National Coastal Resilience 2019 Grant Slate- updated October 2020

NFWF CONTACTS

Erika Feller
Director,
Marine and Coastal Conservation
erika.feller@nfwf.org
202-595-3911

Kaity Goldsmith
Manager,
Marine Conservation
National Coastal Resilience Fund
kaitlin.goldsmith@nfwf.org
202-595-2494

PARTNERS

Brown pelican

ABOUT NFWF

The National Fish and Wildlife Foundation (NFWF) protects and restores our nation's fish and wildlife and their habitats. Created by Congress in 1984, NFWF directs public conservation dollars to the most pressing environmental needs and matches those investments with private funds. Learn more at **www.nfwf.org**

NATIONAL HEADQUARTERS
1133 15th Street NW
Suite 1000
Washington, DC 20005
202-857-0166

OVERVIEW

On Nov. 18, 2019, the National Fish and Wildlife Foundation (NFWF), NOAA, Shell and TransRe announced the 2019 grants from the National Coastal Resilience Fund. Forty-four new grants totaling $29,806,904 were awarded. The 44 awards announced generated $59,668,874 in match from the grantees, providing a total conservation impact of $89,475,778.

The National Coastal Resilience Fund restores, increases and strengthens natural infrastructure to protect coastal communities while also enhancing habitats for fish and wildlife. Established in 2018, the National Coastal Resilience Fund invests in conservation projects that restore or expand natural features such as coastal marshes and wetlands, dune and beach systems, oyster and coral reefs, forests, coastal rivers and floodplains, and barrier islands that minimize the impacts of storms and other naturally occurring events on nearby communities.

(continued)

Identifying Priority Restoration Sites for Resilience in Point Hope, Alaska
Grantee: City of Point Hope
Grant Amount: $215,137
Matching Funds: $216,076
Total Amount. $431,213
Assess potential shoreline sites that are vulnerable to coastal erosion, flooding, and storm surge for adaptation and resiliency projects in and around Point Hope, Alaska. Project will apply native knowledge and expertise in the scoping of projects, and will involve site assessments, modeling, and preliminary design development.

Shaktoolik Alaska Storm Surge Berm and Restoration
Grantee: Native Village of Shaktoolik
Grant Amount: $1,000,000
Matching Funds: $5,089,445
Total Amount. $6,089,445
Build a storm surge berm between Shaktoolik and the Bering Sea using 100 percent nature-based local materials, restoring coastal dune habitat. Project will prevent the destruction of the community, thereby avoiding contaminating marine habitat and coastal wetlands and rivers with fuel and other hazardous and biological waste.

Lower Walnut Creek Restoration (CA)
Grantee: Contra Costa County Flood Control and Water Conservation District
Grant Amount: $1,400,000
Matching Funds: $10,879,855
Total Amount. $12,279,855
Restore wetland habitats in the lower, tidal part of Walnut Creek to provide sustainable flood management. Project will set back levees from the channel to increase flood capacity and reconnect/create new floodplains reconnecting tides to brackish wetlands, thus restoring habitats for fish and wildlife.

Transforming Marin City's Urban Wetland (CA)
Grantee: Audubon California
Grant Amount: $145,948
Matching Funds: $175,000
Total Amount. $320,948
Develop a publicly informed and community-supported design to restore and strengthen Marin City's urban wetland. Project will improve the functionality and resilience of wetland habitat that will serve as shoreline protection from storms and floods while supporting birds and other wildlife, and providing much-needed opportunities for local residents to engage with nature.

Sea otter in coastal Alaska

Intertidal Coastal Marsh Restoration and Transportation Corridor Protection in Humboldt Bay (CA)
Grantee: Humboldt County Department of Public Works
Grant Amount: $125,000
Matching Funds: $125,000
Total Amount. $250,000
Initiate implementation of intertidal coastal marsh restoration to increase community resilience to flooding, and demonstrate the use of natural ecological systems for sea level rise adaptation. Project will perform site characterization and prepare preliminary design (50 percent) for a project utilizing tidal benches or similar natural infrastructure techniques to help protect a critical transportation corridor along Humboldt Bay from flood hazards.

Carmel River Floodplain Restoration and Environmental Enhancement (CA)
Grantee: Monterey County Resource Management Agency
Grant Amount: $300,243
Matching Funds: $367,706
Total Amount. $667,949
Design the removal of sections of levees on the south bank of the Carmel River to construct a causeway that will allow redirected floodwaters to flow under the State Route 1 embankment; thus, reducing flood risk within the 100-year floodplain. Project will design a mosaic of wetland, riparian, and upland habitats across the site providing foraging, nesting, and breeding habitat for many species of birds and other wildlife.

(continued)

Oxon Run Environmental Assessment and Preliminary Designs (DC)
Grantee: Department of Energy and Environment
Grant Amount: $250,000
Matching Funds: $500,000
Total Amount..... $750,000
Conduct an environmental assessment and develop preliminary designs for over 16,000ft of restored stream and wetland creation for Oxon Run in southeast Washington, District of Columbia. Project will develop designs focused on reducing impacts from a 100 year flood, removing 5,000 feet of a trapezoidal concrete stream channel, and improving in-stream habitat conditions.

Using Natural Infrastructure to Increase Flood Resilience in Northeast Wilmington (DE)
Grantee: University of Delaware
Grant Amount: $124,598
Matching Funds: $138,676
Total Amount..... $263,274
Develop a master plan to retrofit vacant lots using a community engagement planning approach to increase flood resilience in Wilmington, Delaware. Project will evaluate existing conditions and prospective designs to inform and support priority phases of implementation and transferability of findings.

Assessing Beneficial Use of Dredged Sediments for Habitat Restoration of Bay shore Communities (DE)
Grantee: DNREC Coastal Programs
Grant Amount: $75,000
Matching Funds: $75,000
Total Amount..... $150,000
Assess the feasibility of using dredge material and other nearshore sediments for beach restoration in the Delaware Bay shore communities of Bowers Beach and South Bowers, to enhance community resilience and restore habitat. Project will integrate a plan to employ this tactic into future community shoreline and habitat management practice.

Designing Living Shorelines Alternatives in the Delaware Estuary (PA)
Grantee: Partnership for the Delaware Estuary
Grant Amount: $125,000
Matching Funds: $125,000
Total Amount:..... $250,000
Address issues of coastal resilience and water quality to enhance the benefits in freshwater tidal zone. Project will design and install an innovative living shoreline approach incorporating freshwater mussels for a high priority area of erosion on the banks of the Schuylkill River at the Fairmount Water Works in Philadelphia.

Fish and corals in Florida's coastal waters

Using Coral Reef Restoration to Enhance Coastal Resilience of South Florida Shorelines (FL)
Grantee: University of Miami
Grant Amount: $2,996,814
Matching Funds: $3,048,957
Total Amount..... $6,045,771
Restore over 150,000 coral colonies to over 125 acres of reef habitat in Miami-Dade and Broward Counties, Florida. Project will: 1) build coastal resilience to extreme weather, waves, flooding, and beach erosion, 2) incorporate state-of-the-science approaches to build climate resilience into restored corals, and 3) create essential habitat for fisheries and enhanced recreation opportunities.

City of Tybee Island Coastal Marsh and Community Resilience Adaptation (GA)
Grantee: City of Tybee Island
Grant Amount: $125,000
Matching Funds: $175,000
Total Amount..... $300,000
Utilize a design approach focused on the interface of engineering, hydrology, ecology, and social science to enhance natural features and protections that reduce flooding impacts on critical human infrastructure and fish and wildlife habitat. Project will launch initial measures for the assessment and prioritized identification of integrated design strategies thus increasing resilience to storm and flood events.

(continued)

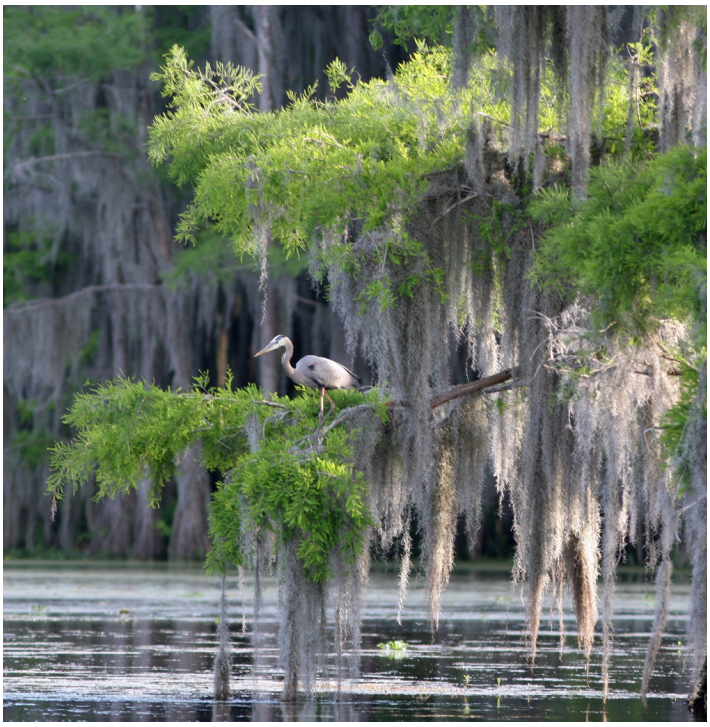
National Coastal Resilience 2019 Grant Slate

Protecting Kaopala's Coastal Infrastructure Using a Nature-Based Flood Management Design (HI)
Grantee: Horsley Witten Group
Grant Amount: $126,406
Matching Funds: $127,000
Total Amount $253,406
Generate conceptual green infrastructure alternatives for an open parcel of land to reduce flooding while providing co-benefits such as water quality improvement, community open space, and habitat improvement. Project will investigate options and prepare permit-ready design plans for a natural floodplain restoration upstream from a threatened coastal road.

Restoring Maui's Coastal Dunes to Improve Community Resilience and Enhance Wildlife Habitat (HI)
Grantee: University of Hawaii Office of Research Services
Grant Amount: $199,506
Matching Funds: $200,000
Total Amount $399,506
Using a collaborative and community-based planning process to develop site-specific plans for the restoration of coastal dunes on Maui's north shore. Project will result in reduced impacts of erosion and high wave flooding, mitigation of extensive losses of wind blown sand from beaches, improved public shorelines access, and restored or expanded habitat for unique native Hawaiian plants and animals.

Landscape-scale Restoration: A Green-Gray Approach to Gulf Coast Resiliency
Grantee: Restore The Earth Foundation
Grant Amount: $2,615,052
Matching Funds: $6,687,444
Total Amount $9,302,496
Restore 4,000 acres of critical historic bald cypress forest at Pointe-aux-Chenes Wildlife Management Area in Montegut, Louisiana. Project will plant approximately 400,000 native trees to reduce vulnerability and increase protection from flood and storm risks for over 200,000 residents and habitat for native wildlife in the area.

Assessing Wetland Restoration Alternatives in Port Fourchon (LA)
Grantee: The Water Institute of the Gulf
Grant Amount: $500,000
Matching Funds: $650,000
Total Amount $1,150,000
Use Louisiana Coastal Master Plan methods to design a nature-based approach for ecosystem restoration and community adaptation that utilizes dredged material from channel deepening to create and manage coastal wetlands. Project will work with partners to assess the possible benefits of a suite of restoration alternatives considering physical, ecological, and community metrics.



Blue heron in a cypress swamp in Louisiana

Bucktown Marsh Restoration and Living Shoreline Construction and Monitoring (LA)
Grantee: Jefferson Parish Coastal Management Department
Grant Amount: $2,500,000
Matching Funds: $2,500,000
Total Amount $5,000,000
Rebuild a one-mile living shoreline and creating up to 70 acres of marsh, tidal creeks, and lagoons to restore water quality and ecological functions of the Lake Pontchartrain shoreline. Project will attenuate wave activity and protect the existing shoreline and levee from erosion and storm surge to mitigate impacts of future storms, and protect approximately 1,375 homes and critical infrastructure.

Permitting and Final Design for Herring River Tidal Restoration in Cape Cod Massachusetts
Grantee: Friends of Herring River
Grant Amount: $300,000
Matching Funds: $355,471
Total Amount $655,471
Remove and/or replace man-made barriers to tidal flow to install an innovative tidal control infrastructure, which will allow tidal flow to be increased incrementally. Project will restore more than 890 acres of degraded former estuarine habitat and restore salt marsh and other native estuarine habitats throughout the river and its connected sub-basins, resulting in ecological and economic benefits to the region, Cape Cod Bay and the Gulf of Maine.

(continued)

National Coastal Resilience 2019 Grant Slate

Semipalmated sandpipers resting in a salt marsh in Massachusetts

Using Salt Marsh Habitat Restoration for Resiliency (MA)
Grantee: The Trustees of Reservations
Grant Amount: $217,931
Matching Funds: $217,931
Total Amount..... $435,862
Implement and monitor ditch remediation to restore salt marsh in Massachusetts' Great Marsh. Project will reverse salt marsh subsidence, reestablish and maintain high marsh habitat, improve coastal resilience and demonstrate ditch remediation as a viable and cost-effective restoration strategy at the landscape level.

Marsh Island Salt Marsh Restoration Project in Fairhaven, Massachusetts
Grantee: Buzzards Bay Coalition
Grant Amount: $2,000,000
Matching Funds: $4,600,000
Total Amount..... $6,600,000
Remove historically-placed dredged material to re-introduce tidal hydrology, and plant marsh vegetation. Project will create vital fish nursery habitat, enhance water quality, provide needed sandy material for nearby municipal coastal resilience projects, as well as build upon the significant investment over the past decade to improve water quality, expand fish passage, and permanently protect natural shorelines in Buzzards Bay.

Restoring and Monitoring Fish Passage at Snows Brook in Sedgwick, Maine
Grantee: Maine Coast Heritage Trust
Grant Amount: $490,000
Matching Funds: $625,000
Total Amount..... $1,115,000
Construct and monitor a fish restoration project using a community-driven approach in Sedgwick, Maine. Project will invest in construction and monitoring to enhance existing efforts to restore fish passage along a designated evacuation route and transportation artery, thus raising awareness of this and other restoration projects in the region.

Megunticook River Watershed Fish Passage and Flood Prevention Site Assessments and Design (ME)
Grantee: Town of Camden, Maine
Grant Amount: $139,000
Matching Funds: $220,000
Total Amount..... $359,000
Develop a comprehensive plan to address fish passage, watershed connectivity barriers, flooding hazards, vulnerable infrastructure, and degraded stream and wetland habitat in the Megunticook River watershed. Project will include site assessment and alternatives analysis for six dams, and envisioning a sea wall where the river outlets to Camden Harbor.

(continued)

National Coastal Resilience 2019 Grant Slate

Design and Permitting for the North Maumee Bay Bottomlands Restoration (MI)
Grantee: The Nature Conservancy - Michigan
Grant Amount: $192,936
Matching Funds: $192,936
Total Amount..... $385,872
Develop final design of a 75 acres restoration of emergent marsh and shrub-scrub peninsula in North Maumee Bay, Monroe County, Michigan to reduce inundation affecting infrastructure and improving water quality in areas receiving runoff from agricultural activities. Project will refine existing engineering plans, monitor baseline site conditions, and continue communication with permitting officials to complete design and permitting.

Saginaw Bay Rock Habitat and Sediment Transport Reef (MI)
Grantee: Michigan Department of Natural Resources
Grant Amount: $122,677
Matching Funds: $123,000
Total Amount..... $245,677
Develop preliminary designs to restore critical reef spawning habitat, allowing for sediment transport and dispersing excessive wind/wave action in the bay to reduce flooding, erosion, sedimentation. Project will improve habitat for walleye, lake whitefish, lake trout, and other fish populations.

Improving Natural Infrastructure in Currituck Sound, North Carolina
Grantee: National Audubon Society
Grant Amount: $95,808
Matching Funds: $99,500
Total Amount..... $195,308
Complete a comprehensive marsh site assessment in Currituck Sound, North Carolina to determine optimal locations, techniques and design for restoring and fortifying existing marsh. Project will generate a design plan at one to three of the highest priority sites in order to increase community resilience to flooding, sea level rise, storms, and other coastal challenges.

Site Assessment and Preliminary Designs to Mitigate Flooding in Hampton, NH
Grantee: Town of Hampton NH
Grant Amount: $185,800
Matching Funds: $185,800
Total Amount..... $371,600
Conduct a site assessment of chronic high tide and episodic coastal storm-based flooding in barrier beach neighborhoods along the harbor-side of the Hampton-Seabrook Estuary. Project will provide conceptual recommendations for flood mitigation strategies, and select two to three high priority strategies to restore natural hydrology and improve estuarine salt marsh habitat.

Great egrets

Determining Design Alternatives for A Nature-based Approach to Coastal Community Protection at Naval Weapons Station Earle (NJ)
Grantee: NY/NJ Baykeeper
Grant Amount: $154,744
Matching Funds: $154,914
Total Amount..... $309,658
Stabilize the shoreline around U.S. Naval Weapons Station Earle to protect the surrounding community and enhance the coastal habitat. Project will conduct a preliminary design and site assessment focused on performing a coastal engineering evaluation to determine the most suitable design alternatives for a nature-based approach to the protection of coastal communities.

Using Dredged Material to Enhance Marsh at Edwin B. Forsythe National Wildlife Refuge (NJ)
Grantee: New Jersey Department of Transportation
Grant Amount: $2,000,000
Matching Funds: $2,651,000
Total Amount..... $4,651,000
Restore and improve 30 acres of previously storm damaged Good Luck Point Marsh using the technique of Sediment Enrichment. Project will use dredged material to enhance the saltmarsh environment and habitat allowing for the natural sediment to remain in the estuarine system, feeding the marsh and replenishing loss from erosion and sea-level rise.

(continued)

National Coastal Resilience 2019 Grant Slate

Black skimmers flying over dunes in coastal New York

South River Ecosystem Restoration and Flood Resiliency Enhancement Project (NJ)
Grantee: Princeton Hydro
Grant Amount: $249,639
Matching Funds: $112,226
Total Amount $361,865
Conduct an ecosystem restoration site assessment and design for 165 acres of tidal marshes and transitional forest in New Jersey's Raritan River Watershed. Project will result in an engineering plan with a permit-ready design to reduce coastal inundation and erosion along about 2.5 miles of shoreline for neighboring flood-prone communities and enhance breeding and foraging habitat for 10 state-listed threatened and endangered avian species.

Restoring the Rockaway Waterfront Dunes (NY)
Grantee: Rockaway Waterfront Alliance
Grant Amount: $372,299
Matching Funds: $380,500
Total Amount $752,799
Develop a comprehensive site assessment and preliminary design to enhance and restore seven miles of coastal dunes along New York City's Atlantic shoreline. Project will transform the shoreline into an extensive, biodiverse and habitat-rich dune system to recognize the importance of biodiversity and monitoring while preparing the community and its dune system for sea level rise.

Removing Infrastructure to Restore Tidal Marsh to the Mastic Beach Coastline (NY)
Grantee: National Audubon Society
Grant Amount: $244,288
Matching Funds: $244,656
Total Amount $488,944
Restore priority coastal habitat in a flood-prone area of the Town of Brookhaven to benefit priority bird species and other wildlife, reduce flooding, and better protect inland areas from rising sea levels and storm events. Project will remove portions of a coastal road that regularly floods due to sea-level rise and restore the area to tidal marsh habitat, contributing to a larger ongoing multi-faceted coastal retreat and floodplain restoration on the 7,600-acre Mastic Beach/Shirley peninsula.

Cleveland Harbor Eastern Embayment Resilience Study (OH)
Grantee: Cleveland Metroparks
Grant Amount: $125,000
Matching Funds: $126,000
Total Amount $251,000
Develop a comprehensive plan to address lack of in-water and nearshore habitat in the eastern embayment in the City of Cleveland. Project will evaluate existing conditions to examine potential for the beneficial re-use of local dredge materials to create natural habitat.

(continued)

Strengthening Puerto Rico's Natural Coastal Systems Through Ecological Restoration, Education and Community Engagement (PR)
Grantee: University of Puerto Rico at Aguadilla
Grant Amount: $852,080
Matching Funds: $1,994,227
Total Amount..... $2,846,307
Restore and monitor damaged coastal dunes using environmental education to engage local community. Project will 1) strengthen coastal resilience to mitigate future storms, floods and other natural hazards; 2) achieve ecological conservation and biodiversity through dune restoration and monitoring; 3) educate and engage the population using the Latino Earth Partnership, a 10-step restoration education process and citizen science program.

Using Habitat Restoration, Expansion and Creation to Protect and Adapt Critical Infrastructure (PR)
Grantee: Protectores de Cuencas
Grant Amount: $118,867
Matching Funds: $123,702
Total Amount..... $242,569
Assess and design fringing reef to restore and expand mangrove habitats at nearshore areas adjacent to PR-250. Project will use engineering with nature approaches to restore, expand and create habitats that reduce flood risks and dynamically adapt to sea level rise while increasing essential fish habitats, as well as provide education and recreation opportunities.

Restoring the three-dimensional structure of hurricane-impacted coral reefs in Puerto Rico
Grantee: Sociedad Ambiente Marino
Grant Amount: $1,645,204
Matching Funds: $1,753,177
Total Amount..... $3,398,381
Restore the three-dimensional structure across coral reefs that were severely damaged by Hurricanes Irma and Maria. Project will use a multi-method restoration approach that combines the out-planting of artificial coral colonies created with emerging 3D printing technology with multispecies out-plants composed of morphologically complex branching and massive corals.

Preliminary Site Design to Improve Coastal Resiliency at Quonochontaug Pond and Breachway (RI)
Grantee: Rhode Island Department of Environmental Management
Grant Amount: $75,000
Matching Funds: $75,000
Total Amount..... $150,000
Assess 49 acres of breachway, shoreline, and adjacent landscape at Quonochontaug Salt Pond to develop preliminary designs that incorporate green infrastructure and ecologically enhanced shoreline into the gray

(continued)

Corals in coastal Puerto Rico

Oysters at low tide in a salt marsh

infrastructure that exists. Project will be a permit-ready, 60-percent site design with coastal adaptation elements that provide improved resilience.

Renaturalizing the Church Creek Drainage Basin (SC)
Grantee: City of Charleston, South Carolina
Grant Amount: $125,000
Matching Funds: $136,550
Total Amount..... $261,550
Develop an engineering and design plan, strengthen stakeholder participation, test outreach and educational opportunities, and complete necessary permitting to restore natural floodplain function. Project will steer and direct next steps to institutionalize a training program that would result in the proliferation of renaturalization as an effective resilience strategy in a broad geographic area far beyond the project site.

Coastal Wetland Restoration and Community Resiliency in West Ashley, City of Charleston (SC)
Grantee: Georgia Tech Research corp.
Grant Amount: $219,395
Matching Funds: $247,096
Total Amount..... $466,491
Deliver at least 90-percent complete engineering design plans for the restoration and/or conservation of 293 acres of tidal marshes in flood prone areas of the West Ashley Resilience Hub in Charleston, South Carolina. Project will engage governmental and non-governmental agencies, stakeholder and community members in planning workshops to develop engineering and design plans as well as citizen science initiatives.

Swan Lake Marsh Restoration (TX)
Grantee: Texas General Land Office
Grant Amount: $3,000,000
Matching Funds: $9,450,000
Total Amount..... $12,450,000
Restore approximately 80 acres of coastal marsh complex within Swan Lake in Galveston County, Texas by utilizing dredged materials to increase intertidal elevations to support marsh habitats and reduce the risk of coastal flooding. Project will protect critical port infrastructure, important aquatic nursery and wildlife habitat, and protect adjacent coastal prairies.

Building Oyster Reefs and Enhanced Saltmarsh Habitat in Wachapreague, Virginia
Grantee: The Nature Conservancy
Grant Amount: $804,878
Matching Funds: $805,093
Total Amount..... $1,609,971
Build and monitor oyster reefs with two types of oyster substrate adjacent to an eroding salt marsh to enhance and protect the seaside town of Wachapreague, VA. Project will further engage the town of Waschapreague and similar

(continued)

Sockey salmon during migration

communities protected by the Virginia coastal bay system in nature-based solutions to increase resilience in this vulnerable area as well as benefit people and wildlife.

Steigerwald Flood Risk Reduction and Floodplain Restoration for Salmonids and Lamprey (WA)
Grantee: Lower Columbia Estuary Partnership
Grant Amount: $1,987,219
Matching Funds: $2,700,000
Total Amount..... $4,687,219
Reconfigure a 5.5-mile levee system to reconnect 960 acres of historic floodplain habitat and establish native vegetation along a section of the lower Columbia River. Project will improve rearing habitat for salmon, steelhead, and lamprey; re-establish unobstructed fish passage to a 7-square-mile watershed; reduce flood risk to an industrial park, municipal wastewater treatment plant, and private residences; and improve recreation opportunities.

Restoring Graveyard Spit to Prevent Coastal Erosion in Willipa Bay (WA)
Grantee: Washington State Department of Ecology
Grant Amount: $240,506
Matching Funds: $250,000
Total Amount..... $490,506
Develop the final engineering designs and permitting for the construction of a nature-based dune and cobble berm to restore and protect Graveyard Spit along the northern entrance to Willapa Bay, Washington. Project will halt the ongoing loss of the spit and the vulnerable back-barrier estuary, while also protecting community infrastructure that is threatened by coastal erosion and sea level rise.

Restoring Thunder Field to Address Erosion and Enhance Salmonid Habitat (WA)
Grantee: Quileute Tribe
Grant Amount: $169,127
Matching Funds: $169,127
Total Amount..... $338,254
Finalize engineering designs that address erosion and avulsion threats at Thunder field to enhance salmonid habitat along 5.5 miles of river channel and associated habitat on the Quillayute River. Project will reduce channel migration and erosion using large wood and earthen structures to protect riparian, upland and stream habitat for wildlife.

Restoring Staghorn Corals and Ecosystem Services on Reef Flats in Guam, Micronesia
Grantee: The University of Guam
Grant Amount: $855,805
Matching Funds: $595,810
Total Amount..... $1,451,615
Upscale current staghorn restoration efforts in Guam, Micronesia. Project will undertake additional research to develop needed best practices that assist restored coral community adaptation to projected future climate conditions.