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INTEGRATED CLIMATE ADAPTATION & RESILIENCY PROGRAM

## Cooperative Technical Partners (CTP) Case Study: North Carolina Resilient Coastal Communities Program (NC RCCP)



### Background:

The Office of Planning and Research (OPR), through the Integrated Climate Adaptation and Resiliency Program (ICARP), was invited by 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. One of OPR's deliverables is to develop case studies with supporting state agencies that highlight lessons learned, best practices, and challenges that arose while navigating FEMA's Hazard Mitigation Assistance (HMA) grant programs. During conversations with federal and state partners, OPR discovered North Carolina's Resilient Coastal Communities Program (RCCP). RCCP provides a framework of how to support a pipeline of coastal resilience infrastructure projects in disadvantaged counties. This framework could potentially be replicated in



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California to demonstrate how to develop a funding program that supports a pipeline of hazard mitigation projects that can leverage federal funding streams.

While supporting state partners in navigating FEMA HMA funding, OPR identified potential technical and administrative barriers applicants may face when applying for competitive federal grant programs. Applicants with shovel-ready projects tend to be better equipped to navigate federal funding, as application timelines tend to move quickly. “Shovel-ready” describes projects that are at an advanced stage of development, where construction can begin soon. These projects have completed thorough project planning, engineering, and design phases. Shovel-ready projects are awaiting funding to begin project implementation. As the availability of shovel-ready projects is limited, OPR was interested in learning more about the NC RCCP as a model for how to develop a pipeline of shovel-ready hazard mitigation projects.

This case study provides an overview of the NC RCCP and applicant requirements. This program supports 20 disadvantaged counties in North Carolina in building resilience against coastal hazards by providing funding to support project identification, vulnerability assessments, and project design and implementation. This case study serves as a resource for other states on how to develop funding programs that can support hazard mitigation projects from the first inception of the project through project implementation. Takeaways from the RCCP will inform work in OPR’s CTP FY21 grant to help align state funding programs with FEMA HMA eligibility.

For more information on OPR’s work to support a pipeline of hazard mitigation projects that can potentially leverage FEMA HMA funding, see the Mitigation Project Pipeline Case Study.

## Overview of NC Resiliency Program:

The North Carolina Division of Coastal Management’s (DCM) Resilient Coastal Communities Program (RCCP) aims to provide technical and capacity building support to advance coastal resilience efforts across North Carolina’s 20 coastal counties. Following a series of destructive hurricanes in 2019, the NC State Legislature and the National Fish and Wildlife Foundation (NFWF) allocated funding for coastal resilience planning to support community-driven projects and adaptation planning to support long-term resilience. Selected communities receive direct technical assistance to complete a community engagement process, risk and vulnerability assessment, and develop an online resilience project portfolio.



## Program Goals:

- Address barriers to coastal resilience in North Carolina at the local level, such as limited capacity, economic constraints, and social inequities.



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- Assist communities in drafting risk and vulnerability assessments, including consideration of future and developing portfolios of well-planned and prioritized projects.
- Advance coastal resilience projects to “shovel-ready” status, or ready for implementation.
- Provide funding for project implementation and link to additional funding streams.

### Program Significance:

As climate change continues to accelerate the impact of natural disasters, it is critical that federal and state governments provide vulnerable communities with the resources to better plan, prepare, and mitigate future hazards. RCCP is identified as a key priority in North Carolina’s Climate Risk Assessment and Resilience Plan to build climate change resiliency, while promoting sustainability and economic growth. North Carolina, through RCCP, provides capacity building and planning support to vulnerable coastal communities. Through this effort, North Carolina is developing a pipeline of shovel-ready hazard mitigation projects that are better suited to leverage federal mitigation funding. RCCP aims to support disadvantaged communities by providing direct technical assistance to support community engagement, a risk and vulnerability assessment, and development of a resilience project portfolio.

Through CTP, OPR is developing a pipeline of California-supported hazard mitigation projects that can potentially leverage HMA funding. OPR is partnering with state agencies to identify hazard mitigation projects that incorporate nature-based solutions (NBS) and provide environmental and social co-benefits. FEMA defines NBS as sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience. As discussed below, RCCP requires applicants to consider integration of NBS during Phase 2: Planning, Project Identification, and Prioritization. NBS is a key component of successful projects that were awarded in the inaugural year of FEMA’s new pre-disaster funding program, the Building Resilient Infrastructure and Communities (BRIC) program. As OPR through CTP continues to partner with state agencies to identify mitigation projects for HMA funding, the RCCP is a framework that could be replicated in California to support the development of shovel-ready projects. The RCCP model also offers insight to California and other states on how to design funding programs that reduce vulnerabilities and builds climate resilience in the most disadvantaged communities.

### Program Framework:

Flooding is one of the most common and costly natural disasters. These disasters have catastrophic impacts on communities and local economies throughout the nation. Climate change intensifies the frequency and severity of floods and precipitation patterns. Smaller and disadvantaged communities with limited fiscal and administrative capacity are often at a disadvantage in accessing resources that support climate resilience planning and implementation. Climate resilience is the ability to prepare for, recover from, and adapt to



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natural hazards. Building climate resilience allows communities to mitigate the impacts of climate change and reduce risk to people, property, and the environment.

RCCP provides funding and technical assistance to support equitable and locally-driven coastal resilience planning and project implementation. RCCP provides a four-phased framework to support eligible counties and municipal governments.

## **Phase 1: Community Engagement; Risk & Vulnerability Assessment**

Complete a risk and vulnerability assessment, develop a community action team, and a public engagement strategy.

## **Phase 2: Planning, Project Identification, & Prioritization**

Community- and data-driven process to identify priority actions that can be taken to adapt to short- and long-term hazards. Communities that Hurricane Florence impacted are required to submit at least one nature-based solution; all other communities are encouraged to incorporate nature-based solutions.

## **Phase 3: Engineering & Design**

This phase is focused on engineering, design, and permitting of the prioritized projects. Applicants that successfully complete Phase 1 and 2 will be eligible for Phase 3 funding.

## **Phase 4: Project Implementation**

Applicants that complete Phases 1-3 are eligible for funding to support the implementation of a shovel-ready project. All projects must incorporate a nature-based solution/component.

In Spring 2021, North Carolina (DCM) awarded \$675,000 in grants to 25 communities for Phases 1 and 2. Applicants are currently in the process of finalizing deliverables for Phase 1 and 2. Phase 3 funding applications is anticipated to open in Spring 2022.

All RCCP awardees are required to complete the following deliverables at the end of their grant period:

### **Risk & Vulnerability Assessment Report:**

This report will include qualitative and quantitative data from the risk and vulnerability assessments performed to help evaluate the vulnerability of critical assets, natural infrastructure, and vulnerable populations to natural hazards.

### **Project Portfolio:**



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This portfolio will outline different pathways to reduce exposure, sensitivity, and increase adaptive capacity to flooding and other hazards. A combination of nonstructural, hybrid, and structural approaches should be considered.

### Engagement Process:

North Carolina DCM, in partnership with The Nature Conservancy (TNC), National Fish and Wildlife Foundation (NFWF), National Oceanic and Atmospheric Administration (NOAA), and North Carolina Sea Grant developed a program handbook to provide guidance to contractors and local governments completing Phases 1 and 2 of the RCCP. The handbook provides insight on program requirements, important existing data, tools, and resources.

### Funding Source:

This program is funded through the N.C. State Legislature and a grant from NFWF.

### Opportunities:

While selected applicants are still in the early phases of RCCP, lessons learned from successful applicants will be insightful for other states and local partners that want to develop funding programs to support disadvantaged communities in building resilience to natural hazards.

### Replicability:

The NC RCCP framework is a model that other states and agencies can replicate to provide capacity building support to develop shovel-ready mitigation projects. In California, there are programs that provide disadvantaged communities with capacity building support and technical assistance, both of which are necessary to build climate resilience and apply for competitive funding opportunities. However, there are not many programs that fund a pipeline of shovel-ready, hazard mitigation projects, as the RCCP does.

One unique funding program in California is the BOOST program administered by the Institute for Local Government (ILG), in partnership with the Strategic Growth Council (SGC). The BOOST program provides technical assistance to disadvantaged communities across the state to address the impacts of climate change. In the first BOOST round, ILG identified ten cities and two regions to receive technical assistance. While each applicant had varying needs, some of the capacity support ILG and SGC provided included: grant writing assistance, project development guidance, climate action, resilience planning, and communications support. The BOOST program closely resembles the capacity building support provided in Phases 1-2 of the RCCP. There is a significant need to increase capacity and technical assistance through all stages of project development, as disadvantaged communities need support to guide them through project implementation to apply for competitive funding programs.

To leverage federal funding, communities must be well positioned to apply for competitive grant programs, such as BRIC and HMGP. BOOST is one potential program OPR could partner with through CTP to provide education and outreach on FEMA HMA funding



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opportunities. This partnership could replicate Phases 3-4 of the RCCP and build off existing project scoping and planning activities that BOOST applicants may have completed. California must prioritize communities facing the most vulnerabilities to climate-driven impacts to support a pipeline of hazard mitigation projects that can leverage HMA funding.

### Looking Ahead:

OPR, through ICARP is in the process of standing up the Adaptation Planning Grant Program and the Regional Resilience and Implementation Grant Program. These programs intend to support planning and implementation efforts to promote integrated and equitable climate adaptation strategies. Insight and findings from the RCCP can serve as a framework on how to align ICARP's funding programs to best support communities from project planning to project implementation and build on a foundation of technical assistance and capacity building. North Carolina's RCCP illuminates the importance of aligning technical assistance and capacity building support with funding resources to help disadvantaged communities build climate resilience. ICARP's Adaptation Planning Grant Program aims to support a pipeline of climate resilient infrastructure projects across the state, while the Regional Resilience and Implementation Grant Program will take a similar approach from a regional perspective through planning and implementation funding.

Federal funding programs can be challenging to navigate for many disadvantaged and under-resourced communities. State funding programs that provide technical assistance and capacity building support help ensure communities are better equipped to identify community needs, conduct vulnerability assessments, and mitigate future climate impacts. The CTP Program Manager anticipates partnering with ICARP's Adaptation Planning Grant Program Manager and Regional Resilience and Implementation Grant Program Manager to identify opportunities to support local, regional, and tribal governments develop shovel-ready mitigation projects to leverage federal implementation funding.

### Additional Resources:

- OPR CTP FY20 Case Study: Mitigation Project Pipeline
- [North Carolina RCCP 2-pager](#)
- [North Carolina Resilience Coastal Communities Program Homepage](#)
- [North Carolina Climate Risk Assessment and Resilience Plan](#)
- [North Carolina RCCP Planning Book](#)

### Further Information:

For more information on this case study, please contact Sarah Samdin, OPR CTP Project Manager at [Sarah.Samdin@opr.ca.gov](mailto:Sarah.Samdin@opr.ca.gov) or (916) 322-0531.

To learn more about the North Carolina RCCP, please contact: [RCCP@ncdenr.gov](mailto:RCCP@ncdenr.gov).