

Projects Recommended for Funding through the Second Round of the Transformational Habitat Restoration and Coastal Resilience Competition under the Bipartisan Infrastructure Law and Inflation Reduction Act

NOAA Fisheries is recommending nearly \$220 million in funding this year and an additional \$66 million in future year funding for 32 habitat restoration and coastal resilience projects under the Bipartisan Infrastructure Law and Inflation Reduction Act. These projects were selected through the second round of NOAA's Transformational-nearly-coastal-resilience funding opportunity.

Alaska

Restoring Pacific Salmon Habitat and Reducing Disaster Risk from Climate Change-Induced Glacial Outburst Flooding, Mendenhall River Watershed, Juneau, Alaska

The <u>Southeast Alaska Watershed Coalition</u> will work with the community and local collaborators to assess and design restoration projects on the Mendenhall River. These efforts are in response to reoccurring high water releases due to climate change, which are causing flooding and erosion. The projects will serve as examples for restoration versus riprap for anticipated future climate change events, and aim to shift thinking to solutions that are salmon habitat-friendly while also mitigating flood risk for landowners. (\$750,000 in first year; up to \$1.5 million total over 3 years)

West Coast

California

The String of Pearls: Restoring Landscape Resilience for Sacramento River Salmon

<u>California Trout</u> will work with partners to implement landscape-scale floodplain habitat projects in the Sacramento River watershed. These projects will benefit endangered Sacramento River Winter-run Chinook salmon, which hold cultural significance for local tribes. By creating floodplain habitat and increasing the frequency and duration of floodplain inundation, these projects will also help address land subsidence caused by severe drought in the Sacramento Valley. (\$3.8 million in first year; up to \$10 million total over 3 years)

Pacific Coast Ocean Restoration Initiative (PCOR): Transformational Habitat Restoration for Subtidal Rocky Reef Ecosystems

The Nature Conservancy will bring together a diverse array of partners to launch the Pacific Coast Ocean Restoration Initiative, which will catalyze a large-scale restoration of rocky reef and kelp forest habitats in California. They will advance efforts to restore habitats important to the recovery of endangered white abalone. They will also pilot a workforce program to support rocky reef ecosystem restoration projects and increase the capacity of historically underserved communities. (\$8 million in first year; up to \$18 million total over 3 years)

Upper Klamath River Tributary Post Dam Removal Salmonid Restoration

The <u>Yurok Tribe</u> will restore habitat in several tributaries of the Upper Klamath Basin that were identified as priorities in the Klamath Reservoir Reach Restoration Plan. This work will include restoring floodplain habitat, improving fish passage, enhancing side channel habitat, and creating new instream habitat features. Restoration will occur in key tributaries that have been cut off to fish migration for more than 100 years. (\$18 million)

Oregon

Resilience through Floodplain Restoration: Creating Conditions for Native Species and Communities to Thrive in the Upper Willamette

The McKenzie Watershed Alliance will work with partners to plan and implement several high priority projects in the Upper Willamette Basin. They will remove barriers to fish passage, reconnect rivers to floodplains, and restore natural ecosystem processes to help support the recovery of Upper Willamette River spring Chinook salmon. Robust environmental education and engagement with local communities—including tribal partners—are integrated throughout the projects. (\$8.5 million)

Oregon Coast Coho Recovery Plan Implementation in Oregon

The <u>Wild Salmon Center</u> will implement a suite of habitat restoration projects to support five populations of threatened Oregon Coast coho salmon. These projects were prioritized with local community input through a multi-year process to generate Strategic Action Plans focused on population-scale coho recovery. In addition to supporting coho, many of the restoration efforts will increase resilience to climate hazards such as flooding. (\$8.1 million)

Washington

Puyallup Watershed Restoration Project: Unbuilding and Reconnecting Floodplains in the Lower Puyallup River in Clear Creek, Middle Watershed in South Prairie Creek, and in the Upper White River Basin

The <u>South Puget Sound Salmon Enhancement Group</u> will work with partners to plan, design, and implement delta and floodplain channel restoration, culvert and road removal, and installation of engineered log jams in the Puyallup River Basin. This work will support the recovery of threatened Puget Sound Chinook salmon, steelhead, and bull trout. It will also improve community resilience to flooding. The project will be carried out in full partnership with the Puyallup and Muckleshoot Indian Tribes, supporting their tribal fisheries and traditional way of life. (\$8.4 million)

Queets Clearwater Large Wood Restoration Project

<u>Trout Unlimited</u> will restore and improve habitat in the Queets-Clearwater watershed to support wild coho salmon. A lack of stable wood and healthy forests throughout the basin has caused extreme channel incision, disconnecting the river from floodplain and side channel rearing habitats that are critical for salmon. This project will design and install engineered log jams and perform riparian restoration treatments (such as thinning and planting) to provide future shade, wood recruitment, and restore old forest characteristics. (\$10 million)

Transformational Chinook Recovery in South Whidbey Basin Watersheds Phase 2

The <u>Washington Department of Fish and Wildlife</u> will work with partners to implement large-scale restoration across the Snohomish and Stillaguamish Rivers within the Whidbey Basin. This work takes a holistic perspective to recover Chinook salmon, targeting restoration to support two critical life stages: upper watershed habitat for spawning and freshwater and estuarine habitat for rearing. (\$1.6 million in first year; up to \$10.1 million total over 3 years)

Hawai'i

Olowalu Resilient Reef: Transformational Habitat Solutions from the Forest to the Sea

The <u>Hawai'i Department of Land and Natural Resources</u> will work from forest to sea to reduce land-based sources of pollution impacting the Olowalu Reef in West Maui. They will help stabilize soils by reforesting native plants, controlling feral ungulates, and reducing the frequency and intensity of fires in the watersheds above the reef. They will construct a sediment capture basin to prevent sediment from entering the ocean and begin plans for restoration of a wetland in the area. This project will incorporate Native Hawaiian traditional and cultural

knowledge and will partner with community organizations to implement restoration and malama 'āina (care for the land). (\$9.9 million)

Transforming Habitat, Transforming Place: Community-led Restoration in Kealakekua, Hawai'i

The Nature Conservancy will restore 1,300 acres of coral reef and coastal habitats at Kealakekua Bay on Hawai'i. This mauka to makai (ridge-to-reef) effort will include expanding coral restoration and creating reef restoration training programs for community members. It will also include efforts to reduce erosion, sedimentation, and other land-based sources of pollution, and reduce human-caused degradation of coral reef and fish habitat, such as littering, coral trampling, and wildlife harassment. (\$4.9 million)

Gulf of Mexico

Alabama, Florida, Louisiana, Mississippi, and Texas

GulfCorps Resilience Collaborative (GRC): Transformative Restoration through Partnerships in the Gulf of Mexico

<u>The Nature Conservancy</u>, through the GulfCorps Resilience Collaborative, will support the work of young adult conservation corps crews to implement 200 science-guided and community supported conservation and nature-based restoration projects across approximately 10,000 acres of diverse Gulf of Mexico habitats. The Corps crews will be located in nine ecologically important but socially vulnerable sub-regions of the Gulf, from Florida through Texas. (\$4.6 million in first year; up to \$12 million total over 3 years)

Florida

Cape Haze Ecosystem Restoration

The <u>Southwest Florida Water Management District</u> will implement a large-scale effort to create and enhance estuary and coastal habitat in Charlotte Harbor Preserve State Park on the Southwest Florida Gulf Coast. The project will benefit Florida sportfish nursery habitat by providing ecological enhancement for up to 410 acres of coastal habitat, including conversion of canals into upland, wetland, and marsh habitats; and removal of barriers to provide access to new and restored fish nursery habitat. (\$3.7 million)

Louisiana

Chandeleur Island Restoration Project

The <u>Louisiana Coastal Protection and Restoration Authority</u> will restore the Chandeleur Islands to improve the function, resilience, and longevity of the island chain. By working with nature to reintroduce sand lost from the system, they will help extend the islands' lifespan and prevent a tipping point toward complete submergence of the islands. Improvements to the islands will support fish and wildlife in the northern Gulf of Mexico and will provide protection to local communities by reducing the effect of tropical storms. (\$25,000 in first year; up to \$10 million total over 3 years)

Texas

Collaborative Restoration of a Network of Oyster Broodstock Spawning Reserves Across the Mission-Aransas Estuary, Texas

The <u>Texas Parks and Wildlife Department</u> will collaborate with local partners to select, construct, and monitor at least 20 acres of oyster reef throughout the Mission-Aransas Estuary near Corpus Christi, Texas. The work will expand a network of protected oyster reserves that will provide a long-term source of larvae for nearby reefs, increasing the resilience and sustainability of the habitat and fishery. Community-based restoration and education activities will engage the local community in oyster biology, ecology, and habitat conservation. (\$8.2 million)

Caribbean

Florida

Next-Generation Coral Restoration Implementing and Scaling New Approaches to Increase the Climate Resilience of Florida Coral Reef

The <u>University of Miami</u> and partners will implement and scale-up strategies to increase the heat tolerance of restored corals, by focusing on corals that survived the summer 2023 heating event and conditioning early life stages of corals to prepare them for warmer temperatures. The project will use its partner network to restore tens of thousands of corals at key sites in South Florida and the Florida Keys, including <u>Mission: Iconic Reefs</u> locations. Partners will also provide bilingual education and community science opportunities in seven South Florida counties focused on how coral restoration contributes to creating healthy reefs that are part of Florida's cultural identity. (\$7.7 million in first year; up to \$16 million total over 3 years)

Puerto Rico

Renovación de Arrecifes: Unprecedented Scale, Driven by Locals, Guided by Experience, Focused on Resilience - Cayo Largo, Fajardo, Puerto Rico

<u>Sea Ventures</u> will implement the largest single-site coral restoration project in Puerto Rico, near the community of Fajardo. In addition to coral propagation—focused primarily on threatened <u>elkhorn coral</u>—the project will develop a coral gene bank to provide for rescue of genetic material. Collaboration with local partners will generate K-12 education opportunities, undergraduate and graduate coral restoration internships, and support for the Coral Restoration Technician apprenticeship program. (\$5 million)

U.S. Virgin Islands

USVI CMR3: Coral and Mangrove Infrastructure Restoration for Resilience and Workforce Readiness

The <u>University of the Virgin Islands</u> will enhance ecosystem and community resilience by restoring coral reefs and mangrove habitat. They will build local restoration capacity by forming multi-disciplinary teams that will establish coral nurseries and apply science-driven methods to improve the survival of coral outplants and mangrove seedlings. The team will develop a module for the Youth Oceans Explorer program, pilot a Corals in the Classroom program, and train university and high school students to assist in restoration and community engagement. (\$2.5 million)

South Atlantic

Florida

System-wide Habitat Restoration Through an Integrated Community of Practice (CoP) for the Indian River Lagoon, Florida

The <u>Indian River Lagoon Council</u> will implement a suite of fifteen projects to restore fish habitat, enhance ecosystem function, and increase resilience in the Indian River Lagoon in Florida. These efforts will help reverse recent habitat declines by restoring and enhancing seagrass, oyster, salt marsh, and shoreline habitats. Individual projects will engage the community through outreach events and volunteer opportunities. (\$9.4 million)

Georgia

Oyster Reef Restoration on Sapelo Island for Coastal Hazard Protection and Multiple Benefits

The <u>University of Georgia Research Foundation</u> will work with community members and local partners to restore oyster reefs and salt marshes around the Gullah Geechee community of Hogg Hummock on Sapelo Island,

Georgia. Using natural and nature-based features, this work will both restore essential fish habitat and increase community flood protection. Engagement with community members in collaborative habitat restoration design will help to improve the multiple benefits to the community. (\$2.8 million)

North Carolina

The New River Watershed Restoration and Resiliency Initiative

The <u>City of Jacksonville</u>, <u>North Carolina</u>, will restore critical habitat and alleviate flooding within the New River watershed through work in five project areas. Building upon the successful New River Estuary Oyster Highway and Wilson Bay Project, this effort will include wetland restoration, culvert replacement, living shoreline creation, and outplanting of three million oysters. In addition to restoring habitat, this work will improve water quality, recreational access, and community resilience. (\$8 million in first year; up to \$16 million total over 3 years)

Just Keep Swimming: Expanding Resilience in North Carolina with a Holistic Approach from Source to Sea in the Cape Fear River Basin

<u>The Nature Conservancy</u> will lead extensive community engagement to improve fish passage and increase resilience on the Cape Fear River. This project will identify and garner consensus around a fish passage solution at two dams on the mainstem river. It will also build capacity for local governments by sharing best practices for nature-based solutions to address concerns related to water quality, flooding, and other community hazards. (\$4 million in first year; up to \$7.9 million total over 3 years)

Northeast

Connecticut

Bride Brook Estuary Transformation: Restoring Ecosystems and Building Resilience at Rocky Neck State Park The Nature Conservancy will complete initial planning and design steps to restore estuary and salt marsh habitat along Bride Brook in Rocky Neck State Park in East Lyme, Connecticut. This work will improve the tidal connection between Bride Brook and Long Island Sound, and support the migration of river herring and American eel. Engagement with and input from the local community will be used to help determine the greatest needs for improving public access, facilities, and recreational opportunities in the park. (\$4 million)

Maine

Transformational Habitat Restoration and Connectivity in Downeast Maine

The Maine Department of Marine Resources will undertake initial planning and design steps to restore more than 400 acres of salt marsh on the west branch of the Pleasant River. The project will replace and enlarge a culvert along Addison road, as part of a larger effort to replace six tidal crossings and raise the roadway. Roadway flooding is a concern in the project area, and improved tidal and freshwater flows will help reduce flooding hazards. (\$9 million)

Maryland

Reef Base Construction and Oyster Restoration

The <u>Maryland Department of Natural Resources</u> will construct approximately 50 acres of reefs within existing oyster sanctuaries in Maryland's Chesapeake Bay. The restored oyster reefs will provide fish habitat and water filtration, and will serve as a source of broodstock to both sustain the new reefs over the long term and to bolster oyster populations on nearby harvest reefs. This work builds a decade of collaboration across partners and successful techniques developed as part of a large-scale effort to build oyster reefs in the Chesapeake Bay. (\$10 million)

Massachusetts

Source to Sea: Connecting Cape Cod's Waters and Communities

The <u>Association to Preserve Cape Cod</u> will work with an array of partners to lead the collaborative planning, design, and implementation of projects to restore rivers, retired cranberry bogs, and salt marshes on Cape Cod in Massachusetts. These efforts will support important species like river herring and American eel. They will also provide benefits to communities such as increased climate resilience and protection from flooding. (\$15 million)

Pennsylvania

Building Ecological and Community Resilience Through the Floodplain Restoration of Lower Darby Creek at John Heinz National Wildlife Refuge

<u>Ducks Unlimited</u> will restore the Lower Darby Creek wetland complex in John Heinz National Wildlife Refuge, an urban wildlife refuge located in Philadelphia. They will provide habitat for numerous species that depend on wetlands by increasing tidal connectivity to the 150-acre Henderson Marsh. They will also complete design and permitting to reintroduce a natural tide into an adjacent man-made impoundment. Installation and improvement of a kayak launch, observation tower, interpretive signage, and the surrounding trail system will expand opportunities for the local community to access and experience these natural areas. (\$9.5 million)

Virginia

Swan Cove Restoration at Chincoteague National Wildlife Refuge

<u>Ducks Unlimited</u> will restore Swan Cove, the southernmost impoundment at Chincoteague National Wildlife Refuge on Assateague Island in Virginia. This work will restore and protect valuable salt marsh habitat on the Delmarva Peninsula and support several important fisheries. It will also help improve community and ecosystem resilience in an area that is vulnerable to sea-level rise, by reestablishing a protective dune system, increasing the elevation of the marsh behind the dune system, and enhancing tidal exchange. (\$9.5 million)

Ragged Island Oyster Restoration and Shoreline Protection

The <u>Virginia Department of Wildlife Resources</u> will protect an eroding marsh ecosystem at Ragged Island Wildlife Management Area with a series of low breakwaters and a living shoreline. This project will protect and benefit a significant area of shoreline and natural marsh, and will help create new marsh in the backfill area between breakwaters and marsh edge. The project design also includes adding oyster reefs to each breakwater, resulting in restored habitat for oysters and fish species that use oyster reefs. (\$8 million)

Great Lakes

Michigan

River Raisin Dam #4 Removal and Restoration

The <u>City of Monroe</u>, <u>Michigan</u>, will reroute a sewer line and remove a dam that are currently preventing fish passage in the River Raisin. This work is part of a larger long-term effort to restore River Raisin fish habitat connectivity to Lake Erie, increase resilience to flooding, and open 23 miles of habitat for Great Lakes fish species. (\$3 million)

Restoration, Engagement, and Traditional Ecological Knowledge: An Indigenous Approach to Climate and Cultural Resiliency

The <u>Grand Traverse Band of Ottawa and Chippewa Indians</u> will preserve and restore coastal habitat on Mashkiigaki, a parcel of sacred ancestral land along West Grand Traverse Bay. They will also support an innovative fish passage project, Giigook man-jowang (FishPass), to fully re-connect the Boardman-Ottaway River

to Lake Michigan. This project emphasizes traditional ecological knowledge and tribal-led multi-generational community engagement. (\$8.9 million in first year; up to \$11.9 million total over 3 years)

Wisconsin

Stream and Habitat Restoration on Sucker Creek in the Town of Belgium, Wisconsin

Ozaukee County, Wisconsin, will complete a large-scale stream restoration project to reconnect Sucker Creek, a tributary to Lake Michigan, to nearby wetlands and floodplains. This work will directly benefit Great Lakes fish species by restoring habitats they rely on for spawning and rearing. The project will also be designed to improve the protection of infrastructure in the face of more frequent and extreme flood events. (\$3.2 million)