

MITIGATION RESOURCE GUIDE

Federal funding, technical assistance,
and other resources to support hazard mitigation

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FEMA

About the Mitigation Resource Guide

PURPOSE OF THE GUIDE

According to the National Institute of Building Sciences 2019 Natural Hazard Mitigation Saves report, every federal grant dollar invested in mitigation results in \$6 saved, on average, during disaster recovery. However, finding those initial dollars to invest, and determining the best way to spend them, can pose a challenge for communities across the Nation. Many resources exist, but they can be difficult to access and may not fit the needs of the community.

This guide aims to fill that gap by providing a comprehensive list of federal resources, including grants, technical assistance, loans, and other means of support. It will help state, local, and tribal officials determine potential source(s) of funding and technical assistance for their potential mitigation projects. For more information on available grants, visit [grants.gov](https://www.grants.gov).

HOW TO USE THE GUIDE

This guide provides federal resources that are currently available nationwide. The guide is organized by federal agency and describes the program, the resource type, the hazards addressed, and the type of mitigation, in addition to information on cost sharing and eligibility requirements.

The icons at the top of each page display key information:

RESOURCE TYPE



Grants:

Resources that provide financial support, often with a cost-share requirement



Loans:

Resources that provide initial financial support, often for low or no interest



Technical Assistance:

Resources that provide guidance and key information for success

MITIGATION TYPE



Education and Outreach:

Sustained programs to educate residents and community leaders about risks, vulnerabilities, and mitigation opportunities



Natural Systems Protection:

Actions that minimize damages and losses through preservation or restoration natural systems



Planning and Regulations:

Policies or codes that influence the way land is developed and buildings are constructed



Structure and Infrastructure:

Actions modifying existing structures/infrastructure to remove them from a vulnerable area, or construction of new structures to protect existing development

UPDATES

This guide will be updated regularly to reflect changes to the programs identified and to include or remove programs as needed. This is intended to be a living document.

FEDERAL, STATE, AND PRIVATE/NOT-FOR-PROFIT RESOURCES

As a national tool, this guide focuses on federal resources but provides a select sample of private resources at the end. FEMA Regions and states may decide to develop specific appendices with state and local private programs.

QUESTIONS?

Communities are generally encouraged to contact their State Hazard Mitigation Officer for hazard mitigation assistance. They may also contact their FEMA Regional Office or find contact information for each program through the websites included in this guide.

State Hazard Mitigation Officer: [fema.gov/grants/mitigation/state-contacts](https://www.fema.gov/grants/mitigation/state-contacts)

FEMA Regional Office: [fema.gov/about/organization/regions](https://www.fema.gov/about/organization/regions)

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Conservation Reserve Program (CRP)

Grant

Department or Organization	Farm Service Agency (FSA), United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Generally, to be eligible for CRP enrollment, a farmer must have owned or operated the land for at least 12 months prior to the previous CRP sign-up period. The land must be either cropland (including field margins) or certain marginal pastureland that is suitable for use as a riparian buffer or for similar water quality purposes.
Hazard Addressed	Erosion, Flood
Restrictions	Unknown
Funding Available	Variable annually
Cost Sharing	The rental payment does not require a cost share.
Specific to Recovery	No
Website	fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index

About the Resource

The Conservation Reserve Program (CRP) is a voluntary program for agricultural landowners to receive rental payments when they convert marginal farmlands to vegetated cover. Participants enroll in CRP contracts for 10 to 15 years. This reduces soil erosion, supports farmers, reduces sedimentation and pollution in water sources, and establishes wildlife habitat. The wetland enhancement, shoreline protection, and riparian buffer practices enhance resilience by reducing downstream flooding during storm events.

One effort of the CRP is the Floodplain Wetlands Initiative, which restores the functions and values of wetland ecosystems that had been devoted to agricultural use. Wetland restoration reverses the degradation of the wetland areas on what is often marginal soil. For farmers and landowners facing crop damage from flooding, restoring wetlands to receive floodwaters can also increase flood storage capacity—while significantly reducing farming risks.

Mitigation Success

The Oman Family Farm in Delaware County, Ohio, is a CRP success story. The Omans' farm started as a livestock and crop production farm in 1948. With the help of CRP, the 205-acre farm today consists of 148 acres of prairie grasses and 17 acres of cropland. In 1993, 67 acres were enrolled in the CRP. In addition to the conservation cover, a shallow water area and food plots were developed.

CRP has helped prevent gully problems and kept the soil from eroding into the Olentangy River. Encouraged by the benefits of CRP, the Omans decided to plant additional acres to prairie grasses and to develop more shallow water areas for wildlife and wetlands on the farm.

The original CRP contract expired after a one-year extension in 2004; however, the CRP conservation cover has been maintained. The farm is working with USDA to add warm-season grass filter strips, hardwood tree riparian buffers, and a wetland restoration project under the new Scioto River Watershed Conservation Reserve Enhancement Program in Ohio. CRP has helped the Oman Family Farm conserve privately owned farmland.

This story was abridged from the "Erosion Success Encourages Family to Install Wildlife Habitat" FSA news release (fsa.usda.gov/FSA/printapp?fileName=ss_oh_artid_649.html&newsType=crpsuccessstories).





Disaster Assistance Programs – USDA

Grant

Department or Organization	Farm Service Agency (FSA), United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Unknown
Hazard Addressed	All
Restrictions	Unknown
Funding Available	Variable
Cost Sharing	Variable
Specific to Recovery	Yes
Website	fsa.usda.gov/programs-and-services/disaster-assistance-program/index

About the Resource

The Farm Service Agency provides several disaster assistance programs. These include the Emergency Conservation Program, Emergency Forest Restoration Program, Emergency Loan Program, and Tree Assistance Program, as well as a mix of other programs aimed at specific agricultural sectors. While focused on recovery, many of these programs provide funding for conservation practices that enhance resilience.

Mitigation Success

When the Missouri River floodwaters receded in Charles Mix County, South Dakota, in fall 2011, portions of the river bottom cropland were covered with 1 to 6 feet of sand debris. The ECP for debris removal was one tool used in this restoration effort.





Source Water Protection Program (SWPP)

Technical Assistance

Department or Organization	Farm Service Agency (FSA), United States Department of Agriculture (USDA)
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Open; producers in participating states are encouraged to take part in SWPP by using suggested conservation practices and becoming a member of the local team responsible for developing the SWPP.
Hazard Addressed	All
Restrictions	Must be in participating state. Contact local FSA office for more information.
Funding Available	Unknown
Cost Sharing	N/A
Specific to Recovery	No
Website	fsa.usda.gov/programs-and-services/conservation-programs/source-water-protection/index

About the Resource

The Source Water Protection Program (SWPP) is a joint project of the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) and the National Rural Water Association (NRWA), a nonprofit water and wastewater utility membership organization. The SWPP is designed to help prevent pollution of surface and ground water used as the primary source of drinking water by rural residents. Water quality projects often meet flood mitigation goals, and vice versa. SWPP funds can be used for flood mitigation when the projects also improve water quality.

Mitigation Success

None identified



Forest Legacy Program (FLP)

Other- Purchase

Department or Organization	Forest Service, United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	A proposed project is eligible if it meets federal requirements as well as minimum eligibility: it is within, or partially within, a designated forest legacy area; it has a minimum of 75% forestland or a documented plan that includes sufficient landowner capacity to reforest to at least 75% forestland; it can be managed in ways consistent with the purpose for which it was acquired by FLP; the landowner is willing to sell or donate the interest in perpetuity; and the landowner acknowledges that the conservation easement will be held by a government entity if federal funds are used for the acquisition.
Hazard Addressed	All
Restrictions	Unknown
Funding Available	States can submit up to three projects, which cannot exceed \$10 million, or \$7 million for individual projects.
Cost Sharing	At least 25% of the total project cost
Specific to Recovery	No
Website	fs.fed.us/managing-land/private-land/forest-legacy/program

About the Resource

The purpose of the Forest Legacy Program (FLP) is to identify and conserve environmentally important forest areas that are threatened by conversion to non-forest uses. Providing economic incentives to landowners to keep their land as forests encourages sustainable forest management and supports strong markets for forest products. Forest protection can be a valuable tool for natural resource conservation and can reduce flooding and hazard risk downstream within a watershed.

Landowners may participate in the FLP by either selling their property outright or by retaining ownership and selling only a portion of the property's development rights; both are held by state agencies or another unit of government. The use of a conservation easement, a legal agreement between a landowner and a nonprofit land trust or governmental agency, allows the land to remain in private ownership while ensuring that its environmental values are retained.

Mitigation Success

A 2018 FLP grant allowed The Trust for Public Land, Green Diamond Resource Company, and Washington State Department of Natural Resources (DNR) to protect 7,391 acres of working forestland in Mason County, Washington, at the southwestern end of Puget Sound. This land, on the Olympic Peninsula between Hood Canal and Case Inlet, will remain in active timber production while protecting water quality and wildlife habitat. It will also be available to the public for hiking, biking, and other outdoor recreation.

The conservation easement was appraised and purchased for \$6.634 million. Funding for the purchase came entirely from the USDA Forest Service's FLP, which is specifically designed to protect environmentally sensitive forestlands that are threatened by conversion to non-forest uses. The easement will be held by DNR, which will be responsible for long-term monitoring and enforcement of its restrictions.

The water quality benefits of the project also serve as flood mitigation, as reduced runoff yields both better water quality and reduced flooding.

This case study is an excerpt from: dnr.wa.gov/news/more-7000-acres-forest-land-protected-puget-sound.



Forest Stewardship Program

Technical Assistance

Department or Organization	Forest Service, United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Non-industrial private forest landowners
Hazard Addressed	All
Restrictions	Unknown
Funding Available	Variable
Cost Sharing	N/A
Specific to Recovery	No
Website	fs.fed.us/managing-land/private-land/forest-stewardship/

About the Resource

The Forest Stewardship Program encourages long-term stewardship of important state and private forest landscapes by helping landowners more actively manage their forest and related resources. Protected forests can reduce flooding and hazard risk downstream within a watershed, and well-managed forests can reduce wildfire risk. The program provides assistance to owners of forestland and other lands where good stewardship, including agroforestry applications, will enhance and sustain the long-term productivity of multiple forest resources, and produce healthy, resilient forest landscapes. Special attention is given to landowners in landscape areas identified by state Forest Action Plans and those new to, or in the early stages of, managing their land in a way that embodies multi-resource stewardship principles. The program provides landowners with the professional planning and technical assistance they need to keep their land in a productive and healthy condition. Assistance offered through the Forest Stewardship Program also provides landowners with enhanced access to other USDA conservation programs, forest certification programs, and forest product and ecosystem service markets.

Mitigation Success

Through the Forest Stewardship Program, the Forest Service helped Sandra Cummings, a landowner in Georgia, fund a forest management and stewardship plan created by the Georgia Forestry Commission, which laid out a 10-year plan for managing the land.

Under the plan's guidance, Mrs. Cummings now uses the land in Madison for timber management, grazing for cattle, and wildlife habitat. She manages her land in the town of Portal for forestry, wildlife, silvopasture (with assistance from the Natural Resources Conservation Service), and a pine straw operation. As a result, she obtains additional earnings from her land by leasing it out for deer hunting and harvesting pine straw.

While this is not necessarily a mitigation story, open space and well-managed lands can be effective tools in preventing the worst impacts of hazards.

This case study is an excerpt from: usda.gov/media/blog/2017/08/10/forest-stewardship-keeps-georgia-grandmother-independent.



Conservation Stewardship Program (CSP)

Grant, Technical Assistance

Department or Organization	Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Applicants may include individuals, legal entities, joint operations, or tribes that meet the stewardship threshold for at least two priority resource concerns when they apply. They must also agree to meet or exceed the stewardship threshold for at least one additional priority resource concern by the end of the contract. Producers must have effective control of the land for the term of the proposed contract.
Hazard Addressed	All
Restrictions	Unknown
Funding Available	Payment rates vary by state.
Cost Sharing	Farmers receive a payment for conservation practices.
Specific to Recovery	No
Website	nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/csp/

About the Resource

The Conservation Stewardship Program (CSP) helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resource concerns. CSP pays participants for conservation performance—the higher the performance, the higher the payment. Many conservation practices (riparian forest buffers, cover crops, etc.) reduce runoff and erosion, reducing flooding downstream.

CSP provides two possible types of payments through five-year contracts: annual payments for installing new conservation activities and maintaining existing practices, and supplemental payments for adopting a resource-conserving crop rotation.

Mitigation Success

Judd Brooke owned the 4,500-acre Brookewood Farm in Hancock County, Mississippi, the state's southernmost county and the hardest hit by Hurricane Katrina. Brooke applied for the CSP to help reestablish the woodlands that had been destroyed.

One of the CSP enhancements Brooke chose was to adopt understory management to restore 20 acres of longleaf pine habitat in an area that was overgrown. Prescribed burning wasn't an option because the fire would get too hot and damage the trees. The best option for this situation was for Brooke to use a mulcher attached to a skid steer. He completed the 20 acres and was so pleased with the results that he kept going and cleaned up other areas of his property in the same way.

This case study is an excerpt from: nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=nrcseprd1292064&ext=pdf.



Emergency Watershed Protection Program (EWPP)

Grant, Technical Assistance

Department or Organization	Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	EWP - Recovery: Applicants may include individuals, legal entities, joint operations, or tribes that meet the stewardship threshold for at least two priority resource concerns when they apply. They must also agree to meet or exceed the stewardship threshold for at least one additional priority resource concern by the end of the contract. Producers must have effective control of the land for the term of the proposed contract. EWP - Floodplain Easements: Landowners can apply directly for assistance at the local NRCS office when project funding for floodplain easements become available.
Hazard Addressed	All
Restrictions	The EWP Program cannot be used to address problems that existed prior to the disaster, for operations/maintenance, or to restore projects installed by another federal agency.
Funding Available	Variable
Cost Sharing	NRCS can pay up to 75% of the cost for eligible emergency recovery projects. Local sponsors must acquire the remaining 25% in cash or in-kind services. Contact NRCS for more information for funding of floodplain easement projects.
Specific to Recovery	Yes
Website	nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/

About the Resource

Congress established the Emergency Watershed Protection (EWP) program to respond to emergencies created by natural disasters. The EWP program offers technical and financial assistance to help local communities mitigate imminent hazards to life and property caused by floods, fires, windstorms, and other natural occurrences that impair a watershed. The Natural Resources Conservation Service (NRCS) administers the EWP program, which consists of two options: EWP – Recovery, and EWP – Floodplain Easement (FPE).

NRCS offers financial and technical assistance for various activities under EWP – Recovery, including removing debris from stream channels, road culverts, and bridges; reshaping and protecting eroded streambanks; correcting damaged or destroyed drainage facilities; establishing vegetative cover on critically eroding lands; repairing levees and structures; and repairing conservation practices.

In addition to recovery projects, NRCS may purchase EWP floodplain easements instead of trying to recover damaged floodplain lands if it proves to be more cost effective than recovery.

Mitigation Success

The Colorado EWP program for the 2013 Flood Recovery funds emergency recovery measures to address hazards to life and property in watersheds impaired by the 2013 Colorado flood events. The program is funded and administered by the NRCS and managed by the Colorado Water Conservation Board on behalf of the state. Projects reduce erosion, protect streambanks, repair conservation practices, remove debris, and more. Technical assistance funds are available to support project design, cultural resources assessment, construction oversight, and other technical services. Financial assistance funds are available for project construction.

This case study is an excerpt from coloradoewp.com/2013-colorado-ewp-program.



Environmental Quality Incentives Program (EQIP)

Grant, Technical Assistance

Department or Organization	Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Agricultural producers, owners of non-industrial private forestland, and tribes are eligible to apply for EQIP. Eligible land includes cropland, rangeland, pastureland, non-industrial private forestland, and other farm or ranch lands. Socially disadvantaged, beginning and limited resource farmers, tribes, and veterans are eligible for an increased payment rate and may receive an advance payment of up to 50% to purchase the materials and services needed to implement the conservation practices included in their EQIP contract.
Hazard Addressed	All
Restrictions	Applicants must: <ul style="list-style-type: none"> • Control or own eligible land. • Comply with adjusted gross income (AGI) limitation provisions. • Comply with the highly erodible land and wetland conservation requirements. • Develop an NRCS EQIP plan of operations. Additional restrictions and program requirements may apply.
Funding Available	Varies by state
Cost Sharing	75% federal, 90% in certain cases (socially disadvantaged, veterans, beginning farmers, etc.)
Specific to Recovery	Yes
Website	nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/

About the Resource

The Environmental Quality Incentives Program (EQIP) provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, or improved or created wildlife habitat.

While not designed to be an emergency response or hazard mitigation program, EQIP can play a vital role in helping producers prevent the worst impacts of and recover from natural disasters like floods, hurricanes, wildfires, and drought. Through EQIP, NRCS provides financial assistance to repair and prevent the excessive soil erosion caused or affected by natural disasters. These practices include activities like stream bank restoration, grassed waterways, and buffers. NRCS-funded conservation practices protect land from erosion, support disaster recovery and repair, and can help mitigate loss from future natural disasters.

Mitigation Success

None identified



Wetland Mitigation Banking Program

Other - Credit

Department or Organization	Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	State, tribal, and local government, and nongovernmental organizations (NGOs), including for-profit NGOs.
Hazard Addressed	Flood
Restrictions	
Funding Available	N/A
Cost Sharing	Banking programs that are strictly in-lieu fee are not eligible for the NRCS Wetland Mitigation Banking Program.
Specific to Recovery	No
Website	nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/farmland/?cid=nrcseprd362686

About the Resource

The Wetlands Mitigation Banking Program helps establish wetland mitigation banks to help producers meet their wetland conservation compliance responsibilities. Producers must comply to maintain eligibility for many USDA programs administered by the Farm Service Agency and NRCS, and to maintain eligibility for the federal crop insurance premium subsidy administered by the Risk Management Agency.

This program assists with establishing the banks, not with securing the wetlands.

Mitigation Success

In 2016, Iowa Agricultural Mitigation, Inc. was granted \$698,000 to develop a new wetland mitigation bank for the Prairie Pothole Region of western Iowa. NRCS reported: "Iowa Agricultural Mitigation, Inc. has been operating a successful agricultural mitigation bank for several years. This bank will be located in the Prairie Pothole Region of western Iowa, where demand for wetland credits is high. The Iowa Natural Heritage Foundation will assist the bank manager with marketing its program as well as finding bank sites."

The Iowa Agricultural Mitigation Bank (IAMB) is a nonprofit entity created to provide wetland mitigation services to producers within targeted watersheds of the Prairie Pothole Region of north-central Iowa. IAMB is providing producers with an alternative to replace lost acres and functions of converted, farmed wetlands on agricultural lands.

Kirby Roberts farmed a large area of wet cropland for many years. He struggled to establish corn and soybean crops because of persistently wet soils. By enrolling these acres into the IAMB, and restoring the wet cropland to a semi-permanent wetland, Roberts created a high-functioning wetland bank site, which provided mitigation credits for agricultural producers.



Housing Preservation Grants

Grant

Department or Organization	Rural Development, United States Department of Agriculture (USDA)
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	State, tribal, and local governments, and nonprofit organizations. Eligible areas include rural towns with 20,000 or fewer people, and federally recognized tribal lands.
Hazard Addressed	All
Restrictions	Applicants must have the necessary background and experience, with a proven ability to perform the repair and rehabilitation of low-income housing.
Funding Available	Unknown
Cost Sharing	Up to 100% federal
Specific to Recovery	No
Website	rd.usda.gov/programs-services/housing-preservation-grants

About the Resource

The Housing Preservation Grant (HPG) program provides grants to sponsoring organizations for the repair or rehabilitation of low- and very low-income housing. The grants are competitive and are made available in areas where there is a concentration of need. Those assisted must own very low- or low-income housing, either as homeowners, landlords, or members of a cooperative. Very low income is defined as below 50% of the area median income (AMI); low income is between 50 and 80% of AMI.

Eligible expenses include:

- Repairing or replacing electrical wiring, foundations, roofs, insulation, heating systems and water/waste disposal systems.
- Handicap accessibility features.
- Labor and materials.
- Administrative expenses.

Eligible homeowners can apply for funding to repair damages caused by natural hazards or to harden their structures against future hazard events.

Mitigation Success

Every time the south winds blew through the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) in northeastern Oregon, Mary and Abbie Van Pelt had problems with their roof. Each time, Abbie would climb on the roof to try to fix it.

When CTUIR received an HPG from USDA Rural Development, the tribe's housing department began offering up to \$6,000 per household to help tribal elders address health and safety hazards in their homes. The Van Pelts heard about the grants and decided to apply. The shingles on the Van Pelts' roof have now been replaced. Their home's septic system was repaired as well, and they had just enough funding left to replace failing light fixtures and the smoke alarms. The Van Pelts aren't alone. In all, 29 families on the reservation are making critical repairs to their homes with the help of this and one previous USDA grant. By eliminating these safety issues, tribal elders can age in place, remaining in the homes they have known for many years.

This case study is an excerpt from: rd.usda.gov/newsroom/success-stories/repairs-improve-safety-Tribal-elders%E2%80%99-homes.





Water and Environmental Programs	
Grant, Technical Assistance	
Department or Organization	Rural Development, United States Department of Agriculture (USDA)
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Details vary by program, but most programs are open to state, local, and federally recognized tribes.
Hazard Addressed	Flood
Restrictions	Variable
Funding Available	Variable
Cost Sharing	Variable
Specific to Recovery	No
Website	rd.usda.gov/programs-services/all-programs/water-environmental-programs

About the Resource

The USDA's Rural Development Water and Environmental Programs (WEP) provide technical assistance, loans, grants, and loan guarantees for drinking water, sanitary sewer, solid waste, and storm drainage facilities in rural areas and cities and towns of 10,000 or less. WEP also makes grants to nonprofit organizations to provide technical assistance and training to help rural communities with their water, wastewater, and solid waste problems. Water quality projects often meet flood mitigation goals, and vice versa.

WEP includes Emergency Community Water Assistance Grants, Grants for Rural and Native Alaskan Villages, Water & Waste Disposal Loans & Grants, and more.

Mitigation Success

The Forest Park Tenants' Association Cooperative in Jaffrey, New Hampshire, will draw on the Water & Waste Disposal Loan & Grant Program for a \$2 million loan and a \$1.4 million grant to make water, wastewater, and stormwater improvements at a 116-unit housing park. The current system no longer works properly, causing water loss and frequent sewage line blockages. All water mains and a section of the sewer main will be replaced, and a stormwater management system will be installed. The project also includes roadway improvements that will be funded through a Community Development Block Grant. (Source: sentinelsource.com/news/local/jaffrey-home-park-gets-grant-for-infrastructure/article_a5fc5fd9-9b62-550d-9b9d-93334ec93b74.html)



Economic Development Administration Disaster Recovery

Grant

Department or Organization	Economic Development Administration, United States Department of Agriculture (USDA)
Type of Mitigation Action	Structure and Infrastructure Projects, Education and Outreach Programs
Eligible Applicants	Varies by disaster
Hazard Addressed	All
Restrictions	Varies by disaster
Funding Available	Varies by disaster. \$587 million was available in FY 2019.
Cost Sharing	Up to 80% federal
Specific to Recovery	Yes
Website	eda.gov/programs/disaster-recovery/

About the Resource

The Economic Development Administration (EDA) has a long history of successfully supporting disaster recovery and resiliency efforts. EDA's role in disaster recovery is to facilitate the timely and effective delivery of federal economic development assistance to support long-term community economic recovery planning and project implementation, redevelopment and resiliency. EDA is uniquely positioned to coordinate regional disaster recovery efforts in partnership with its extensive network of Economic Development Districts (EDDs), university centers, institutions of higher education, and other partners in designated impact areas.

Mitigation Success

The city of Viroqua, Wisconsin, received a \$2.6 million grant in 2019 to update critical water infrastructure needed to protect local businesses from flooding. The project will help expand Viroqua's industrial park and help provide necessary improvements to the community's aging water infrastructure. In addition to flood protection, the project is expected to create or retain jobs and spur private investment. This case study is an excerpt from eda.gov/news/blogs/2020/09/01/success.htm.



EDA Disaster Supplemental Funding

Grant

Department or Organization	Economic Development Administration, United States Department of Agriculture (USDA)
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Varies by disaster
Hazard Addressed	All
Restrictions	Varies by disaster
Funding Available	Varies by disaster
Cost Sharing	Varies by disaster
Specific to Recovery	Yes
Website	eda.gov/disaster-recovery/supplemental/

About the Resource

Congress often appropriates supplemental funds for economic recovery after significant disasters. Between Fiscal Years 2018 and 2019, EDA received \$1.2 billion in supplemental disaster appropriations (\$600 million each year) from Congress to help regions recover from the economic harm and distress resulting from natural disasters that occurred from 2017 to 2019. With the support of these funds, American regions and communities hard-hit by major disasters are rebuilding stronger, more resilient economies.

Mitigation Success

Catastrophic flooding in Tennessee in 2010 caused an estimated \$2.5 billion in damages and losses to Nashville businesses. The Economic Development Administration awarded \$2.5 million in supplemental disaster funds to the Nashville Entrepreneur Center to expand their operations so the city's economy could "bounce forward" to be stronger than it was before the floods. The project allowed the Entrepreneur Center to renovate the historic Trolley Barn building to be used for office and meeting space for new businesses.

More info: eda.gov/success-stories/disaster/stories/nashville-tn.htm



Coastal and Marine Habitat Restoration Grants

Grant	
Department or Organization	National Oceanic and Atmospheric Administration, United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection, Structure and Infrastructure Projects, Education and Outreach
Eligible Applicants	Institutions of higher education, nonprofits, commercial (for profit) organizations, U.S. territories, and state, local, and tribal governments.
Hazard Addressed	Erosion, Sea Level Rise, Storm Surge, Flood
Restrictions	Unknown
Funding Available	\$4 million in Community-based Restoration Program funding available for coastal and marine habitat restoration in 2020.
Cost Sharing	None is required, but applicants are encouraged to demonstrate a 1:1 non-federal match for the NOAA funds requested to conduct the proposed project.
Specific to Recovery	No
Website	fisheries.noaa.gov/grant/coastal-and-marine-habitat-restoration-grants

About the Resource

The National Oceanic and Atmospheric Administration (NOAA) Community-Based Restoration Program recognizes that habitat protection and restoration are essential elements of a strategy for sustainable commercial and recreational fisheries. Investing in habitat restoration projects leads to real, lasting differences for communities, businesses, and the environment. The program grants support restoration projects that use a habitat-based approach to rebuild productive and sustainable fisheries, contribute to the recovery and conservation of protected resources, and promote healthy ecosystems and resilient communities.

Restoration includes activities that return degraded or altered marine, estuarine, coastal, and freshwater, migratory fish habitats to functioning conditions, and techniques that return NOAA trust species to their historic habitats. These projects support economic recovery. They can also prevent future hazards and hazard losses by protecting natural resources in critical areas of the coastal floodplain.

Mitigation Success

Willow Bend Floodplain Habitat Restoration

In 2016, River Partners in California was awarded up to \$1,511,237 to restore floodplain habitat and create natural flood patterns at the Willow Bend Preserve along the Sacramento River. The project provides critical rearing habitat for juvenile salmon and steelhead, including Central Valley steelhead, spring-run Chinook, and critically endangered Sacramento River winter-run Chinook salmon.

This case study is an excerpt from NOAA's website: fisheries.noaa.gov/national/habitat-conservation/current-and-past-community-based-restoration-projects.



Coastal Resilience Grants

Grant

Department or Organization	National Oceanic and Atmospheric Administration, United States Department of Agriculture (USDA)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Institutions of higher education, nonprofit and for-profit organizations, U.S. territories and states, tribes, and local governments including counties, municipalities, and cities
Hazard Addressed	Erosion, Sea Level Rise, Storm Surge, Flood
Restrictions	Unknown
Funding Available	Unknown
Cost Sharing	Federal funds awarded under this program must be matched with non-federal funds at a 2:1 ratio. For a project requesting \$500,000 in federal funding, for example, the award recipient would need to provide \$250,000 in non-federal matching contributions, for a total project budget of \$750,000.
Specific to Recovery	No
Website	fisheries.noaa.gov/grant/noaa-coastal-resilience-grants

About the Resource

The National Oceanic and Atmospheric Administration (NOAA) Coastal Resilience Grants program, jointly administered by NOAA's National Ocean Service and NOAA Fisheries, implements projects that build resilient U.S. coastal communities and ecosystems.

Resilience is the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events such as extreme weather or long-term changing environmental conditions. This program is intended to build resilience through projects that conserve and restore sustainable ecosystem processes and functions and reduce the vulnerability of coastal communities and infrastructure from the impacts of extreme weather events, climate hazards, and changing ocean conditions.

Mitigation Success

Teaway Community Forest Aquatic Restoration Project

The Confederated Tribes and Bands of the Yakama Nation received \$250,000 to restore floodplain connectivity along approximately 3 miles of tributary stream habitat in the Teaway Community Forest Trust. The project will place locally harvested woody material within the stream to improve flow, reduce peak temperatures, and enhance the complexity of habitats within the stream for fish, including Columbia steelhead, coho and chinook salmon.

This case study is an excerpt from NOAA's website: fisheries.noaa.gov/national/habitat-conservation/current-and-past-resilience-projects.





Disaster Loan Assistance

Loan

Department or Organization	Small Business Administration, Department of Commerce
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Businesses, private nonprofit organizations, homeowners, and renters
Hazard Addressed	All
Restrictions	Varies by applicant type
Funding Available	Businesses may borrow up to \$2 million. Homeowners may borrow up to \$200,000 to repair/replace a disaster-damaged private residence or \$40,000 for a homeowner or renter to repair/replace damaged personal property.
Cost Sharing	Loan
Specific to Recovery	Yes
Website	disasterloan.sba.gov/ela/Information/Index

About the Resource

The Small Business Administration (SBA) provides low-interest disaster loans to businesses of all sizes, private nonprofit organizations, homeowners and renters. SBA disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.

Mitigation Success

In 1999, Hurricane Floyd struck southeastern Pennsylvania with a vengeance, and Pennsylvania entrepreneurs Larry Klebanoff and Drew Wolf’s business, League Collegiate Wear, was hit hard. When the storm subsided, Klebanoff and Wolf found their 9,000-foot facility—located in a floodplain—virtually underwater. In the face of that level of devastation, Klebanoff and Wolf were forced to close their business for necessary restoration.

In the weeks that followed, League faced many challenges, but relied on support from their staff and from the SBA to rebuild their business. When the business experienced an electrical fire a few years later, they again relied on the SBA to rebuild.

This case study is an excerpt from: sba.gov/offices/district/pa/king-of-prussia/success-stories/southeastern-pennsylvania-firm-league-collegiate-wear-emerges-flood-fire-help-sba-disaster-loans.



Continuing Authorities Program

Technical Assistance

Department or Organization	U.S. Army Corps of Engineers (USACE), Department of Defense
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	State, regional, and local governments, tribes, and other non-federal public agencies
Hazard Addressed	Erosion, Flood, Sea Level Rise, Storm Surge
Restrictions	Varies by sub-program
Funding Available	N/A
Cost Sharing	Varies by sub-program, but many programs follow these guidelines: Feasibility Study: 100%/0% for initial \$100,000; 50%/50% remaining cost Implementation: 75% federal
Specific to Recovery	No
Website	nae.usace.army.mil/Missions/Public-Services/Continuing-Authorities-Program/

About the Resource

The Continuing Authorities Program (CAP) allows the USACE to plan, design, and implement certain types of water resources projects without additional project-specific congressional authorization. Under CAP, the USACE can plan and implement projects of limited size, cost, scope and complexity. These projects include streambank and shoreline protection, hurricane and storm damage reduction projects, and flood damage reduction projects.

All projects in this program include a feasibility phase and an implementation phase.

Mitigation Success

In Cedar Island, Virginia, the USACE used CAP to study the use of dredged material to create back-barrier shoreline wetlands and marsh islands. According to the study, the project, if approved and funded, could:

- Create long-term, sustainable solutions to reduce tidal wetland erosion rates, increase sediment accretion rates, and increase shoreline protection.
- Expand and enhance the existing wetlands and marsh islands to enhance fish habitat, fishery resources, and wildlife habitat.
- Increase the area of intertidal mudflat habitat to provide increased foraging opportunities for birds.
- Enhance existing shoreline protection to the town of Wachapreague through creating, enhancing, and protecting wetlands and marsh islands.
- Provide other benefits.

More information: nao.usace.army.mil/About/Projects/Cedar-Island-CAP-204/



Ecosystem Restoration	
Technical Assistance	
Department or Organization	U.S. Army Corps of Engineers (USACE), Department of Defense
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Communities and local governments
Hazard Addressed	Erosion, Flood
Restrictions	\$10 million federal project limit
Funding Available	N/A
Cost Sharing	Variable with project type, but generally: Feasibility: 100%/0% for initial \$100,000; 50%/50% remaining cost (\$100,000 limit does not apply for dredging projects) Implementation: 75% federal for project modifications; 65% federal for dredging and aquatic ecosystem restoration projects
Specific to Recovery	No
Website	nae.usace.army.mil/Missions/Public-Services/Ecosystem-Restoration-Authorities/

About the Resource

Ecosystem restoration is one of the primary missions of the USACE. The purpose of the USACE ecosystem restoration activities is to restore significant ecosystem function, structure, and dynamic processes that have been degraded. Ecosystem restoration efforts involve examining the problems contributing to the system degradation, and developing alternative means to solve these problems. The intent of restoration is to partially or fully reestablish the attributes of a natural, functioning, self-regulating system. Restoration opportunities associated with wetlands, riparian, and other floodplain and aquatic systems are likely to be most appropriate for USACE involvement.

The three ecosystem restoration authorities within the program are: Project Modifications for Improvements to the Environment, Beneficial Use of Dredged Materials, and Aquatic Ecosystem Restoration.

Mitigation Success

Nashawannuck Pond is a shallow impoundment in Easthampton, Massachusetts. The pond suffers from excessive sedimentation and rooted aquatic plant growth, which reduce water depth and open water habitat. The USACE prepared an environmental assessment that recommended dredging the pond to restore open water habitat.

In 2009, the USACE and the city of Easthampton drained the pond and contracted the excavation of over 40,000 cubic yards of soft sediment from the upper portion of the pond. The USACE and several volunteers encouraged fish to move downstream during the draining and physically moved those that remained. The excavated sediment was placed on city-owned property not far from the pond. The pond was refilled during spring 2010.

This case study is an excerpt from: nae.usace.army.mil/Missions/Projects-Topics/Nasawannuck-Pond/.



Emergency Operations

Technical Assistance

Department or Organization	U.S. Army Corps of Engineers (USACE), Department of Defense
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	State and local governments
Hazard Addressed	All
Restrictions	Disaster response and recovery program
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	Yes
Website	saj.usace.army.mil/Missions/Emergency-Operations/Programs-Policies/

About the Resource

Emergency preparedness and response are primarily state and local responsibilities. However, when the nature of the disaster exceeds the capabilities of state and local interests, the USACE may provide help to save human life, prevent immediate human suffering, or mitigate property damage.

The USACE participates in the National Response Framework as the primary agency for planning, preparedness, and response under Emergency Support Function (ESF) #3, Public Works and Engineering. The purpose of ESF #3 is to provide lifesaving or life-protecting assistance to augment efforts of the affected state(s) and local response efforts following a major or catastrophic disaster.

The USACE's Rehabilitation and Inspection Program provides the inspection of flood control projects, the rehabilitation of damaged flood control projects, and the rehabilitation of federally authorized and constructed hurricane or shore protection projects.

Mitigation Success

None identified



Floodplain Management Services (FPMS) Program

Technical Assistance

Department or Organization	U.S. Army Corps of Engineers (USACE), Department of Defense
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	State, regional, and local governments, tribes, and other non-federal public agencies
Hazard Addressed	Erosion, Flood
Restrictions	This program provides studies only. Design and construction are not included.
Funding Available	N/A
Cost Sharing	None. State and local governments can receive technical assistance free of charge.
Specific to Recovery	No
Website	nae.usace.army.mil/Missions/Public-Services/Flood-Plain-Management-Services/

About the Resource

The USACE provides a full range of technical services and planning guidance needed to support effective floodplain management:

- Site-specific data on obstructions to flood flows, flood formation, and timing.
- Flood depths, stages or floodwater velocities.
- Extent, duration, and frequency of flooding.
- Information on natural and cultural floodplain resources.
- Flood loss potential before and after the use of floodplain management measures.

The types of studies conducted under the Floodplain Management Services (FPMS) program include floodplain delineation/hazard, dam failure analyses, hurricane evacuation, flood warning, floodway, flood damage reduction, stormwater management, flood-proofing, and inventories of floodprone structures.

Mitigation Success

In February 2018, the USACE Baltimore District's FPMS program provided an update on their work in Southern Maryland, including the following note (abridged here). Between FY11 and FY17, the Baltimore District:

- Completed a stormwater management plan for Cobb Island in Charles County.
- Conducted hydraulic modeling for two streams in St. Mary's County.
- Completed field surveys of floodprone structures and developed and evaluated flood risk management alternatives for Upper Marlboro.
- Completed modeling and recommended FRM alternatives for Prince George's County (using \$401,500 in funds voluntarily contributed by the county).
- Conducted various tasks to help Calvert County participate in FEMA's Community Rating System program.
- Conducted surveys and floodproofing analyses for buildings in the Annapolis Historic District.
- Conducted existing conditions stormwater modeling for the Annapolis City Dock area (using \$64,000 voluntarily contributed by Annapolis in FY16) and presented a number of flood mitigation alternatives to the city in FY17.

For more information: nab.usace.army.mil/technical-services/



Inspection of Completed Works Program

Technical Assistance

Department or Organization	U.S. Army Corps of Engineers (USACE), Department of Defense
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Communities with critical infrastructure completed by the USACE
Hazard Addressed	All
Restrictions	Only for previously completed projects
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	No
Website	mvp.usace.army.mil/Missions/Civil-Works/Programs-Project-Management/District-Programs/Inspection-of-Completed-Works/

About the Resource

The USACE's Inspection of Completed Works Program is designed to ensure that non-federal owners of federally built critical infrastructure, such as a flood damage reduction project, perform essential maintenance in accordance with the operation and maintenance manuals. Annual compliance inspections identify maintenance deficiencies, operational problems, and corrective actions. When necessary, the USACE provides technical assistance before, during, and after each flood emergency. Through these compliance inspections, the USACE ensures that the project will operate and function as designed.

Mitigation Success

None identified



Silver Jackets

Technical Assistance

Department or Organization	U.S. Army Corps of Engineers (USACE), Department of Defense
Type of Mitigation Action	Structure and Infrastructure Projects, Education and Outreach Programs
Eligible Applicants	Silver Jackets teams include state, federal, tribal, and local agencies
Hazard Addressed	All
Restrictions	Varies, depending on the project
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	Yes
Website	silverjackets.nfrmp.us/

About the Resource

Silver Jackets teams across the United States bring together multiple state, federal, and sometimes tribal and local agencies to learn from one another about reducing the risk of floods and other natural disasters. The collaboration, shared knowledge, and relationships enhance response and recovery efforts when hazard events do occur. Each state Silver Jackets team is unique. Common state agency participants include those with mission areas such as hazard mitigation, emergency management, floodplain management and natural resources management or conservation. Federal participation typically includes the USACE, FEMA, and often others such as the National Weather Service and the U.S. Geological Survey.

Mitigation Success

In recent years, Missouri roadways have sustained significant damage from flash floods and high water events. Missouri spends an average of approximately \$10 million each year to repair flood-damaged roads, bridges, and other infrastructure. In March 2018, the Kansas City Silver Jackets team began working with the Missouri State Risk Management Team (SRMT), the Missouri Department of Transportation (MODOT), and the Missouri State Emergency Management Agency to prioritize flood mitigation projects for Missouri's roadways. The effort provided MODOT with a framework for prioritizing which locations should be remediated to reduce the frequency of roadway flooding and road closures, based on economic impact.

This mitigation success story is from the Fall 2019 Silver Jackets Newsletter: silverjackets.nfrmp.us/Resources/Newsletter.



Small Flood Control

Technical Assistance

Department or Organization	U.S. Army Corps of Engineers (USACE), Department of Defense
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	State and local governments
Hazard Addressed	Flood
Restrictions	Projects must pass a cost-benefit analysis.
Funding Available	N/A
Cost Sharing	Feasibility Study: 100%/0% for initial \$100,000; 50%/50% remaining cost Design and implementation: 65% federal/35% non-federal. At least 5% must be in cash; the rest may be in kind.
Specific to Recovery	No
Website	mvp.usace.army.mil/Missions/Civil-Works/Programs-Project-Management/District-Programs/Small-Flood-Control-Projects/

About the Resource

Under the Small Flood Control Program, the USACE works with communities to plan, design and construct certain small flood control projects that have not already been specifically authorized by Congress. Both structural (levees, channels, or dams, for instance) and nonstructural (floodproofing or evacuation, for example) solutions are considered. Studies are required to evaluate potential projects. Each project selected must be economically justified; that is, the benefits resulting from a project must exceed the cost incurred to construct the project. It also must be environmentally acceptable and complete within itself. In addition, each separate project is limited to a total federal cost of not more than \$10 million, including studies, design, and implementation.

Mitigation Success

None identified



Smart Growth Support

Grant, Technical Assistance

Department or Organization	Office of Sustainable Communities, Environmental Protection Agency
Type of Mitigation Action	Local Planning and Regulations, Education and Outreach
Eligible Applicants	Variable
Hazard Addressed	All
Restrictions	Variable
Funding Available	Variable
Cost Sharing	Variable
Specific to Recovery	Yes
Website	epa.gov/smartgrowth/about-smart-growth

About the Resource

The Environmental Protection Agency's (EPA) Office of Community Revitalization works on smart growth issues by:

- Conducting research.
- Producing reports and other publications.
- Providing examples of outstanding smart growth communities and projects.
- Working with tribes, states, regions, and communities through grants and technical assistance.

Smart growth can incorporate elements of green infrastructure and/or land preservation and can create more resilient communities.

Mitigation Success

Following severe flooding in 2008, Iowa City, Iowa, knew it needed to rebuild in a smarter way. For years, the city had thought about redeveloping an underused semi-industrial area south of downtown. The 2008 flood gave the community an opportunity to do just that. After conducting a retail and housing market analysis, along with a transit-oriented development study, both commissioned by the EPA, Iowa City decided that this area could be transformed into a mixed-use, pedestrian- and transit-friendly neighborhood. Using EPA funding, the city had contractors with expertise in sustainable urban planning develop conceptual plans for such a neighborhood. After considerable interaction with local stakeholders, the EPA finalized these plans in May 2011.

Since then, the plans have been implemented. The city adopted a new, form-based zoning code for the district. The aging, floodprone wastewater treatment plant was demolished, and both private and public investment have revitalized the area.

This mitigation success excerpt is from: blog.epa.gov/2017/03/02/eight-years-later-epa-assists-iowa-citys-sustainable-recovery-after-historic-2008-flood/.





Brownfields Program Grant Funding

Grant, Technical Assistance

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Communities
Hazard Addressed	All
Restrictions	Varies
Funding Available	Varies
Cost Sharing	Varies
Specific to Recovery	No
Website	epa.gov/brownfields/types-epa-brownfield-grant-funding

About the Resource

The EPA's Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, and environmental job training, and it provides technical information on brownfields financing matters. Separate grant programs are available for assessment, cleanup, environmental job training, and more. While not envisioned as a mitigation program, brownfield cleanup can prevent toxic materials from spreading during a hazard event.

Mitigation Success

Contamination from former sawmills can present significant environmental and economic challenges for many communities across the country. In the late 1990s, the city of Missoula, Montana, and the EPA began characterizing the former Champion International Sawmill site along the Clark Fork River. They confirmed extensive methane contamination from wood debris, with levels high enough to elevate the site to the Montana Department of Environmental Quality's (DEQ) state Superfund list. The EPA provided funds from a variety of sources: \$137,500 in EPA Targeted Brownfields Assessment; \$2.4 million as an EPA Revolving Loan Fund; and an EPA Brownfields subgrant under the American Recovery and Reinvestment Act. While this project was not intended as a mitigation project, it did prevent contamination from spreading during a flood event.

After nearly 15 years of assessment and cleanup work, the Montana DEQ issued a final cleanup complete (closure) letter in spring 2014. In June of that year, the city dedicated Silver Park. This new 17-acre park is owned by the city and features bike paths, green space, and restored historic sawmill structures and equipment. In March 2015, developers broke ground on the first part of the privately owned 29 acres that will host a mixed retail and housing development. Additional retail plans include a boutique 200-bed student residence and a brewpub restaurant in the aptly named "Old Sawmill District." Additionally, the cleanup enabled Missoula to leverage funds to lengthen Wyoming Street from North California Street to Cregg Lane, which created an important new connector route and helped alleviate congestion for the surrounding neighborhoods.

Excerpted from: epa.gov/sites/production/files/2016-01/documents/cprs_region_8_sawmill_fact_sheet_508_092415.pdf





Clean Water State Revolving Loan Fund

Loan

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Natural Systems Protection, Structure and Infrastructure Projects
Eligible Applicants	Funding is provided to states, and states distribute it to local communities. Tribal and territorial funding is also available.
Hazard Addressed	Flood
Restrictions	Varies by state
Funding Available	Varies by state
Cost Sharing	Loan
Specific to Recovery	No
Website	epa.gov/cwsrf

About the Resource

The EPA's Clean Water State Revolving Fund (CWSRF) program is a federal-state partnership that provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects. CWSRF can fund a wide variety of water quality protection efforts. The program's flexibility and broad range of project eligibilities enable states to target CWSRF funds to their specific water quality priorities. Water quality projects often meet flood mitigation goals, and vice versa.

States are responsible for the operation of their CWSRF program. Under the CWSRF, states may provide various types of assistance, including loans, refinancing, purchasing, or guaranteeing local debt and purchasing bond insurance. States may also set specific loan terms, including interest rates from 0% to market rate and repayment periods of up to 30 years. States have the flexibility to target financial resources to their specific community and environmental needs.

Mitigation Success

The city of Chattahoochee, Florida, received a loan agreement for just under \$427,000 to repair the Chattahoochee wastewater treatment system, which was damaged during Hurricane Michael. This includes forgiving more than \$341,000 in principal, which the city will not be obligated to repay.

More info: floridadep.gov/wra/srff/content/recent-awards-State-revolving-fund



Drinking Water State Revolving Fund

Loan

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Natural Systems Protection, Structure and Infrastructure Projects
Eligible Applicants	Funding is provided to states, and states distribute it to local communities. Tribal and territorial funding is also available.
Hazard Addressed	Flood
Restrictions	Varies by state
Funding Available	Varies by state
Cost Sharing	Loan
Specific to Recovery	No
Website	epa.gov/drinkingwatersrf

About the Resource

Under the Drinking Water State Revolving Fund (DWSRF), the EPA provides grants to all 50 states plus Puerto Rico to capitalize state DWSRF loan programs. The states contribute an additional 20% to match the federal grants. The program also provides direct grant funding for the District of Columbia, U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of Northern Mariana Islands. Water quality projects often meet flood mitigation goals, and vice versa.

The 51 DWSRF programs function like infrastructure banks by providing low-interest loans to eligible recipients for drinking water infrastructure projects. As money is paid back into the state's revolving loan fund, the state makes new loans to other recipients. These recycled repayments of loan principal and interest earnings allow the state's DWSRF to "revolve" over time.

States are responsible for operating their DWSRF programs. Under the DWSRF, states may provide various types of assistance, including:

- Loans.
- Refinancing.
- Purchasing.
- Guaranteeing local debt.
- Purchasing bond insurance.

States may also set specific loan terms, including interest rates from 0% to the market rate, and repayment periods of up to 30 years.

Mitigation Success

None identified



Environmental Finance Centers

Technical Assistance

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	States, tribes, local governments, and the private sector
Hazard Addressed	All
Restrictions	Technical assistance
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	No
Website	epa.gov/waterfinancecenter/efcn

About the Resource

The EPA's Environmental Finance Centers (EFCs) deliver targeted technical assistance to, and partner with, states, tribes, local governments, and the private sector in providing innovative solutions to manage the costs of environmental financing and program management. Potential environmental projects may include hazard mitigation projects.

Mitigation Success

None identified



Environmental Justice, Grants and Technical Assistance

Grant

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	Incorporated nonprofit organizations—including, but not limited to, environmental justice networks, faith-based organizations and those affiliated with religious institutions; federally recognized tribal governments—including Alaska Native Villages and tribal organizations
Hazard Addressed	All
Restrictions	1-year projects
Funding Available	\$1.5 million in 2019
Cost Sharing	Unknown
Specific to Recovery	No
Website	epa.gov/environmentaljustice/environmental-justice-grants-funding-and-technical-assistance

About the Resource

The EPA's Environmental Justice Small Grants (EJSG) program awards grants that support community-driven projects designed to engage, educate, and empower communities to better understand local environmental and public health issues and develop strategies for addressing those issues, building consensus in the community, and setting community priorities. The grants can be used for education and outreach about hazard mitigation efforts.

Mitigation Success

None identified



Greening America's Communities

Technical Assistance

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	Cities and towns
Hazard Addressed	All
Restrictions	Technical assistance
Funding Available	Unknown
Cost Sharing	Unknown
Specific to Recovery	No
Website	epa.gov/smartgrowth/greening-americas-communities

About the Resource

Greening America's Communities (formerly known as Greening America's Capitals) is an EPA program that helps cities and towns develop an implementable vision of environmentally friendly neighborhoods that incorporate innovative green infrastructure, hazard mitigation, and other sustainable/resilient design strategies. EPA provides design assistance to help support sustainable communities that protect the environment, economy, and public health and to inspire local and state leaders to expand this work elsewhere.

Mitigation Success

The city of Jackson, Mississippi, used the Greening America's Communities program to explore retrofitting public spaces within a half-mile of the state capitol building with green technologies such as solar-powered water fountains, native and drought-tolerant landscaping, rain gardens for stormwater treatment, and permeable paving. The Greening America's Capitals project developed design concepts that use green technologies and green infrastructure for Congress Street and two public parks.

This case study is an excerpt from: epa.gov/smartgrowth/reports-greening-americas-communities-projects.



Nonpoint Source Water Quality (Section 319) Grants

Grant

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Funding is provided to states, and states distribute it to local communities. Tribal 319 funding is also available.
Hazard Addressed	Erosion, Flood
Restrictions	Varies by state
Funding Available	Varies by state; total funds in 2019: \$165.4 million
Cost Sharing	Varies by state
Specific to Recovery	No
Website	epa.gov/nps

About the Resource

Clean Water Act Section 319(h) funds are provided only to designated state and tribal agencies to implement their approved nonpoint source management programs. State and tribal nonpoint source programs include a variety of components, including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and regulatory programs. Water quality projects often meet flood mitigation goals, and vice versa.

Each year, EPA awards Section 319(h) funds to states in accordance with a state-by-state allocation formula that EPA developed in consultation with the states. Tribal funding is also available under Clean Water Act Section 319(h).

Mitigation Success

In the early 2000s, sediment in stormwater runoff from parking lots, driveways, and construction projects at Jay Peak Resort in Jay, Vermont, polluted Jay Branch and a contributing stream (Tributary 9). As a result, the Vermont Department of Environmental Conservation (DEC) placed the two streams on its Clean Water Act (CWA) Section 303(d) list of impaired waters in 2006. In response, the resort designed and installed numerous stormwater runoff treatment, control, and prevention projects, which ultimately reduced sediment levels in both streams. Monitoring in 2016 and 2017 demonstrated that both streams achieved full compliance with Vermont's water quality standards for aquatic life. As a result, DEC removed both streams from the CWA Section 303(d) list in 2018.

Stormwater control and prevention practices do double duty to protect communities from water pollution as well as flooding.

Excerpted from: epa.gov/sites/production/files/2019-12/documents/vt_jay_branch_1824_508.pdf



Urban Waters Small Grants

Grant

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Eligible applicants include states, local governments, tribes, public and private universities and colleges, public or private nonprofit institutions/organizations, intertribal consortia, and interstate agencies.
Hazard Addressed	Flood
Restrictions	Unknown
Funding Available	Up to \$60,000
Cost Sharing	Unknown
Specific to Recovery	No
Website	epa.gov/urbanwaters/urban-waters-small-grants

About the Resource

Healthy and accessible urban waters can help local businesses grow and enhance educational, recreational, social, and employment opportunities in nearby communities. The EPA's Urban Waters Small Grants are expanding communities' ability to engage in activities that improve water quality in a way that also advances community priorities. Water quality projects often meet flood mitigation goals, and vice versa.

Improving urban waters requires various levels of government and local stakeholders (e.g., community residents, local businesses, etc.) to work together in developing effective and long-term solutions with multiple benefits. EPA supports and empowers communities, especially in underserved areas, who are working on solutions to address multiple community needs and fostering successful collaborative partnerships.

Since the inception of the Urban Waters Small Grants Program in 2012, the program has awarded approximately \$6.6 million in grants to 114 organizations across the country and Puerto Rico.

Mitigation Success

In 2013, the Urban Waters Federal Partnership designated Proctor Creek as a priority Urban Waters location. Proctor Creek snakes through downtown Atlanta and eventually works its way to the Chattahoochee River. The partnership works to improve coordination and focus among federal agencies on problems in the watershed. The partnership promotes community-led efforts toward economic, social, and ecological revitalization.

Partnership goals include:

- Water quality improvements for the creek.
- Create green space and increase the use of green infrastructure.
- Research how downtown development contributes to increased stormwater and decreased public health.
- Engage communities to become stewards of Proctor Creek.
- Advance economic development in the area.

Excerpted from: epa.gov/urbanwaterspartners/urban-waters-and-proctor-creek-watershedatlanta-georgia.



Water Infrastructure and Resiliency Finance Center

Technical Assistance

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	Communities
Hazard Addressed	Erosion, Flood, Sea Level Rise, Storm Surge
Restrictions	Technical Assistance
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	No
Website	epa.gov/waterfinancecenter

About the Resource

The Water Finance Center provides financing information to help local decision makers make informed decisions about drinking water, wastewater, and stormwater infrastructure, to protect human health and the environment. Water quality projects often meet flood mitigation goals, and vice versa.

Mitigation Success

None identified



Wetlands Protection Program Development Grants

Grant

Department or Organization	Environmental Protection Agency
Type of Mitigation Action	Local Planning and Regulations, Education and Outreach
Eligible Applicants	Funding is provided through each EPA region
Hazard Addressed	Erosion, Flood
Restrictions	Variable by EPA region
Funding Available	Variable by EPA region
Cost Sharing	75% federal
Specific to Recovery	No
Website	epa.gov/wetlands/wetland-program-development-grants-and-epa-wetlands-grant-coordinators

About the Resource

Wetlands Protection Development Grants (WPDGs) provide eligible applicants an opportunity to conduct projects to strengthen wetland protection programs. Eligible projects promote the coordination and acceleration of research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of water pollution. Wetland protection is an important type of natural resource protection hazard mitigation project.

Mitigation Success

In 2019, the Tahoe Regional Planning Authority received a grant of nearly \$100,000 to develop a wetland restoration prioritization plan for the Tahoe Basin. More details are available in the EPA project database: epa.gov/wetlands/wetland-program-development-grants-and-epa-wetlands-grant-coordinators#past-grants (click on "Wetland Grants Database").



Section 404 of the Clean Water Act - Compensatory Mitigation

Other - Credit

Department or Organization	Environmental Protection Agency, U.S. Army Corps of Engineers (USACE)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Unknown
Hazard Addressed	Flood
Restrictions	Unknown
Funding Available	Unknown
Cost Sharing	Unknown
Specific to Recovery	No
Website	epa.gov/cwa-404/compensatory-mitigation

About the Resource

In 2008, Environmental Protection Agency and the USACE jointly revised and clarified regulations with requirements for compensatory mitigation. According to these regulations, compensatory mitigation is the restoration (reestablishment or rehabilitation), establishment (creation), enhancement, and, in certain circumstances, preservation of wetlands, streams, and other aquatic resources to offset unavoidable adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

The regulations provide three mechanisms for providing compensatory mitigation (in order of preference as established by the regulations): mitigation banks, in-lieu fee programs, and permittee-responsible mitigation.

Mitigation Success

None identified



Building Resilient Infrastructure and Communities (BRIC)

Grant

Department or Organization	Federal Emergency Management Agency, Department of Homeland Security
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
Eligible Applicants	States, territories, and federally recognized tribes may apply directly. Eligible sub-applicants are local governments, including cities, townships, counties, special district governments, state agencies, and tribal governments (including federally recognized tribes who choose to apply as sub-applicants). Sub-applicants must have a FEMA-approved local or tribal hazard mitigation plan.
Hazard Addressed	All
Restrictions	Applicants must have a FEMA-approved state or tribal hazard mitigation plan and must have received a major disaster declaration under the Stafford Act in the seven years prior to the annual grant period start date. Sub-applicants must have a FEMA-approved local or tribal hazard mitigation plan.
Funding Available	FEMA made \$500 million available in FY 2020, including \$33.6 million dedicated for states and territories, \$20 million for tribes, and \$446.4 million in competitive funding.
Cost Sharing	Matching requirements are up to 75% for a federal match and a minimum of 25% for a non-federal match. Small, impoverished communities may be eligible for up to a 90% federal cost share. Pre-award costs are eligible for funding once awarded. FEMA will provide 100% funding for applicant and sub-applicant management costs.
Specific to Recovery	No
Website	fema.gov/grants/mitigation/building-resilient-infrastructure-communities

About the Resource

The Building Resilient Infrastructure and Communities (BRIC) program supports states, local communities, tribes and territories in implementing hazard mitigation. BRIC is a new program (as of 2020) and replaces the previous Pre-Disaster Mitigation program. BRIC's guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.

Applicants are encouraged to address infrastructure issues, mitigate risk to one or more lifelines (per FEMA guidance), and incorporate nature-based solutions. Applicants receive additional points based on their building codes.

Mitigation Success

This is a new program—stay tuned for more mitigation successes.



Emergency Management Performance Grants (EMPG)

Grant

Department or Organization	Federal Emergency Management Agency, Department of Homeland Security
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	States or territories. May make available to subgrantee communities.
Hazard Addressed	All
Restrictions	<p>Grant funds may not be used to purchase prohibited equipment (see Information Bulletin 407, Use of Grant Funds for Controlled Equipment, and Executive Order 13688, Federal Support for Local Law Enforcement Equipment Acquisition, and the Recommendations Pursuant to Executive Order 13688).</p> <ul style="list-style-type: none"> • Expenditures for weapons systems and ammunition. • Costs to support the hiring of sworn public safety officers for the purposes of fulfilling traditional public safety duties or to supplant traditional public safety positions and responsibilities. • Activities and projects unrelated to the completion and implementation of the EMPG Program.
Funding Available	\$350 million (FY19)
Cost Sharing	The recipient's contribution can be cash (hard match) or third-party in-kind (soft match). Eligible EMPG program applicants agree to make available non-federal funds to carry out an EMPG award in an amount not less than 50% of the total project cost.
Specific to Recovery	No
Website	fema.gov/grants/preparedness/emergency-management-performance

About the Resource

The purpose of the Emergency Management Performance Grant (EMPG) program is to provide federal funds to states to assist state, local, territorial, and tribal governments in preparing for all hazards. Title VI of the Stafford Act authorizes the Federal Emergency Management Agency (FEMA) to make grants for providing a system of emergency preparedness for the protection of life and property in the United States from hazards. It vests responsibility for emergency preparedness jointly in the federal government, states, and their political subdivisions. The federal government, through the EMPG program, provides the necessary direction, coordination, guidance, and assistance to support a comprehensive all-hazards emergency preparedness system. The EMPG program will provide federal funds to assist state, local, tribal, and territorial emergency management agencies to obtain the resources required to support the National Preparedness Goal's associated mission areas and core capabilities.

Mitigation Success

In 2017, Rhode Island received \$3,303,621 in EMPG funding to use and distribute to local communities. The local news reported, "This funding provides grants for emergency preparedness to assist state and local governments in enhancing and sustaining all-hazards emergency management capabilities. Administered by the Federal Emergency Management Agency (FEMA), the EMPG Program provides necessary direction, coordination, and guidance, and assistance, so that a comprehensive emergency preparedness system exists for all hazards."

Read more: turnto10.com/news/local/ri-gets-nearly-8-million-in-Federal-funds-for-security-and-disaster-preparedness





National Dam Safety Program

Grant, Technical Assistance

Department or Organization	Federal Emergency Management Agency, Department of Homeland Security
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	<p>Non-federal dams that:</p> <ul style="list-style-type: none"> • Are in a state or territory with a state or territorial dam safety program. • Are classified as having "high hazard potential" by the dam safety agency in the dam's state or territory. • Have an emergency action plan approved by the state or territory's dam safety agency. • The state or territory in which the dam is located determines that the dam fails to meet minimum dam safety standards.
Hazard Addressed	All
Restrictions	<p>An "eligible high hazard potential dam" does not include: (i) a licensed hydroelectric dam; or (ii) a dam built under the federal authority of the Secretary of Agriculture.</p> <p>Dams on tribal lands are not eligible to receive High Hazard Potential Dams grant funding. The Indian Dam Safety Act of 1994 establishes a Dam Safety Maintenance and Repair Program within the Bureau of Indian Affairs.</p>
Funding Available	\$10 million
Cost Sharing	Non-federal cost share requirement of not less than 35%, which may be partially or fully in-kind.
Specific to Recovery	No
Website	fema.gov/emergency-managers/risk-management/dam-safety

About the Resource

For 30 years, the federal government has used the National Dam Safety Program (NDSP) to protect Americans from dam failure. The NDSP is a partnership of states, federal agencies, and other stakeholders that encourages and promotes the establishment and maintenance of effective federal and state dam safety programs to reduce the risks to human life, property, and the environment from dam-related hazards.

Mitigation Success

The NDSP provides technical assistance and resources to states to develop and strengthen their dam safety programs. Publications include model state dam safety program guidelines, fact sheets, technical manuals, videos, and more. The program also oversees the High-Hazard Potential Dam Grant Program, which provides funding for planning and pre-construction activities to advance the repair, removal, or rehabilitation of high-hazard dams. In 2019, the grant program provided \$10 million in awards to a total of 26 states.



Public Assistance 404 and 406 Program

Grant

Department or Organization	Federal Emergency Management Agency, Department of Homeland Security
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Eligible applicants include states, federally recognized tribal governments (including Alaska Native villages and organizations, as long as they are not privately owned), U.S. territories, local governments, and certain organizations.
Hazard Addressed	All
Restrictions	Mitigation funding is generally only available for eligible disaster-damaged facilities. Projects must directly reduce the potential of similar damage to the facility and must be cost effective, technically feasible, and compliant with environmental and historic preservation laws, regulations, and executive orders.
Funding Available	Mitigation funding limits are determined based on a benefit-cost analysis or as a percentage of the damaged facility's repair cost.
Cost Sharing	The federal share of assistance is not less than 75% of the eligible cost.
Specific to Recovery	No
Website	fema.gov/assistance/public

About the Resource

The FEMA Public Assistance (PA) program provides grants to state, territorial, tribal, and local governments, and certain types of private non-profit (PNP) organizations, so that communities can quickly respond to and recover from major disasters or emergencies declared by the president.

Through the program, FEMA provides supplemental federal disaster grant assistance for debris removal; life-saving emergency protective measures; and the repair, replacement, or restoration of disaster-damaged publicly owned facilities, and the facilities of certain PNP organizations. The PA program also encourages protection of these damaged facilities from future events by providing assistance for cost-effective hazard mitigation measures during the recovery process.

Mitigation Success

Public Assistance Section 406 funding was used to repair and restore sections of the banks of the Kankakee River. The 5.6-mile-long stretch of riverbank, north of De Motte, Indiana, was damaged in February 2018 by spring flooding, later declared a presidential disaster (DR-4363). Before the flooding, the riverbank was 25 feet wide. The flooding eroded the riverbank to 15–20 feet in most areas. The project restored the width of the riverbank by adding rip-rap to the embankment. Doing so helped protect people and property near the Kankakee River. PA Section 406 contributed \$1,036,875 toward the total project cost of \$3,580,468.





Flood Mitigation Assistance Program

Grant

Department or Organization	Federal Emergency Management Agency, Department of Homeland Security
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
Eligible Applicants	Applicants must be states, U.S. territories, or federally recognized tribes. Local governments may apply as sub-applicants under their states or territories.
Hazard Addressed	Flood
Restrictions	Applying communities must be members of the National Flood Insurance Program.
Funding Available	\$210 million (FY19)
Cost Sharing	Federal funding is available for up to 75% of the eligible activity costs.
Specific to Recovery	No
Website	fema.gov/grants/mitigation/floods

About the Resource

The goal of FEMA's Flood Mitigation Assistance (FMA) program is to reduce or eliminate claims under the National Flood Insurance Program (NFIP). FMA provides funding to states, territories, federally recognized tribes, and local communities for projects and planning that reduce or eliminate the long-term risk of flood damage to structures insured under the NFIP. FMA funding is also available for management costs. Funding is appropriated by Congress annually.

Mitigation Success

Tom Kolar's Lighthouse Resort Inn and Suites in Fort Myers Beach, Florida, which sits 200 feet from the beach at San Carlos Bay, used to flood during hurricane season, but it does not anymore. In 2003, the hotel owner worked with a local contractor and the town manager to apply for an FMA grant. The grant provided funds to elevate the six hotel buildings well above the 1% annual-chance flood level. When Hurricane Charley hit the area in August 2004, the four buildings with completed elevation projects were dry and undamaged. Other hotels on the island were damaged, but the Lighthouse Resort was still able to rent rooms.

This is an excerpt from the following FEMA Mitigation Best Practice Story: hsdl.org/?abstract&did=682864.



Hazard Mitigation Grant Program (HMGP)

Grant

Department or Organization	Federal Emergency Management Agency, Department of Homeland Security
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	In general, individuals, businesses and private nonprofits via local governments, can apply for HMGP funding. Individuals must be sponsored through an appropriate sub-applicant such as a local government, state agency, tribe or tribal agency, or private nonprofit. Applications are submitted to the state, eligible tribe, or territory, which receives HMGP funds from FEMA.
Hazard Addressed	All
Restrictions	To be considered for funding under HMGP, a project must: <ul style="list-style-type: none"> • Conform with the approved state and local mitigation plan. • Benefit the disaster area. • Conform with environmental regulations. • Solve a problem and be technically feasible. • Meet all applicable state and local codes and standards. • Demonstrate cost-effectiveness. • Consider a range of alternatives.
Funding Available	The available funding is determined based upon the disaster declaration.
Cost Sharing	Matching requirements are up to 75% for a federal match and a minimum of 25% for a non-federal match. Note that funding from other federal sources cannot be used for the 25% share with one exception: Funding provided to states, tribes, or territories under the Community Development Block Grant (CDBG) program from the Department of Housing and Urban Development (HUD) can be used to meet the non-federal share requirement.
Specific to Recovery	No
Website	fema.gov/grants/mitigation/hazard-mitigation

About the Resource

The purpose of the Hazard Mitigation Grant Program (HMGP) is to help communities implement hazard mitigation measures following a presidential major disaster declaration in the areas of the state, tribe, or territory requested by the governor or tribal executive. The key purpose of this grant program is to enact mitigation measures that reduce the risk of loss of life and property from future disasters. The primary guidance document for this program is the Hazard Mitigation Assistance Guidance. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Mitigation Success

DeSoto Memorial Hospital in Arcadia, Florida, was hit hard during Hurricane Charley in 2004. It lost windows and part of the roof, exposing patients and critical equipment to the wind and rain. The staff maintained operations and moved patients to the interior of the building. After the storm, the hospital received a loan from the USDA to rebuild, expand, and renovate to strengthen the building and protect against future storms. It also received an HMGP grant to upgrade windows throughout the hospital to meet the design standards of the new construction.

This is an excerpt from the following FEMA Mitigation Best Practice Story: hmdl.org/?view&did=10944.



Community Development Block Grant (CDBG) - Mitigation

Grant

Department or Organization	Department of Housing and Urban Development
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	States
Hazard Addressed	All
Restrictions	Unknown
Funding Available	Variable by year
Cost Sharing	Unknown
Specific to Recovery	See CDBG-DR
Website	hudexchange.info/news/hud-publishes-cdbg-mitigation-notice/

About the Resource

The Community Development Block Grant - Mitigation Program is designed to provide assistance to areas affected by recent disasters through funding high-impact activities aimed at reducing future losses from natural hazards.

Mitigation Success

None identified



Community Development Block Grant (CDBG) - Disaster Recovery

Grant

Department or Organization	Department of Housing and Urban Development
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	State and local governments act as grantees. Those who receive funding include: state agencies, nonprofit organizations, economic development agencies, citizens, and businesses.
Hazard Addressed	All
Restrictions	Each activity must be CDBG-eligible, address a disaster-related impact in a presidentially declared county, and meet a national objective. Eligible grantees are states, units of general local government, tribes, and insular areas.
Funding Available	Varies depending on the disaster.
Cost Sharing	Varies depending on the cost type. More information on costs can be found here: hudexchange.info/resources/documents/CDBG-DR-Cost-Types-Summary.pdf .
Specific to Recovery	No
Website	hudexchange.info/programs/cdbg-dr/ hudexchange.info/programs/cdbg-dr/cdbg-dr-grantee-contact-information/#all-disasters

About the Resource

The Department of Housing and Urban Development (HUD) provides flexible grants to help cities, counties, and states recover from presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations. In response to presidentially declared disasters, Congress may appropriate additional funding for the CDBG program as Disaster Recovery grants, to rebuild the affected areas and provide crucial seed money to start the recovery process. Since this Disaster Recovery assistance may fund a broad range of recovery activities, HUD can help communities and neighborhoods that otherwise might not recover due to limited resources.

Mitigation Success

Following severe storms, tornadoes, straight-line winds, and flooding in spring 2011, HUD provided disaster recovery funding to the state of Alabama, city of Tuscaloosa, city of Birmingham, and Jefferson County, to help them realize local goals to restore and rebuild housing, infrastructure, and businesses. CDBGs support long-term disaster recovery efforts.

More information: archives.hud.gov/news/2013/pr13-039.cfm





Section 108 Loan Guarantee Program

Loan

Department or Organization	Department of Housing and Urban Development (HUD)
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	States, metropolitan cities and urban counties (i.e., CDBG entitlement recipients), nonentitlement communities that states administering the CDBG program assist with submitting applications, nonentitlement communities eligible to receive CDBG funds under the HUD-administered small cities CDBG program. The public entity may be the borrower, or it may designate a public agency as the borrower.
Hazard Addressed	All
Restrictions	N/A
Funding Available	Current availability of funding can be found here: hudexchange.info/resource/5197/current-availability-of-section-108-financing-cdbg-entitlement-and-State-grantees/ .
Cost Sharing	N/A
Specific to Recovery	No
Website	hudexchange.info/programs/section-108/

About the Resource

The Section 108 Loan Guarantee Program (Section 108 of the Housing and Community Development Act of 1974) provides communities with financing for economic development, housing rehabilitation, public facilities, and other physical development projects, including improvements to increase their resilience against natural disasters. The flexibility of the program makes it one of the most important public investment tools that HUD offers to state and local governments. Section 108 offers state and local governments the ability to transform a small portion of their CDBG funds into federally guaranteed loans large enough to pursue physical and economic revitalization projects capable of revitalizing entire neighborhoods.

Mitigation Success

The state of Indiana received \$30 million in 2013 for their Community Enhancement and Economic Development (CEED) Loan Fund. The state used the Section 108 loan funds to capitalize a CEED Loan Fund to make loans to eligible local governments throughout the state. The local governments will either re-lend the Section 108 guaranteed loan funds to third party for-profit and nonprofit businesses, including community-based development organizations, use the funds directly, or deploy the funds through a subrecipient to carry out a variety of activities. Loans will range between \$1 million and \$7 million. The funds can be used for improvements to increase resilience against natural disasters.

This is an excerpt from the following HUD document: hudexchange.info/resources/documents/2013-Section-108-Guaranteed-Loan-Program-Overview.pdf.



Housing Improvement Program

Grant

Department or Organization	Bureau of Indian Affairs, Department of Interior
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	Member of a federally recognized tribe or an Alaska Native; live in an approved tribal service area; have an income that does not exceed 150% of the U.S. Department of Health and Human Services (DHHS) Poverty Guidelines; have present housing that is substandard, as defined by the regulations; have no other resource for housing assistance; and have not acquired the present housing through a federally sponsored housing program that includes such housing assistance.
Hazard Addressed	All
Restrictions	Consult the eligibility guidelines found on the website.
Funding Available	Interim Improvements: Provides up to \$7,500 in housing repairs for conditions that threaten the health and/or safety of the occupants. Repairs and Renovation: Provides up to \$60,000 in repairs and renovation to improve the condition of a homeowner's dwelling to meet applicable building code standards. Replacement Housing: Provides a modest replacement home if a homeowner's dwelling cannot be brought to applicable building code standards. New Housing: Provides a modest new home. People who do not own a home may be eligible if they own or lease land suitable for housing and the lease is for not less than 25 years when assistance is received.
Cost Sharing	Not identified
Specific to Recovery	No
Website	bia.gov/bia/ois/dhs/housing-improvement-program

About the Resource

The Housing Improvement Program (HIP) is a home repair, renovation, replacement and new housing grant program administered by the Bureau of Indian Affairs (BIA) and by federally recognized tribes. It is aimed at American Indians and Alaska Native (AI/AN) individuals and families who have no immediate resources for standard housing. Repairs can include those required as part of recovery or to reinforce the structure.

Mitigation Success

None identified



Tribal Climate Resilience Program (TCRP)

Grant

Department or Organization	Bureau of Indian Affairs, Department of Interior
Type of Mitigation Action	Local Planning and Regulations, Education and Outreach
Eligible Applicants	Federally recognized tribes
Hazard Addressed	All
Restrictions	Proposals should be for projects that can be completed within two years. Because funding is limited, awards shall not exceed \$150,000 for any one proposal for Categories 1–2, 4, and 7 (training, planning, ocean and coastal management, relocation); \$15,000 for any one proposal in Categories 3 and 5 (travel); and \$65,000 for any one proposal in Category 6 (capacity building support for scoping efforts).
Funding Available	\$8,731,454 awarded in FY2019.
Cost Sharing	Not required
Specific to Recovery	No
Website	bia.gov/bia/ots/tribal-climate-resilience-program

About the Resource

The BIA's Tribal Climate Resilience Program (TCRP) provides grants to tribes to build capacity and resilience for tribally designed resilience training, adaptation planning, vulnerability assessments, supplemental monitoring, capacity building, and youth engagement.

Mitigation Success

In the 2017–2018 funding cycle, the Eastern Shoshone and Northern Arapahoe Tribes received a grant of nearly \$50,000 for Wind River Reservation Drought Adaptation Planning. The tribes will partner with the Colorado State University on a project to support a full-scale drought planning process. Stakeholders from across multiple departments, sectors, and communities will be engaged to develop the plan. This project will also include continued outreach and capacity building for tribal natural resources staff, students, and the greater community.

This example is excerpted from bia.gov/sites/bia.gov/files/assets/bia/ots/tcrp/2017_18_TRPAwardSummary.pdf.



WaterSMART Programs

Grant, Technical Assistance

Department or Organization	Bureau of Reclamation, Department of Interior
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	States, tribes, and local entities in Western States
Hazard Addressed	Drought, Flood
Restrictions	Western States: Washington, Oregon, Idaho, Montana, North Dakota, South Dakota, Nebraska, Wyoming, California, Nevada, Utah, Colorado, Kansas, Oklahoma, Texas, New Mexico, and Arizona
Funding Available	Varies
Cost Sharing	Not required
Specific to Recovery	No
Website	usbr.gov/watersmart/

About the Resource

Through WaterSMART, the Bureau of Reclamation will continue to work with states, tribes, and local entities as they plan for and implement actions to increase their water supply through investments to modernize existing infrastructure and attention to local water conflicts. WaterSMART is an umbrella for a variety of programs, including water and energy efficiency grants, drought planning grants, and watershed management planning grants.

Mitigation Success

The Big Hole Watershed Committee based in Divide, Montana, will receive \$86,610 to complete the Lower French Creek Sediment Reduction Project, which was developed in partnership with the Montana Department of Fish, Wildlife and Parks. The project will reroute a 4,000-linear-foot reach of French Creek that is currently pinned between an eroding bank and linear gravel piles, leading to an annual deposition of an estimated 800 tons of sediment into French Creek. This will improve the river's flow and will create important habitat for fish and other aquatic creatures.

Excerpted from an August 2019 press release on the watershed management grant funding:

usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=67304





National Coastal Wetlands Conservation Grants (NCWCG)

Grant

Department or Organization	Fish and Wildlife Service, Department of Interior
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	State agencies, coastal states only
Hazard Addressed	Flood, Sea Level Rise, Storm Surge
Restrictions	Must meet cost-share
Funding Available	\$20 million in 2019
Cost Sharing	Open to applicants who have established a fund that is used for acquiring coastal wetlands, other natural areas, or open space, at a 75% grant share of total project costs, up to the maximum award of \$1,000,000. Open to others at a 50% cost.
Specific to Recovery	No
Website	fws.gov/coastal/CoastalGrants/index.html

About the Resource

The National Coastal Wetlands Conservation Grants (NCWCG) program annually provides grants of up to \$1 million to coastal and Great Lakes states and territories to protect, restore, and enhance coastal wetland ecosystems and associated uplands. The grants are funded through the Sport Fish Restoration and Boating Trust Fund, which is supported by excise taxes on fishing equipment and motorboat fuel. Wetland conservation is an important type of natural resource protection hazard mitigation project.

Mitigation Success

The North Carolina Wildlife Resources Commission, in partnership with the North Carolina Coastal Land Trust, was awarded \$1 million to acquire a 3,000-acre property along 7.5 miles of the Waccamaw River in Columbus County, North Carolina. The project will help protect over 1,900 acres of forested wetlands and considerable waterfowl, water bird, and land bird habitat. This will also create new public game lands, along with a new canoe/kayak landing for public access to the Waccamaw River Blue Trail.



North American Wetland Conservation Fund

Grant

Department or Organization	Fish and Wildlife Service, Department of Interior
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	A list of eligible and ineligible activities for 2020 grants can be found in Eligibility Criteria & Processes: fws.gov/migratorybirds/pdf/grants/EligibilityCriteria.pdf .
Hazard Addressed	All
Restrictions	N/A
Funding Available	\$23.9 million in 2019
Cost Sharing	1:1 matching.
Specific to Recovery	No
Website	fws.gov/birds/grants/north-american-wetland-conservation-act.php

About the Resource

The North American Wetland Conservation Fund Program provides matching grants to wetlands conservation projects in the United States, Canada, and Mexico. It includes a Standard Program and a Small Grants Program. Wetland conservation is an important type of natural resource protection hazard mitigation project.

Mitigation Success

The Nature Conservancy received \$1 million to protect more than 5,000 acres in Georgia, including nearly 2,000 acres of wetlands.

More information: [fws.gov/migratorybirds/pdf/grants/nawcaprojects190917.pdf](https://www.fws.gov/migratorybirds/pdf/grants/nawcaprojects190917.pdf)



Disaster Recovery Grants

Grant

Department or Organization	National Park Service, Department of Interior
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Dependent on congressional authorization specific to disaster; must be affected by specific disaster
Hazard Addressed	All
Restrictions	Must be affected by specific disaster
Funding Available	Varies
Cost Sharing	N/A
Specific to Recovery	No
Website	nps.gov/preservation-grants/disaster-recovery/index.html

About the Resource

Congress responds to some major disasters by appropriating Emergency Supplemental funding from the Historic Preservation Fund (ESHPF) for recovery, allowing state and tribal historic preservation offices to work on various recovery projects, including compliance activities, survey and inventory of historic resources in areas impacted by the disaster, recovery and repair of historic properties damaged during the disaster, and other activities related to disaster recovery, as approved by the National Park Service (NPS). All funded repair work must substantially mitigate the threat and include steps to mitigate future damages.

Mitigation Success

In 2018, Congress appropriated \$50 million in ESHPF through Public Law 115-123 to provide relief for historic preservation projects affected by Hurricanes Harvey, Irma, and Maria. The funds went to state and tribal historic preservation offices in locations where major disaster declarations had been issued (Florida, Georgia, Louisiana, Puerto Rico, South Carolina, Texas, and the U.S. Virgin Islands). These funds were released to the states and tribes in these areas; private property owners interested in receiving support for historic properties should contact their state or tribal historic preservation office.

This information excerpted from: nps.gov/preservation-grants/disaster-recovery/program-details.html



Emergency Relief (ER) Program

Grant

Department or Organization	Federal Highway Administration, Department of Transportation
Type of Mitigation Action	Structure and Infrastructure Projects
Eligible Applicants	States may request ER funds, which can be used for either “emergency repairs” or “permanent repairs.”
Hazard Addressed	All
Restrictions	Must be in affected disaster areas
Funding Available	\$100 million is authorized annually under 23 U.S.C. 125. Congress has periodically provided additional funds for the ER program through supplemental appropriations. The Moving Ahead for Progress in the 21st Century Act (MAP-21) eliminated the cap of \$100 million per state event. The total ER obligations for U.S. territories (American Samoa, Commonwealth of Northern Mariana Islands, Guam, and Virgin Islands) is limited to \$20 million in any fiscal year.
Cost Sharing	For Interstate highways, the federal share is 90%. For all other highways, the federal share is 80%. The federal share for permanent ER repairs may amount to 90% if the combined eligible ER expenses incurred by the state in a federal fiscal year exceeds the annual apportionment of the state under 23 U.S.C. Section 104 for the fiscal year in which the disasters or failures occurred.
Specific to Recovery	Yes
Website	fhwa.dot.gov/programadmin/erelief.cfm

About the Resource

The Federal Highway Administration's (FHWA) Emergency Relief (ER) program provides grants for the repair or reconstruction of federal highways and roads on federal lands that have suffered serious damage as a result of either natural disasters or catastrophic failures from an external cause. The program supplements the commitment of resources by states, their political subdivisions, or other federal agencies to help pay for unusually heavy expenses resulting from extraordinary conditions. The applicability of the ER program to a natural disaster is based on the extent and intensity of the disaster. Damage to highways must be severe, occur over a wide area, and result in unusually high expenses to the highway agency. Applicability of ER to a catastrophic failure due to an external cause is based on the criteria that the failure was not the result of an inherent flaw in the facility, but was sudden, caused a disastrous impact on transportation services, and resulted in unusually high expenses to the highway agency.

Mitigation Success

In January 2020, the FHWA made \$5 million available in “quick release” ER funds to help Puerto Rico recover from a series of earthquakes. The ER program funds the repair of federally eligible highways and bridges damaged by natural disasters or catastrophic events.

Quick release funds are a down payment on the costs of short-term repairs. Puerto Rico will assess long-term repairs.



Disaster Assistance and Emergency Relief for Individuals and Businesses

Other - Tax Relief

Department or Organization	Internal Revenue Service, Department of Treasury
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	U.S. taxpayers, including individuals and businesses affected by federally declared disasters
Hazard Addressed	All
Restrictions	Various by specific program; must be affected by disaster
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	No
Website	irs.gov/businesses/small-businesses-self-employed/disaster-assistance-and-emergency-relief-for-individuals-and-businesses

About the Resource

Special tax law provisions may help taxpayers and businesses recover financially from the impact of a disaster, especially when the federal government declares their location to be a major disaster area. Depending on the circumstances, the Internal Revenue Service (IRS) may grant additional time to file returns and pay taxes. Both individuals and businesses in a federally declared disaster area can get a faster refund by claiming losses related to the disaster on the tax return for the previous year, usually by filing an amended return. The IRS also offers audio presentations on planning for disaster. These presentations discuss business continuity planning, insurance coverage, record keeping, and other tips to stay in business after a major disaster.

Mitigation Success

After the fall 2018 wildfires in California, residents from affected counties received additional time to file income tax returns. Fees and penalties for late submittals were waived, and certain deadlines were extended.

After Hurricanes Michael and Florence in 2018, residents of some North Carolina, South Carolina, and Virginia counties were granted additional time to file tax returns. Fees and penalties were waived, and deadlines were extended. In addition, the IRS loosened the requirements so affected individuals could take hardship distributions and loans from 401(k), 403(b), and other employer-sponsored retirement accounts without the usual penalties.

More information at irs.gov/newsroom/tax-relief-for-victims-of-november-8-wildfires-in-california and irs.gov/newsroom/proposed-hardship-withdrawal-regulations-include-relief-for-disaster-victims-retirement-plans-can-now-make-loans-hardship-distributions-to-victims-of-hurricanes-michael-and-florence





Climate Adaptation Knowledge Exchange

Technical Assistance

Department or Organization	Climate Adaptation Knowledge Exchange
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	N/A
Hazard Addressed	All
Restrictions	None
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	No
Website	cakex.org/

About the Resource

The Climate Adaptation Knowledge Exchange is the world's largest and most used source of climate adaptation case studies and resources. It can be used to share lessons, ideas, and opportunities with others in the field.

Mitigation Success

One tool available from the Climate Adaptation Knowledge Exchange is the Puerto Rico Coastal Management Program's Coastal Adaptation Project. Its goal is to develop a coastal zone vulnerability assessment and appropriate adaptation strategies to help Puerto Rico cope with existing coastal hazards and future climate changes. The project is using stakeholder participation, spatial analysis tools, geophysical and chemical scientific knowledge, and the best available data from Puerto Rico's experts to develop broadly applicable outputs.

This information was excerpted from the following case study: cakex.org/case-studies/puerto-rico-coastal-adaptation-project.

Find more case studies on the Climate Adaptation Knowledge Exchange's interactive map: cakex.org/interactive-map?title=&type=project.



Ecosystem Investment Partners (EIP)

Loan

Department or Organization	Ecosystem Investment Partners
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	<p>EIP targets the acquisition of rural real estate throughout the U.S. that has degraded or threatened ecological or habitat features, offering opportunities to create value through priority restoration projects and mitigation bank entitlement. Acquisitions typically target geographies with three key characteristics:</p> <ul style="list-style-type: none"> • Extensive, significant and regulated natural resources, such as wetlands, streams or endangered species habitats. • Active land development or public agency requirements in the area generating significant demand for environmental offsets (e.g., wetland credits). • Effective enforcement of environmental laws requiring that unavoidable ecological impacts are offset through high-quality mitigation, or identified public demand for restoration. • Target investment size \$10-\$50 million, 1,000-30,000 acres
Hazard Addressed	All
Restrictions	See eligibility
Funding Available	Unknown
Cost Sharing	Unknown
Specific to Recovery	No
Website	ecosystempartners.com/our-work/

About the Resource

Ecosystem Investment Partners (EIP) invests in large-scale ecological restoration projects that meet this growing demand. Their environmental investing initiatives satisfy mitigation needs through the use of private conservation finance capital.

Mitigation Success

Four projects, in Minnesota, West Virginia, Louisiana and Kentucky, will restore over 35,000 acres and 100 miles of streams, including some of the largest private restoration projects in the country to date. Stream restoration is a type of natural resource preservation hazard mitigation project.

Excerpted from forbes.com/sites/ashoka/2014/04/25/how-private-capital-is-restoring-u-s-wetlands/#36c892415e83



Firewise

Technical Assistance

Department or Organization	National Fire Prevention Association
Type of Mitigation Action	Education and Outreach Programs
Eligible Applicants	Communities
Hazard Addressed	Wildfire
Restrictions	None
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	No
Website	nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA

About the Resource

Firewise USA is a voluntary program that provides a framework to help neighbors get organized, find direction, and take action to increase the ignition resistance of their homes and community.

Mitigation Success

The community of Falls Creek in Durango, Colorado, was threatened by the 416 fire in June 2018. Because of the community's prior fire mitigation efforts, firefighters were able to defend the community and fight the fire.

Learn more at nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA/Firewise-USA-success.



Five Star and Urban Waters Restoration Grant Program

Grant

Department or Organization	National Fish and Wildlife Foundation
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Local governments or organizations
Hazard Addressed	All
Restrictions	<p>All projects must have:</p> <ul style="list-style-type: none"> • On-the-ground activities such as wetland, river, or coastal habitat restoration and/or targeted green infrastructure creation and monitoring. • Community partners united to achieve ecological and educational outcomes. • Integrated education, outreach and training on the restoration project through broad community engagement activities or participation and integration with K-12 environmental curriculum. • Measurable ecological, educational and community benefits.
Funding Available	
Cost Sharing	Matching required
Specific to Recovery	No
Website	nfwf.org/fivestar/Pages/home.aspx

About the Resource

The Five Star and Urban Waters Restoration Program seeks to develop nationwide-community stewardship of local natural resources, preserving these resources for future generations and enhancing habitat for local wildlife. Projects seek to address water quality issues in priority watersheds, such as erosion due to unstable streambanks, pollution from stormwater runoff, and degraded shorelines caused by development.

Mitigation Success

The Wolf River Conservancy (WRC) removed 65 acres of invasive plants and planted 5,084 trees at four target properties along the Wolf River in urbanized sections of Memphis, Tennessee. Project partners contributed manual labor, community organizing, bird expertise, project coordination, financial support and environmental education. A total of 3,776 volunteers assisted the WRC in the restoration work, including WRC members, corporate volunteers and Five Star and Urban Waters Restoration Program students who participated in service projects as part of the environmental stewardship education component of the program. An additional 5,901 community members were engaged through public outreach and education.





National Coastal Resilience Fund

Grant

Department or Organization	National Fish and Wildlife Foundation
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Eligible applicants include nonprofit 501(c) organizations, state and territorial government agencies, local governments, municipal governments, tribal governments, educational institutions, or commercial (for-profit) organizations. Tribal governments include both federally recognized tribes and tribes that are not federally recognized.
Hazard Addressed	Storm Surge
Restrictions	Financial Assistance
Funding Available	\$30 million (2019)
Cost Sharing	Matching required
Specific to Recovery	No
Website	nfwf.org/programs/national-coastal-resilience-fund

About the Resource

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. The National Coastal Resilience Fund restores, increases and strengthens natural infrastructure to protect coastal communities while also enhancing habitats for fish and wildlife. The National Coastal Resilience Fund is supported by NOAA, Shell Oil Company and TransRe.

Mitigation Success

From 2006 through 2019, the program has awarded 337 grants worth \$81 million in federal and corporate partner funding. Grantees matched this funding with an additional \$93.5 million, for a total conservation investment of over \$174.5 million. Some of the important outcomes generated by this investment include 2,145 miles of restored aquatic connectivity, 42,878 acres of restored habitat, and 281 miles of restored stream and riparian habitat.



Resilient Communities Program

Grant

Department or Organization	National Fish and Wildlife Foundation
Type of Mitigation Action	Local Planning and Regulations
Eligible Applicants	Local governments or organizations
Hazard Addressed	All
Restrictions	Grants will be offered once a year to support priority projects in select states and communities.
Funding Available	\$12 million plus additional local funding to \$24 million
Cost Sharing	Matching required
Specific to Recovery	No
Website	nfwf.org/resilientcommunities/Pages/home.aspx

About the Resource

The program focuses on water quality and quantity declines, forest health concerns, and sea level rise. The program will emphasize community inclusion and assistance to traditionally underserved populations in vulnerable areas.

Mitigation Success

The Maui Nui Marine Resource Council received a grant in 2019 to increase fire resilience in 3,414 acres of Forest Reserve in Ma'alaea, Hawaii, by eliminating fuel in strategically placed corridors.



Climate Adaptation Fund	
Grant	
Department or Organization	Wildlife Conservation Society (WCS)
Type of Mitigation Action	Natural Systems Protection
Eligible Applicants	Conservation nonprofits
Hazard Addressed	All
Restrictions	Project proposals must: <ul style="list-style-type: none">• Focus on the functionality of ecosystems, rather than conserving individual species.• Be designed for long-term conservation impact.• Create the potential for impact at a landscape scale.• Use strategic, targeted communication activities to amplify adaptation outcomes.• Be designed with climate adaptation for wildlife and ecosystems as a core goal or outcome of the work.• Propose conservation goals and actions that are grounded in the best available science.• Conduct on-the-ground implementation, not research, planning, or tool development.
Funding Available	The WCS Climate Adaptation Fund provides a total of \$2.5 million in grant awards (between \$50,000 and \$250,000 each) to conservation nonprofit organizations each year.
Cost Sharing	Unknown
Specific to Recovery	No
Website	wscclimateadaptationfund.org/program-information

About the Resource

The Wildlife Conservation Society's Climate Adaptation Fund provides grant awards to conservation nonprofits across the United States to catalyze innovative, science-driven projects responding to the impacts of climate change on wildlife and people.

Mitigation Success

None identified



Georgetown Climate Center Adaptation Resources

Technical Assistance

Department or Organization	Georgetown Climate Center
Type of Mitigation Action	Local Planning and Regulations, Education and Outreach
Eligible Applicants	N/A
Hazard Addressed	All
Restrictions	None
Funding Available	N/A
Cost Sharing	N/A
Specific to Recovery	No
Website	georgetownclimate.org/adaptation/featured.html

About the Resource

The Georgetown Climate Center provides resources to policymakers and others helping communities adapt to climate change.

Mitigation Success

None identified

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FEMA