invading salt marshes, outcompeting native plants, including as the federally endangered salt marsh bird's beak, and providing poor habitat for coastal breeding birds, such as the state endangered Belding's Savannah sparrow.

Despite annual eradication efforts at San Diego Bay National Wildlife Refuge and the Port of San Diego, the sea lavenders continued to expand because of their prolific seed production. The Coastal Program found that solarization with black plastic (pictured) along with mechanical removal was the most effective control technique and helped the Refuge and Port to successfully apply this technique on their lands.

Biologist installing solarization plastic tarp / Carolyn Lieberman, USFWS

Habitat Diversity
Florida

Burn crew overseeing the prescribed fire.

Ten Thousand Islands is home to one of the world's largest mangrove systems — more than 230 square miles in southwest Florida. Mangroves are expanding into other habitats reducing habitat diversity.

Unfortunately, salt marshes are less common in this part of Florida and more susceptible to sea-level rise and freshwater management activities for the Everglades. However, salt marshes provide critical habitat for many fish, birds, and wildlife. The Coastal Program worked with Ten Thousand Islands National Wildlife Refuge to manage mangroves and restore 2,498 acres of salt marsh using prescribed fire.

The restored marsh will provide nursery habitat for fish and feeding and nesting habitat for migratory birds including waterfowl, wading birds, and shorebirds. Although there are currently no nesting eastern black rails or wood storks on the Refuge, the restored marshes are ideal habitat for these federally threatened birds and may attract them in the future.

Prescribed fire at Ten Thousand Islands National Wildlife Refuge / Larry Richardson, USFWS

Wildlife Corridors
Maine

Blanding's turtle crossing a road.

Entrance to the wildlife tunnel.

Working with local communities, the Coastal Program creates wildlife corridors - large and small. In Maine, between the towns of Eliot and Berwick, a significant number of wildlife mortalities have occurred along Route 236 due to vehicle collisions.

The Coastal Program, Maine Department of Transportation, and Department of Inland Fisheries and Wildlife installed exclusion fencing and a wildlife tunnel under the road to facilitate the movement of smaller wildlife, especially the Blanding's turtle, a species of greatest conservation need, and spotted turtle, an at-risk species. The tunnel also reconnects the hydrology of a Wetland of Special Significance that is bisected by the road.

Blanding's turtle (top) / USFWS and Wildlife crossing (bottom) / USFWS

Project Statistics

8,171
Acres Conserved on and adjacent to National Wildlife Refuges

4
Projects on National Parks

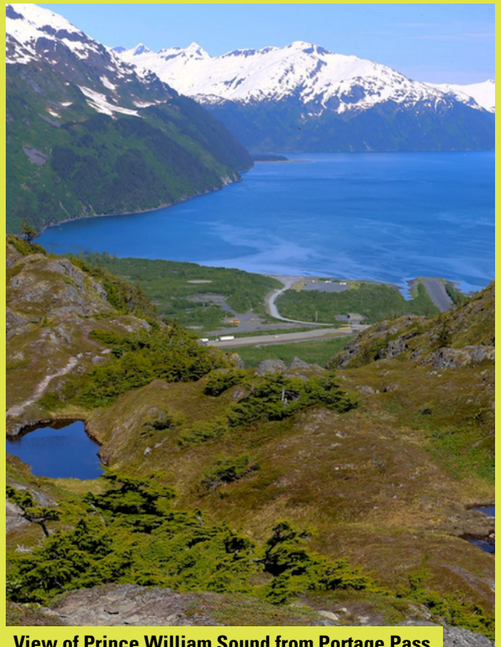
Supporting National Wildlife Refuges

The Conservation Fund and the U.S. Fish and Wildlife Service share an interest in protecting endangered species and their habitats. The Coastal Program supports habitat protection by prioritizing properties for conservation and paying for the costs of conveyance, such as appraisals and environmental assessments.

In Texas, the Coastal Program helped The Conservation Fund protect more than 3,300 acres of habitat that was later donated to Laguna Atascosa National Wildlife Refuge. The donated land connects the northern and southern portions of the refuge and provides crucial habitat for the federally endangered ocelot (pictured) and Aplomado falcon. The American Bird Conservancy designated the land as a globally important bird area.

Ocelot / Valerie, Flickr

Historic Trail
Alaska



View of Prince William Sound from Portage Pass.

The Coastal Program works with a wide range of partners to permanently protect natural places important to communities of wildlife and people. For example, the Coastal Program helped The Conservation Fund protect more than 250 acres of wetland, forest, and river habitat along the Portage Pass, in south-central Alaska.

Located in Chugach National Forest, Portage Pass (pictured) provides a shortcut for bears, moose, migratory birds, and other wildlife moving between Prince William Sound and Cook Inlet. The protected land conserves a stream that supports Pacific salmon and other fish and preserves recreational activities, including hiking on the Portage Pass Trail — a small segment of the more than 1,000-mile Iditarod National Historic Trail. The protected land was later transfered to the U.S. Forest Service for management.

Portage Pass / The Conservation Fund

Access to Nature
California

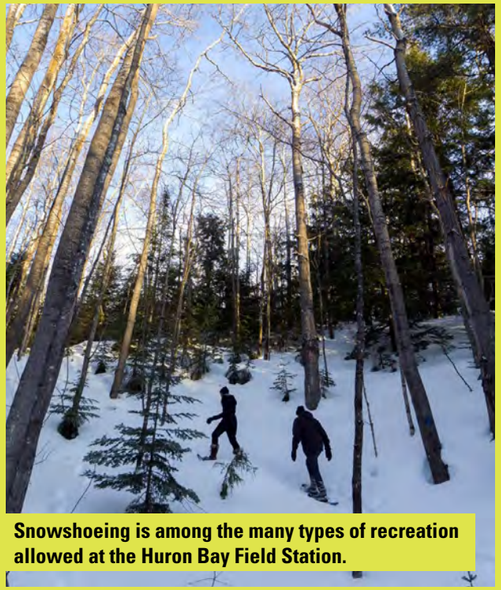
Summer camp at Kokte Ranch and Nature Preserve.

The Coastal Program works with partners to ensure that communities have access to nature and outdoor recreation, locally. In the community of Bayside, the Jacoby Creek Land Trust owns the Kokte Ranch and Nature Preserve — a stellar example of how nature, agriculture, and recreation can complement one another. The Humboldt Wildlife Care Center, also located on the property, rehabilitates injured wildlife so they can return to the wild.

Most recently, the Coastal Program and the Land Trust installed livestock exclusion fencing around 17 acres of freshwater wetlands to protect wintering habitat for the federally threatened Coho and other native salmon. The partnership also developed a grazing plan to manage wetland vegetation for Aleutian geese, wood ducks, mallards, and shorebirds.

Kids, Herbs, and Arts Camp / Jacoby Creek Land Trust

Rural Recreation
Michigan



Snowshoeing is among the many types of recreation allowed at the Huron Bay Field Station.

In Baraga County, the Keweenaw Land Trust acquired the 1,245-acre Huron Bay Field Station with funding from the National Coastal Wetland Conservation Grant Program, co-administered by the Coastal Program.

Although this part of Michigan is rural, development is steadily spreading across the region. The Coastal Program and the Land Trust improved the natural landscape by removing invasive species and barriers to wildlife movement and the quality of life for the local community.

The Land Trust also allows year-round recreation activities, including hiking and hunting for deer and grouse. The Land Trust is working with Michigan Department of Natural Resources and others to establish a walk-in game bird hunting area and hopes to be designated as a Grouse Enhancement Management Site — a program that partners with local businesses to offer discounts to hunters.

Snowshoeing / Nathan Miller, Keweenaw Land Trust

Coastal Recreation
Texas

Signage protecting piping plover nesting area.

The Coastal Program helps communities to manage their land and water resources for public recreation and wildlife conservation. Conserving these special places can also reduce the impacts of climate change (e.g., coastal flooding and sea level rise) and improve coastal resiliency.

In Texas, the Coastal Program and American Bird Conservancy worked with 11 local coastal land managers at 13 sites - from High Island to Padre Island. These partnerships balanced public recreation, such as beach going, fishing, and driving on the beach, with habitat conservation for the federally threatened piping plover and other beach-nesting birds.

The partners installed signs and temporary fencing that protected more than 1,300 acres of nesting habitat. They also developed management plans for the long-term recovery and monitoring of piping plovers.

Temporary signage around nesting site / Kacy Hay, American Bird Conservancy

Project Statistics

At least
3
Schoolyard Habitat Projects

1,147
Acres Publicly Accessible Lands

Connecting Urban Communities

The Coastal Program worked with the Galveston Bay Foundation and The Nature Conservancy's Texas City Prairie Preserve to restore 110 acres of wetlands along Dollar Bay, in Galveston, Texas. This region is important to commercial fishing and supports a wide range of recreational activities, such as fishing and boating. The project is located near the Texas City Prairie Preserve and adds to a network of protected natural spaces.

The project constructed a breakwater and restored intertidal marshes creating a living shoreline that builds coastal resiliency, improves water quality and attenuates coastal erosion and flooding.

The breakwater provides a suitable area for oyster recruitment. The restored habitats also benefit a suite of federal trust species, including interjurisdictional fish and migratory birds.

The success of this project led a private landowner to sell 100 acres to the Galveston Bay Foundation to permanently protect wetlands adjacent to the restoration. The protected lands were later transferred to the city of Texas City.

Volunteers planting emergent vegetation in the intertidal marsh / Scott Williams, USFWS

Alutiiq Lands
Alaska

Kodiak brown bear at Dog Salmon Falls.

Tribes and indigenous people are important partners in the conservation of fish, wildlife, habitats, and ecosystem functions. These partnerships can also support the cultural traditions, quality of life, and economic well-being of Tribes and indigenous people.

The Coastal Program worked with Koniag — a Native Corporation, the Great Land Trust, and government agencies to protect 151 acres of Tribal lands on Kodiak Island, Alaska. The project involved the transfer of subsurface rights to the Bureau of Land Management, adding an extra layer of protection for these pristine habitats.

The island is home to many iconic Alaskan wildlife such as the Kodiak brown bear, Sitka black-tailed deer, seals, tufted puffins, and the endangered marbled murrelet. The state of Alaska and the Service will manage the land for public use and recreation, including sightseeing, kayaking, hiking, photography, and camping.

Kodiak brown bear / Lisa Hupp, USFWS

Outdoor Classrooms
Delaware

Pollinator garden at Caesar Rodney High School.

Purple martin house monitoring by students and families.

The Coastal Program works with local schools to create schoolyard habitats that foster a connection with nature for the next generation of environmental stewards. Near the city of Dover, the Coastal Program continued to work with the Caesar Rodney School District to develop a district-wide environmental curriculum and network of schoolyard habitats — a shared vision among the local community.

Most recently, the Coastal Program worked with parents, students, and teachers at four schools, including the Frear Elementary School and Reily Brown Elementary School. Students assisted with many aspects of the schoolyard projects, such as planting native vegetation for migratory birds and pollinators and building purple martin houses. These activities complemented classroom lessons and fostered stewardship for nature among the students.

Pollinator garden (top) and Purple martin gourds (houses) / Brian Marsh, USFWS

Urban Conservation
Illinois

Field House at Leone Park Beach.

Visitors to Leone Park Beach.

The Coastal Program worked with the city of Chicago and the Park Advisory Council to improve access to and the quality of several parks located throughout Chicago. These parks were increasingly important as people looked for ways to ease the effects of COVID quarantines and social distancing.

Leone Beach Park, located along Lake Michigan, was selected as one of the best community beaches in Chicago by Time Out, an art, food, and entertainment magazine. At this park, the partnership restored 1.5 acres of habitat by planting an oak savanna and dry prairie that complements existing park habitats and amenities.

Field house (top) and Park visitors (bottom) / Ashley Houghton

Learn more about the Coastal Program at
https://www.fws.gov/program/coastal

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(Front Cover) Sockeye salmon / Ken Yasui
(Back Cover) Hawaiian yellow-faced bee / Sheldon Plentovich, USFWS)