



ICARP

INTEGRATED CLIMATE ADAPTATION & RESILIENCY PROGRAM

Cooperative Technical Partners (CTP) Case Study: Mitigation Project Pipeline



Background:

The Governor's Office of Planning and Research (OPR), through the Integrated Climate Adaptation and Resiliency Program (ICARP), was invited by the Federal Emergency Management Agency (FEMA) Region 9 to participate in the Cooperative Technical Partners (CTP) Program. The CTP Program is part of FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) Program. CTP leverages partnerships to strengthen the National Flood Insurance Program (NFIP) and supports FEMA's mitigation priorities. Through these partnerships the program delivers high-quality hazard identification and risk assessment products, provides outreach support and empowers communities to reduce risk based on informed multi hazard-based data and resources.

OPR received an award in August 2020 to support an 18-month CTP partnership with two main deliverables:

- Project coordination and development of at least two hazard mitigation pilot projects for either FEMA's Building Resilient Infrastructure and Communities (BRIC) program or the Hazard Mitigation Grant Program (HMGP).

- A six-month feasibility study exploring the development and ongoing maintenance of a public-facing, easy to navigate local government hazard mitigation database as a feature on California's Adaptation Clearinghouse. **This study provided useful insights regarding stakeholders' need and support for a database, the cost required for development and maintenance, and potential challenges with maintaining a database. ICARP concluded that it is not best suited to proceed with further scoping and development at this time.*

This case study offers best practices for navigating FEMA HMA funding and lessons learned regarding common challenges sub-applicants may face when identifying and scoping eligible project types.

Lead Agency and Partnerships:

OPR leads the CTP grant, through ICARP, in partnership with FEMA Region 9, FEMA Regional Support - STARR II, California Office of Emergency Services (CalOES), and The Nature Conservancy (TNC). OPR provides coordination support to identify state partners that are eligible for HMA funding to ensure projects align and drive on the administration's climate resilience priorities. CalOES provides technical assistance on HMA project eligibility, scoping, and general grant administrative support. FEMA Region 9 provides technical assistance, project coordination support, and HMA research needs. TNC, through the California chapter is a co-recipient of FEMA CTP funding. TNC's CTP award focuses on nature-based solutions and streamlining FEMA's Benefit-Cost-Analysis (BCA) toolkit. TNC provides technical assistance and expertise on incorporating nature-based solutions into mitigation projects and BCA assistance.

This group of CTP partners provide technical and subject matter expertise on hazard mitigation to state and local partners interested in pursuing FEMA HMA funding. The group meets bi-weekly to identify and discuss opportunities to align climate resilience priorities to support a project pipeline of California-supported mitigation projects.

OPR CTP Partnership Significance

California's most vulnerable communities experience heightened risk to climate change and limited resources to cope with, adapt to, and recover from climate-related disasters. Communities across the state are at risk of a variety of climate driven natural disasters including extreme heat, wildfires, flooding, drought, increasing seismic activity, and sea-level rise. FEMA defines hazard mitigation as any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and its effects. Once states, tribes, and local governments identify potential natural disasters a community will face and have conducted vulnerability assessments, hazard mitigation plans help develop a long term strategy to building resilience. While these hazards are increasing in frequency and severity, the cost to rebuild and recover is simultaneously increasing. Climate change continues to worsen the impact these hazards have on low-income and front-line communities.

To build climate resilience, all communities need to be equipped with the necessary resources to plan and prepare for future climate risks. FEMA has invested historic funding into pre-disaster planning and mitigation activities over the past few years. This is an

important step to building community resilience, as most of FEMA's HMA funding is tied to disaster response and recovery efforts. The Stafford Act gives the President of the United States authority to declare a national emergency in response to a natural disaster. Once a national emergency is declared, the President can access funding and disaster relief assistance set aside by Congress. The Stafford Act authorizes two types of declarations: emergency declarations, and major disaster declarations. Under both declarations, the Governor of the affected state or Tribal Chief Executive of the affected Tribe must submit the request to the President within 30 days of the incident. The Stafford Act authorizes funding for three types of federal aid: Individual Assistance, Public Assistance, and the Hazard Mitigation Grant Program (HMGP). HMGP funding is allocated using a "sliding scale" formula based on the percentage of funds spent on Public and Individual Assistance. Currently, CalOES oversees a hazard mitigation portfolio of approximately \$1B, an exceptionally large sum of funding - a result of the total cost of recent federally declared disasters. This increased funding, coupled with the accelerating impacts of climate change, has compelled ICARP to think strategically about aligning state and regional climate resilience priorities with federal hazard mitigation funding opportunities. This CTP grant begins to explore opportunities for alignment across shared climate priorities.

Engagement Process

FEMA's HMA funding programs prioritize projects that reduce community vulnerability to disasters and their effects, promote community safety and resilience, and support long term community capacity in the wake of future disasters. Given ICARP's charge to align and support state and local adaptation efforts that advance climate equity and support integrated climate strategies, this CTP partnership prioritized hazard mitigation projects that include social equity and environmental co-benefits, both of which are critical to long term resilience in California. Through CTP, OPR and FEMA partner to guide non-traditional, "hard-to-reach" projects through HMA eligibility, specifically focusing on projects that incorporate nature-based solutions. FEMA identified an initial list of hard-to-reach project types that include healthy soils, urban greening, and seismic safety for multi-family homes. These project types, including several others, are considered new mitigation strategies that might be difficult to evaluate using FEMA-approved methodologies.

OPR, in partnership with CalOES, brought in potential new state partners to explore hazard mitigation funding opportunities. OPR is committed to expanding the network of state and local partners who are eligible for HMA funding. To date, OPR has collaborated with several state agencies, including the California Department of Food and Agriculture (CDFA), Department of Transportation (Caltrans), Sierra Nevada Conservancy (SNC), California Department of Forestry and Fire Protection (CalFire), and the Ocean Protection Council (OPC).

Through this CTP grant, OPR supports state agencies address the following challenges:

1. **Administrative:** Currently the network of state agencies and local governments who know and understand HMA grant programs is limited. Capacity building and public outreach is critical to build a pipeline of innovative, California-supported hazard

mitigation projects that can leverage federal funding. OPR, through CTP, provides coordination support to help expand the network of state and local partners who can potentially support eligible funding activities.

- 2. Technical Feasibility:** Interested sub-applicants encounter technical challenges when identifying eligible activities, such as meeting FEMA's Benefit-Cost Analysis (BCA) and Environmental and Historic Preservation (EHP) requirements. Furthermore, FEMA's Duplication of Programs (DOP) clause is a barrier when projects interface with federal land or mitigation activities falls outside of FEMA's authority. OPR, through CTP, works with state agencies to provide coordination support to overcome technical challenges. OPR will develop case studies illuminating these challenges and lessons-learned for future applicants interested in pursuing FEMA funding.

Funding Sources

OPR coordinated with state and local partners to identify and prioritize projects for the following FEMA programs.

Building Resilient Infrastructure and Communities (BRIC): In order to align this CTP grant's performance period with an open FEMA HMA funding stream, OPR prioritized projects for FEMA's BRIC program. BRIC is FEMA's newest pre-disaster funding program, replacing FEMA's pre-disaster mitigation (PDM) grant program. The BRIC Program began in FY20, following the Disaster Recovery Reform Act of 2018, which authorizes the President to set aside 6% of the total funding awarded under the Stafford Act for every major disaster declaration through the Disaster Relief Fund (DRF). This program supports states, local communities, tribes and territories build mitigation capacity, develop innovative mitigation solutions, establish public-private partnerships, and provide funding for largescale infrastructure projects with an emphasis on nature-based solutions. In FY21, BRIC was appropriated \$1B, with sub-applicants eligible for up to \$50M in federal cost share requests in the national competition funding pot.

Hazard Mitigation Grant Program (HMGP): In August 2021, in response to the COVID-19 pandemic and accelerating climate change crisis, President Biden authorized a major disaster declaration for all states, tribes, and territories. This declaration authorized HMGP funding to be released. Every eligible FEMA applicant is eligible for up to 4% of the total disaster costs to invest in mitigation planning and risk reduction projects. HMGP is competitive, statewide program where eligible projects must be technically feasible and cost-effective. HMGP funding does not have to be used for the incident or hazard type for which it was allocated. This specific disaster declaration is not restricted to pandemic-related mitigation activities. California received over \$400M in HMGP funding – an unprecedented amount of hazard mitigation funding. Given the scale of this funding allotment, OPR began to target eligible projects for HMGP.

- **Advanced Assistance (AA):** There are five different types of HMGP projects. AA is a project type for complex problems where data and studies are needed to develop a mitigation solution. This type of project is used to support studies to develop mitigation strategies/alternatives. AA sub-applications should result in a complete HMGP application. For CA, the AAs should complete 60% design and review of the California Environmental Quality Act (CEQA). OPR and CalOES prioritized AA projects for state agencies that have project ideas that need to be fleshed out more.

Below is a snapshot of a few state partners OPR engaged with through this CTP grant. While not every partner OPR worked with is pursuing FEMA HMA funding at this time, these discussions provided key insight and information that supports future mitigation project development and helped expand the network of state agencies eligible for hazard mitigation funding.

Snapshot of OPR-CTP State partners and project proposals

California Department of Food and Agriculture

Project Proposal

OPR approached CDFA to discuss opportunities to support healthy soil practices through FEMA's BRIC program. CDFA is new to the FEMA HMA space, so OPR in partnership with CalOES began to brainstorm potential project ideas. Given the limited available data to quantify mitigation benefits, CDFA proposed the following project:

CDFA seeks advanced assistance funding to compile the reference values, citable sources, and example calculations needed for FEMA's Benefit-Cost Analysis of various climate smart agricultural practices. Such assessment lies beyond the capabilities of most local governments and farmers, who are likely to be the main applicants for such support.

Hazards Addressed and Benefits

The Manual will be for California specific and defined geographical areas in which practices are useful and their costs justified to mitigation particular hazards. In that sense, the Manual also embodies a high-level, long-term plan for statewide agricultural hazard mitigation. Overall, this project will promote climate resilient agriculture to begin to be recognized alongside built infrastructure.

Partnerships

N/A

Funding Source and Estimated Project Cost

HMGP COVID-19 DR, Advanced Assistance

Total Activity Cost: \$440,000.00

Federal Request: \$330,000.00

Non-Federal Cost Share: \$110,000.00



Drivers and Unmet Needs

Agricultural related practices are not eligible for HMA funding because of FEMA's Duplication of Programs (DOP) clause that states HMA funding cannot be used, where another federal agency has primary authority. CDFA's HSP Program is funded by the United States Department of Agricultural (USDA).

Replicability

CDFA is new to the FEMA HMA funding space and can offer lessons-learned to other state partners when navigating FEMA funding.

Sierra Nevada Conservancy

Project Proposal

OPR approached SNC to discuss opportunities to support wildfire mitigation activities for FEMA's HMGP. While SNC was not able to identify any shovel-ready projects, it began hosting monthly convenings with local partners in the Sierra Nevada Region to build awareness and capacity of FEMA HMA eligibility and application requirements. These conversations resulted in the following project:

SNC is partnering with a tribal/land trust to support a beaver dam analog project to prevent post-fire debris flows.

Hazards Addressed and Benefits

Through this project, at least 225 beaver dam analogs (BDAs) and log erosion barriers (LEBs) will be constructed to capture the 5year pulse of sediment and debris expected from nearby areas that have recently burned. This network of BDAs and LEBs will protect resources from future flood flows and sedimentation by capturing debris, reconnecting floodplains and disbursing stream power. LEBs are designed for a 5year lifespan.

The project area is comprised of four properties protected by the Feather River Land Trust for exceptional natural and cultural values. Three of these properties are owned by the Maidu Summit Consortium, which is an association of tribes united to protect and restore ancestral Maidu lands.

Partnerships

Feather River Land Trust (FRLT) in partnership with the Maidu Summit Consortium (MSC) and Swiftwater Design (through a contract)

Funding Source and Estimated Project Cost

HMGP COVID-19 DR

Total Activity Cost: \$260,000

Federal Request: \$200,000.25

Non-Federal Cost Share: \$66,666.75



Drivers and Unmet Needs

Challenging to identify a project location that does not cross into federal jurisdiction. Projects on federal forest land trigger FEMA's Duplication of Programs (DOP). Authority lies with the United States Department of Agriculture Forest Service (USDA FS).

Replicability

SNC is supporting a cohort of resource conservation districts (RCD) and local governments in the Sierra Nevada navigate FEMA funding. SNC's project offers lessons for local and state level efforts to support innovative wildfire mitigation projects and the benefits of peer-to-peer learning to share best practices when applying to federal programs.

CAL FIRE

Project Proposal

OPR approached CalFire to discuss opportunities to support wildfire mitigation projects for FEMA's BRIC program. Following several conversations between OPR and CalOES, CalFire sent out a solicitation for hazard mitigation projects to its regional and local partners.

CalFire proposed the following fuels reduction project for BRIC:

CalFire's Northern Region and Nevada Yuba Placer Unit is interested in supporting a fuels reduction project in the City of Auburn that runs north and east along a break between the North Fork of the American River and I-80 Highway.

Hazards Addressed and Benefits

This large project that spans over 5,000 acres of vulnerable infrastructure in wildfire-prone land. The project objective is to protect a critical travel corridor for the community in a fast growing, dense wildlife-urban interface (WUI) with a history of large wildfires.

Partnerships

CalFire Northern Region and Nevada Yuba Placer Unit

Funding Source and Estimated Project Cost

BRIC

Total Activity Cost: N/A:

Federal Request: N/A

Non-Federal Share: N/A



Drivers and Unmet Needs

This project involves private property and federal land. Projects on federal forest land trigger FEMA's Duplication of Programs (DOP). Authority lies with the United States Department of Agriculture Forest Service (USDA FS).

Replicability

While this fuels reduction project is no longer moving forward with FEMA funding at this time, this project offered key insight on challenges wildfire mitigation projects face. These findings helped inform OPR's DOP case study.

Ocean Protection Council

Project Proposal

OPR approached OPC to discuss opportunities to support Prop 68 grantees interested in implementation funding through FEMA's BRIC program. OPC connected OPR to three interested Prop 68 grantees. Two out of the three grantees had FEMA eligible projects:

City of Imperial Beach: This project will retrofit a 1.2 segment of the San Diego Bayshore Bikeway to provide multiple benefits to the disadvantaged communities of Imperial Beach including sea-level rise, enhanced coastal access, and ecosystem resilience. This project will incorporate a living levee, coastal access trail enhancements, habitat enhancements, and a stormwater treatment wetland.

Bolinas Wye Wetlands Resiliency Project: This project will restore hydrologic, geomorphic, and ecologic processes by redirecting sections of the Lewis Gulch Creek at the bisection of three roads (State Route 1, Olema-Bolinas Rd., and the Crossover Rd.)

Hazards Addressed and Benefits

City of Imperial Beach: Project offers sea-level rise adaptation, flood protection, and ecosystem resilience that will benefit disadvantaged communities.

Bolinas Wye Wetlands Resiliency Project: Will provide sea-level rise adaptation in a high flood zone and restoration for approximately 1,100 acres of a tidal estuary known for its unique biodiversity. Caltrans District 4 provided a preliminary list of nine conceptual projects that are not shovel-ready and would need to leverage local agency partnerships.

Partnerships

California Natural Resources Agency (CNRA), Ocean Protection Council (OPC), State Coastal Conservancy (SCC)

Prop 68 grantees: City of Imperial Beach and Marin County Parks

Funding Source and Estimated Project Cost

BRIC

Total Activity Cost: N/A:

Federal Request: N/A

Non-Federal Share: N/A



Drivers and Unmet Needs

Prop 68 planning grantees are still in the early stages of project planning and design.

Replicability

OPC's Prop 68 grant program demonstrates the critical need to connect planning grant programs with implementation funding. OPR will reconnect with OPC Prop 68 grantees later in 2022 to see if the timing is right to begin thinking about implementation funding opportunities.

Caltrans

Project Proposal

OPR approached Caltrans HQ to discuss opportunities to support transportation related mitigation projects for FEMA's BRIC program.

Caltrans District 4 provided a preliminary list of nine conceptual projects that are not shovel-ready and would need to leverage partnerships with local agencies.

Hazards Addressed and Benefits

N/A

Partnerships

Caltrans Headquarters, California Natural Resources Agency (CNRA), Caltrans District 4

Funding Source and Estimated Project Cost

BRIC

Total Activity Cost: N/A:

Federal Request: N/A

Non-Federal Share: N/A

Drivers and Unmet Needs

Challenging to use state transportation funding to fund sea-level rise adaptation on Caltrans right of way.



work

Replicability

Caltrans HQ and CalOES are continuing to work together to identify opportunities at the district level to fund sea-level rise adaptation projects that offer transportation benefits. Insight from these conversations will help support the development of a future mitigation project for BRIC or HMGP funding.

CTP Project Pipeline Challenges

While working with state and local partners to identify hazard mitigation projects, these conversations illuminated the following challenges with accessing FEMA funding.

Limited Capacity & Administrative Barriers: Many under-resourced communities lack the technical expertise, leadership, partnerships, or resources to track and apply to competitive federal funding opportunities. Community leaders and emergency managers have taken on multiple roles during the COVID-19 pandemic, further limiting staff capacity to build resilience in the face of ongoing and future climate-related disasters. These communities will benefit from leveraging partnerships with state and regional agencies who can provide enhanced technical assistance and local match funding to support application development costs and project scoping needs.

Many state and local partners have expressed challenges with federal grant administration requirements, including complicated reporting requirements and lengthy award timelines. For example, FEMA HMA sub-applicants that are selected for further review may not be awarded funding until 24 to 36 months after submitting their application to CalOES. This prolonged timeline is a barrier to disadvantaged communities, as they are unable to begin any work on the project until FEMA approval is received.

Funding – Local Cost Share Limitations: FEMA’s HMA programs require a cost share of up to 75% federal and 25% non-federal. This funding requirement is challenging for small and under-resourced communities to match. While FEMA does offer a cost share of up to 90% federal and 10% non-federal for “economically disadvantaged rural communities,” it is difficult to identify communities in California that are eligible for this increased cost share. FEMA defines an economically disadvantaged rural community, as a community of 3,000 or fewer individuals identified by the applicant that is economically disadvantaged, with residents having an average per capita annual income not exceeding 80% of the national per capita income, based on best available data. This definition is limiting in a California context, as there are many disadvantaged communities with populations larger than 3,000.

FEMA offers reimbursement for pre-award administrative costs. Sub-applicants that are selected to receive BRIC or HMGP funding are eligible to be reimbursed for direct costs associated with application development; eligible activities include developing the Benefit-Cost Analysis (BCA) and gathering data for the National Environmental Quality Act (NEPA). This is a potential roadblock for disadvantaged communities that face financial and capacity limitations to provide up-front costs associated with application development. Often, the communities that are most successful in accessing FEMA funding are those that can hire experienced grant writers to support the application development process.

Benefit-Cost Analysis (BCA): FEMA’s Benefit-Cost Analysis (BCA) is a required component of all HMA sub-applications. The BCA is used to calculate the future risk reduction benefits of a hazard mitigation project and compares those benefits to its costs. The future costs or losses can include direct damages (structural & contents damages), displacement costs, loss of function, emergency management costs, and deaths and

injuries. A project is considered cost-effective when the Benefit-Cost Ratio (BCR) is greater than 1.0. FEMA's BCA tends to work best for projects that address flooding and/or sea-level rise, as these are considered "traditional" FEMA mitigation projects with sufficient data sources available to quantify the benefits of mitigating flood risk within the HMA space.

FEMA provides pre-calculated benefits for several eligible project types including residential hurricane wind retrofits, acquisitions, and elevations in the Special Flood Hazard Areas (SFHA), and individual tornado safe rooms. While this list doesn't cover all of FEMA's pre-calculated benefits, additional guidance is needed to address new and emerging hazards. It is challenging to demonstrate the mitigation benefits of hazards and mitigation strategies that are not traditionally funded under FEMA programs. For example, while extreme heat is a known hazard, FEMA has not provided pre-calculated benefits for this project type. Extreme heat ranks as the deadliest climate-driven hazard in California and by the end of the century, the United States will see thousands of additional heat-related deaths (National Academies of Sciences). While there is substantial data and research available to demonstrate how mitigating heat-related events can offer benefits to vulnerable populations, infrastructure, and the natural environment, the data isn't widespread to meet FEMA's BCA requirements. This data gap makes it difficult for non-traditional mitigation projects, like extreme heat to receive HMA funding without additional consultation from FEMA.

Duplication of Programs (DOP): FEMA's Duplication of Programs (DOP) clause can be a roadblock for hazard mitigation projects that aim to address multi-hazards. Under this clause, FEMA cannot provide financial assistance for activities that fall under the authority of another Federal agency or program because HMA funds are not intended to be used as a substitute for other available Federal program authorities. However, DOP can be a barrier for wildfire mitigation projects that are adjacent to or require coordination with activities on federal land. Because wildfires do not recognize jurisdictional borders, additional flexibility is needed to support collaborative federal and state mitigation projects. For more information on this policy, see OPR's case study on DOP.

[CTP Project Pipeline Opportunities](#)

While working with state and local partners to identify hazard mitigation projects, these conversations illuminated the following opportunities to streamline access to FEMA funding.

Peer-to-Peer Learning: State agencies and local governments that successfully apply to FEMA HMA funding can share best practices and lessons learned with current and future subapplicants. This type of peer-to-peer learning can help prospective applicants develop future California-supported hazard mitigation projects that advance the state's climate resiliency priorities. OPR through CTP will publish case studies documenting these findings for adaptation practitioners, emergency managers, and hazard mitigation planners on the State Adaptation Clearinghouse.

The CTP team partnered with the Sierra Nevada Conservancy (SNC) to identify potential wildfire mitigation projects within the Sierra Nevada region. While SNC is eager to explore

FEMA funding, their regional and local partners have varying technical understanding of and expertise with FEMA HMA funding. Following conversations with CalOES, SNC hosted a region-wide monthly technical assistance call with local partners interested in exploring FEMA HMA funding opportunities. On these calls, CalOES provides technical and administrative assistance to interested sub-applicants. CalOES provided guidance on topics ranging from identifying eligible project types and local match requirements to completing a Notice of Interest (NOI) for HMA funding. This type of collaboration helps build awareness of available federal mitigation funding streams which is key to building community capacity to better plan, prepare, and mitigate potential hazards.

Leveraging Partnerships to Advance Climate Resilience: Building partnerships among federal, state, regional, and local governments is critical to advancing long-term climate resilience in California. Through the CTP partnership, OPR brought new state partners into the FEMA HMA space and helped provide coordination support to interested subapplicants as they navigate the application process. This CTP grant helped OPR and CalOES foster a strong working relationship. Together, they can align shared climate resilience priorities to identify potential new mitigation projects. Expanding the network of state partners who know and understand the requirements for HMA funding will ensure the development of new hazard mitigation projects that can leverage federal dollars. State support is needed for local and regional capacity to compete for grant funding opportunities at the state and national scales. Similarly, local governments lean on state and federal partners to help guide them through the process of rebuilding and applying for federal disaster aid. FEMA's BRIC program incentivizes project applicants to leverage public-private partnerships to increase capacity and investments to support overall community resilience. Project applicants who successfully partner with private sector organizations, non-profits, or educational institutions are eligible for up to 15 points under the BRIC qualitative evaluation criteria.

Increased Coordination Across the Disaster Lifecycle: There is a significant need to increase coordination across available federal and state funding streams to address the various stages of a disaster (mitigation, preparedness, response, and recovery). While OPR's CTP grant focuses on reducing risks pre-disaster, there are benefits of aligning these efforts with lessons learned at the response and recovery stages, which occur post-disaster. Historically, post-disaster mitigation has received significantly more funding than pre-disaster mitigation. The U.S. Government Accountability Office (GAO) found that between FY2010-18, FEMA awarded approximately 88% or \$11.3B for post-disaster grants through HMGP and PA (Congressional Research Services Report 2022). Funding for the different stages of a disaster should be aligned to build cohesive community resilience before, during, and after a disaster. Federal and state partnerships are critical to achieving climate equity, building capacity, identifying socially vulnerable communities, and building long-term resilience from future natural hazards. Through this CTP grant, OPR and CalOES strengthened their working relationship, providing an example of how closer coordination can promote opportunities for alignment on climate resilience goals and funding priorities.

Leveraging State funding for Local Match: The increasing severity of climate hazards has triggered the creation of new federal and state funding opportunities to support local climate mitigation and resilience projects. All FEMA HMA projects require a 25% (non-federal) local cost share. For example, if a project's total estimated cost is \$60M, FEMA will reimburse at least 75% of the eligible costs or \$45M. The subapplicant contributes 25% of the local cost share or \$15M. The 25% local match can be a burden for many communities. Eligible local match funding includes contributions of cash, in-kind services, materials, or any combination thereof. Subapplicants that can secure their 25% local match requirement through an existing State funding program are better positioned to leverage federal implementation funding. Through a CTP FY21 grant, OPR will be exploring how to align and position state funding programs to meet HMA requirements to support future hazard mitigation projects.

OPR, through CTP developed a case study highlighting North Carolina's Resilient Coastal Communities Program (RCCP). This program provides funding to disadvantaged coastal communities to support activities ranging from project scoping to project implementation to build capacity and support long-term coastal resilience. RCCP serves as a model that could be replicated in other states to better support a pipeline of hazard mitigation projects. For more information, see OPR's case study on the NC RCCP.

Looking Ahead

Scaling HMA Pipeline to State Programmatic Eligibility: OPR, through ICARP, received a CTP FY21 award to build off work established through this pilot partnership FY20 grant. In Spring 2022, OPR will begin identifying eligible state funding programs that can potentially be realigned to incorporate FEMA HMA eligibility into existing program guidelines. OPR will prioritize at least one state funding program that focuses on building resilience to flooding or drought. ICARP received funding in the FY21 State budget to stand up two new programs: the Adaptation Planning Grant Program and Regional Resilience Planning and Implementation Grant Program. ICARP received \$25M for the Adaptation Planning Grant Program to provide funding to fill local, regional, and tribal planning needs, provide communities the resources to identify climate resilience priorities, and support the development of a project pipeline of climate-resilient infrastructure projects across the state. ICARP received \$250M for the Regional Resilience Planning and Implementation Grant Program to scale regional climate resilience solutions over multiple rounds of funding. The CTP Project Manager will work closely with the Adaptation Planning Grant Program Project Manager to assist in the development of program guidelines and to explore how this program can serve as proof of concept on how to align a state funding program with FEMA's HMA programmatic eligibility. The CTP Program Manager also anticipates partnering with the Regional Resilience Planning and Implementation Grant Program Manager to identify opportunities to support hazard mitigation projects on a regional scale. OPR will develop a case study documenting lessons learned and best practices with realigning state funding programs with FEMA HMA eligibility. This case study will be published on the Adaptation Clearinghouse in Fall 2023.

Additional Resources:

- OPR CTP Case Study: Duplication of Programs (DOP)
- OPR CTP Case Study: North Carolina Resilient Coastal Communities Program (RCCP)
- [Congressional Research Services: Recent Funding Increases for FEMA](#)
- [Hazard Mitigation Assistance](#)
- [Congressional Research Services: FEMA Hazard Mitigation: A First Step Toward Climate Adaptation](#)
- [National Academies of Science: Extreme Heat Waves](#)

Further Information:

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