



**U.S. Fish and Wildlife Service**

# **Urban Habitat Conservation Report**

**for the**

## **Partners for Fish and Wildlife Program & Coastal Program**



July 2023

U.S. Fish and Wildlife Service  
**Partners for Fish and Wildlife Program**

### **A Premier Partner**

that works with landowners to voluntarily and collaboratively improve habitats on privately-owned lands. We also help landowners access resources available through the U.S. Department of Agriculture's Farm Bill conservation programs, which provides billions of dollars for voluntary habitat conservation.



### **Our Mission**

is to restore, protect, and enhance fish and wildlife habitat cooperatively through voluntary partnerships with private landowners, Tribes, and other entities.

### **Working with Private Landowners**

across all 50 states and territories, we provide technical and financial assistance to plan, design, and implement projects that improve natural habitat and address the needs of the landowners.

Find the Partners for Fish and Wildlife Program online:



U.S. Fish and Wildlife Service  
**Coastal Program**

### **A Conservation Leader**

that works with communities to voluntarily and collaboratively 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:



# U.S. Fish and Wildlife Service Urban Habitat Conservation

## Partners for Fish and Wildlife Program & Coastal Program



According to the U.S. Census Bureau, 80% of Americans live in urban areas.<sup>1</sup> Cities are often located in areas that are also important to fish and wildlife, such as near rivers and estuaries. The Partners for Fish and Wildlife Program and Coastal Program recognize that the natural habitats around cities are critically important to fish and wildlife. These habitats provide much needed food and refuge for migrating and resident fish and wildlife, especially migratory birds, pollinators, and interjurisdictional fish.

These natural habitats also provide important ecosystem functions and services for people, such as clean water and flood protection. Research shows that these habitats play an important role in sustaining the welfare and livelihood of people. For example, coastal wetlands provide more than \$23 billion in storm protection.<sup>2</sup> In cities, trees can make people feel 7 years younger or \$10,000 richer.<sup>3</sup>

The Partners for Fish and Wildlife Program and Coastal Program have a long history of engaging and working with urban communities. By using principles reflected in the Service's Standards of Excellence, we are able to collaboratively design and implement landscape-scale habitat conservation that delivers the wide range of benefits to fish, wildlife, and people. Furthermore, by working with urban communities, we connect people to nature and foster a sense of stewardship, which is critical to the success and future of habitat conservation.

1. Nation's Urban and Rural Populations Shift Following 2020 Census | U.S. Census Bureau (census.gov)  
 2. The Value of Coastal Wetlands for Hurricane Protection | ResearchGate (researchgate.net)  
 3. Neighborhood greenspace and health in a large urban center | Scientific Reports (nature.com)

# U.S. Fish and Wildlife Service Urban Habitat Conservation

## Partners for Fish and Wildlife Program & Coastal Program

### 2020-2022 Urban Conservation Project Statistics<sup>4</sup>



**310**  
Projects



**39**  
States & Territories



**States**  
with most Urban Projects



**3,519**  
Acres Restored



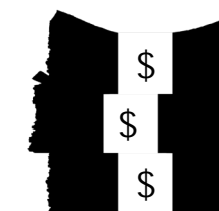
**805**  
Acres Protected



**12**  
Fish Passage Projects



More than  
**\$7,944,000**  
in Program Contributions



More than  
**\$66,827,000**  
in Partner Contributions



More than  
**\$1 : \$8**  
Program to Partner  
Contributions

4. Urban as defined by the United States Census Bureau - 2020 Urban Areas National Geodatabase.

# U.S. Fish and Wildlife Service Environmental Justice



Conservation justice, equity, diversity, inclusion, and accessibility are complex societal challenges that require thoughtful and ambitious solutions as well as incremental changes to address inequities at all scales. As the U.S. Fish and Wildlife Service (Service) implements Justice40 and similar initiatives, the Partners for Fish and Wildlife Program and Coastal Program are reviewing how we can better collaborate with underserved and underrepresented communities to implement voluntary habitat conservation.

Fundamentally, our approach to habitat conservation requires building a diverse coalition of stakeholders, including Tribes and minority communities. We are currently reviewing our program capabilities and operations, so we can become a more effective leader in equity and inclusion among the conservation community.

Annually, we track the number of projects in underserved communities, using data from the Council on Environmental Quality's [Climate and Economic Justice Screening Tool](#). We are working with Restore America's Estuaries, the Service's Urban Wildlife Conservation Program, and local organizations to convene a series of focus groups with underrepresented and underserved communities. The focus group discussions will inform the development of best practices for removing obstacles to community engagement. We are also helping to make institutional changes in the Service by participating in working groups that are building a culture of justice, equity, diversity, inclusion, and accessibility.

*Child playing in the rain / Andre Taissin, Unsplash, Visitors to Long Wharf Nature Preserve, Connecticut / Firefly Imageworks, Inc., and Visitors to Freshwater Farms Reserve, California / Firefly Imageworks, Inc.*

# Coastal Program Urban Conservation Projects



Volunteers helping to maintain coastal dune habitat in 2021.

## Community Stewardship California

The El Segundo blue is a federally endangered butterfly that is endemic to coastal dunes along southern California. Habitat loss has restricted the butterfly to a handful of locations near Los Angeles.

In 2021, the Coastal Program, Los Angeles Conservation Corps, Los Angeles County Department of Beaches and Harbors, South Bay Parkland Conservancy, and other partners worked with local volunteers to improve three acres of habitat for the butterfly and other pollinators by planting sea cliff buckwheat and other native dune plants.

Community support for this project fosters a sense of conservation stewardship among local residents and provides an opportunity to give back to their neighborhoods. The partnership observed a three-fold increase of El Segundo blue butterflies on the project site, likely because of the increased buckwheat and removal of invasive plants.

Read more about the project at [Diversity of Effort Benefits Diversity in Nature](#).

*Volunteer dune maintenance event / USFWS.*



Blooming native vegetation along restored coastal dunes.

## Urban Recreation California

In 2020, the Coastal Program worked with partners to restore 2,900 feet of coastal shoreline and dunes that provide nesting habitat for snowy plovers, least terns, and other shorebirds. The restoration also protects the Pacific Coastal Highway (US Route 101) from coastal erosion and floods.

The restoration incorporated several footpaths and interpretive signs to protect sensitive nesting habitat and provide easy public access to the beach.

The Coastal Program provided financial and technical assistance with project coordination, regulatory compliance, and project design.

*Native dune vegetation along coastal dunes / J. Gilkeson, USFWS*

# Coastal Program Urban Conservation Projects



Volunteers and local high school students were important to the success of the project by planting more than 165,000 marsh grasses and other native plants.

## Community Stewardship Connecticut

Once more than 1,400 acres, the Great Meadow Marsh has lost more than 50 percent of its tidal wetlands. Considered to be among the best coastal bird habitats, the marsh also provides important ecosystem services and functions, such as flood protection and carbon sequestration.

In 2022, the Coastal Program and other Service programs worked with Audubon Connecticut, Connecticut Department of Energy and Environmental Protection, National Oceanic and Atmospheric Administration, and the Town of Stratford to restore 34 acres of marsh located on the Stewart B. McKinney National Wildlife Refuge. The project involved removing invasive plants, planting native marsh plants, and creating tidal channels to allow for regular flooding of the marsh. The Coastal Program is also monitoring the project for biological outcomes, such as the nesting success of saltmarsh sparrows.

Read more about the project at the [Restoration of the Great Meadows Marsh](#).

*Volunteers planting native marsh grasses / Corrie Folxom-O'Keefe, Audubon Connecticut*



Pollinator garden at Caesar Rodney High School.



Postlethwait Middle School students and family members built purple martin houses.

## Outdoor Classrooms Delaware

Near the city of Dover, the Coastal Program continues to work with local schools to create schoolyard habitats that foster a connection with nature for the next generation of environmental stewards. In 2021, the Coastal Program worked with parents, students, and teachers at four schools, including the Caesar Rodney High School and Postlethwait Middle 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 hands-on activities complemented classroom lessons and fostered stewardship for nature among the students.

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

# Coastal Program Urban Conservation Projects



Green sea turtle hatchlings exploring the ocean.

## Citizen Science Hawaii

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. Volunteers were critical to the monitoring effort, which also improves the science and delivery of conservation. The abundant help from volunteers reflects the local community's strong support for habitat and species conservation.

In 2021, the Coastal Program 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*



Field house at Leone Park Beach in Chicago.



Visitors to Leone Park Beach.

## Urban Recreation Illinois

In 2021, the Coastal Program worked with the City of Chicago and Park Advisory Council to improve the quality of and access to several parks located throughout Chicago.

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

*Field house at Leone Beach Park / Ashley Houghton*

# Coastal Program Urban Conservation Projects



Wetland restoration at the Six Points Wyandot Tribal Heritage Site is located near Detroit.

## Tribal Communities Michigan

The Six Points Wyandot Tribal Heritage Site is located on the ancestral grounds of the Wyandot of Anderdon Nation near Detroit. The property combines a ceremonial space for the Wyandot to perform spiritual activities with a public space to share their culture.

The 15-acre property is part of a corridor of protected lands that includes the Detroit River International Wildlife Refuge and Lake Erie Metropark. However, the property's wetlands were degraded by common reed, glossy buckthorn, and other invasive plants.

In 2022, the Coastal Program worked with the Wyandot community, the International Wildlife Refuge Alliance, and local volunteers to remove invasive plants that restored more than five acres of wetlands.

*Invasive European frog-bit removal / USFWS*



In 2022, volunteers monitored the project to evaluate recovery efforts for the *cóbana negra* and other conservation outcomes.

## Community Stewardship Puerto Rico

The Ciénaga las Cucharillas Nature Reserve is one of the largest natural spaces in the San Juan metropolitan area. The Reserve supports several types of mangroves and other wetland habitats that provide flood control and water filtration for the surrounding communities. These habitats also support an impressive biodiversity despite their location in an urban landscape. The Reserve provides critical habitat for migratory, endangered, and endemic species, such as the snowy egret, hawksbill sea turtle, and mangrove cuckoo.

In 2021, the Coastal Program worked with Caras of the Americas and Corredor del Yaguazo, Inc. to restore four acres of wetland on the Reserve. Community involvement was key to implementing the project. Around 2,000 local volunteers planted more than 800 native trees, including the federally threatened *cóbana negra* – an evergreen tree that occurs in brackish, seasonally-flooded wetlands.

*Volunteers monitoring a planted *cóbana negra* / Caras of the Americas*

# Coastal Program Urban Conservation Projects



Volunteers restoring an intertidal marsh by planting emergent vegetation.

## Coastal Conservation Texas

In 2021, 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 Texas City, Texas. This region is important to commercial fishing and supports a wide range of recreational activities, such as fishing and boating.

The partnership restored intertidal marshes by building a breakwater and living shoreline. The project benefits a suite of federal trust species as well as builds coastal resilience, improves water quality, and attenuates coastal flooding.

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.

*Aerial view of volunteers planting native marsh vegetation / Scott Williams, USFWS*



Students learning to harvest and sow wild rice at the Barkhausen Waterfowl Preserve near Green Bay.

## Tribal Heritage Wisconsin

Native wild rice was once a keystone species for the coastal ecosystems along the Great Lakes as well as a staple food for native communities, such as the Ojibwe people. Wild rice continues to be culturally and ceremonially important to local Tribes. However, habitat loss and poor habitat conditions has caused a significant decline in wild rice in the region.

In 2022, the Coastal Program, Ducks Unlimited, Menominee Indian Tribe of Wisconsin, and other partners provided assistance for Wild Rice in the Classroom – a local education initiative that incorporates the topic of wild rice into environmental science and other subject lessons. As part of the initiative, students from the Menominee Indian High School and other schools learned about wild rice and helped harvest and sow wild rice at the Barkhausen Waterfowl Preserve.

*Students at the Barkhausen Waterfowl Preserve / Menominee Indian High School*

# Partners for Fish and Wildlife Program Urban Conservation Projects



Nature-based conservation techniques, such as native brush layering, create better aquatic habitat conditions for salmon than more traditional stabilization techniques, such as riprap.

## Nature-based Solutions Alaska

The Partners for Fish and Wildlife Program is working with the Alaska Department of Fish and Game to advance nature-based solutions by hosting workshops for local communities and conservation practitioners. In 2022, as part of a workshop, the partners replaced a riprap-armored streambank with native brush layers along the lower Chena River.

Local agencies and landowners provided the labor to remove the riprap and replant vegetation. This nature-based conservation technique provides long-term erosion control, restores stream functions, and enhances aquatic and riparian habitat. Healthy riparian habitat cools stream temperatures that will benefit juvenile Chinook salmon.

Chinook salmon / Roger Tabor



Students and staff from the Partners for Fish and Wildlife Program and Silvio O. Conte National Fish and Wildlife Refuge planting a pollinator garden in the City of Hartford.

## Community Engagement Connecticut

In 2022, staff from the Partners for Fish and Wildlife Program and Silvio O. Conte National Fish and Wildlife Refuge met with Hartford community leaders to discuss possible habitat restoration projects that would benefit the Hartford Urban Wildlife Conservation Partnership.

The Hartford Urban Wildlife Conservation Partnership is a diverse coalition of community leaders, agencies, organizations, and individuals, including Friends of Keney Park and Ebony Horsewomen, Inc., that represent a wide range of interests that have a nexus in the Hartford community.

In 2023, Program and Refuge staff worked with KNOX, Inc., an organization that manages community horticultural and environmental centers, and students from Prince Technical High School to plant a pollinator garden. The pollinator garden will benefit birds and pollinators and increase the production of fruit and vegetables in an adjacent community garden.

Pollinator garden in Hartford, Connecticut. / USFWS

# Partners for Fish and Wildlife Program Urban Conservation Projects



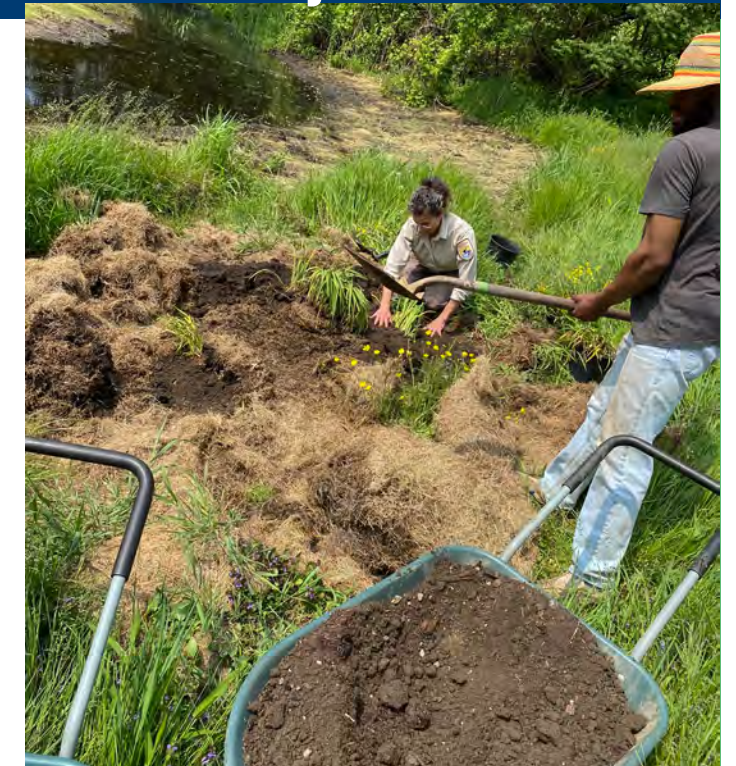
Urban oasis at McGrath Park in New Haven.

## Outdoor Classroom Connecticut

The New Haven Urban Wildlife Refuge Program awarded Prospect Land Trust a grant to create an Audubon Connecticut Urban Oasis at McGrath Park in Prospect. The park joins a network of urban oases created across New Haven. These oases provide critical habitats for migrating birds and pollinators as well as green space for people.

In 2020, the Partners of Fish and Wildlife Program worked with Audubon Connecticut and Prospect Land Trust to restore more than four acres of natural habitat at the park. The park's proximity to Long River Middle School makes it an excellent outdoor classroom. The Land Trust is working with teachers from Long River Middle School to develop environmental activities for students.

Restored habitat at McGrath Park, Connecticut / USFWS



Staff from the Partners for Fish and Wildlife Program, People Aligning to Create Harmony, and volunteers planting a pollinator garden on a vacant lot in Springfield.

## Community Conservation Massachusetts

In 2023, the Partners for Fish and Wildlife Program worked with People Aligning to Create Harmony and volunteers from the community to build a pocket park on a vacant lot in Springfield. The project involved planting milkweed and other pollinator friendly plants.

This project supports the goals of the local Urban Wildlife Conservation Partnership by providing access and a connection to nature for an underserved community.

Future construction of a rain and community garden is planned for the park, which will also be used as educational greenspace for the community.

Pollinator garden in Springfield, Massachusetts / USFWS

# Partners for Fish and Wildlife Program Urban Conservation Projects



North Las Vegas residents walk through the pollinator habitat.

## Connecting with Nature Nevada

In 2020, the Partners for Fish and Wildlife Program, Get Outdoors Nevada, and the City of North Las Vegas established a pollinator habitat at a brownfield site, near Rancho High School. The small native habitat is a sanctuary for birds and pollinators, including hummingbirds, insects, and bats. The site is an outdoor classroom that includes a trail, benches, and educational signs to provide a place for the local community to connect with nature.

Partners for Fish and Wildlife Program provided assistance on plant selection, planting techniques, irrigation, and weed control. The partnership and volunteers planted 300 native plants and laid out the trail and seating areas, while the city installed the trail, benches, and irrigation system.

Pollinator habitat in North Las Vegas, Nevada / USFWS



Volunteers planting native vegetation at Rio Grande Valley State Park.

## Wildlife Corridor New Mexico

The Partners for Fish and Wildlife Program worked with the City of Albuquerque, Middle Rio Grande Conservancy District, University of New Mexico, and other partners to restore riparian habitat in the Rio Grande Valley State Park. The project was along a stretch of stream that was severely burned several years ago and natural revegetation was hindered by a lack of overbank flooding.

In 2023, the partnership worked with local students, volunteers, and community groups to plan and carry out the planting of native riparian trees, shrubs, and forbs. The project reconnects habitats along a major migratory bird corridor. The partnership also plans to create a botanical garden where people can learn about the cultural value of native plants to the local community.

(Top and bottom) Volunteer planting event at Rio Grande Valley State Park, New Mexico / USFWS

# Partners for Fish and Wildlife Program Urban Conservation Projects



Milkweed serves as a food source for monarch caterpillars.

## Pollinator Conservation Texas

Birds and pollinators, such as monarch butterflies, migrate through Texas in the fall and spring. Natural habitats provide important food and refuge for migrating wildlife. For example, butterflies rely on flower nectar as a source of energy during their migrations and to build their fat reserves for wintering in Mexico.

In 2020, the Partners for Fish and Wildlife Program and Fort Worth Zoo improved bird and pollinator habitat at the zoo by planting native prairie vegetation, such as milkweed. Milkweed is indispensable to monarch butterflies, as the females lay their eggs exclusively on this plant.

The project also involved installing educational signage about pollinators and native prairies that may be seen by the one million annual zoo visitors. The zoo's education department is using the restored prairie as an outdoor classroom for students to participate in hands-on conservation, such as tagging monarch butterflies.

Monarch caterpillar - Joanna Gilkeson / USFWS



American kestrels are North America's smallest falcon and are found in urban and suburban locations.

## Migratory Bird Conservation Texas

The loss of native grasslands have contributed to the loss of nearly three billion birds in the United States and Canada. The Partners for Fish and Wildlife Program is working with conservation partners to reverse this trend of grassland loss.

In 2021, the Partners for Fish and Wildlife Program and the City of Grapevine restored more than 8 acres of native grasslands in a local public park. The restored habitat will benefit migratory birds and pollinators, including the American kestrel and monarch butterfly.

This project supports national and regional pollinator conservation plans and strategies. The local community also recognizes the value of this project because native grasslands improve water quality by filtering stormwater and reducing the need for fertilizers and herbicides.

American kestrel / Cassabdra Trevino, USFWS





**Learn more about the Partners for Fish and Wildlife Program at  
[www.fws.gov/program/partners-fish-and-wildlife](http://www.fws.gov/program/partners-fish-and-wildlife)**

**Learn more about the Coastal Program at  
[www.fws.gov/program/coastal](http://www.fws.gov/program/coastal)**



*(Front Cover) Students exploring New Haven Harbor at Long Wharf Nature Preserve, Connecticut / Firefly Imageworks, Inc.  
(Back Cover) Visitors to Long Wharf Nature Preserve, Connecticut / Firefly Imageworks, Inc.*