



COASTAL FLOOD RESILIENCE PLANNING FELLOWSHIP

HOST OFFICE

Virginia Department of Conservation and Recreation, Office of Resilience Planning

PROJECT TITLE

Virginia Coastal Resilience Master Plan, Adaptive Management Plan

LOCATION

Richmond, VA

DESCRIPTION OF HOST OFFICE

The Department of Conservation and Recreation (DCR) is the state's lead natural resource conservation agency. DCR protects what Virginians care about - natural habitat, parks, clean water, dams, open space and access to the outdoors. DCR enables and encourages people to enjoy and benefit from Virginia's natural and cultural resources. DCR values diversity of nature, culture, and communities to ensure a sustainable and equitable future for recreational access and a healthy environment for all Virginians to enjoy. DCR accomplishes its mission through funding, expertise, education, acquisition, and improved access.

DCR's **Office of Resilience Planning** serves as the Commonwealth's lead developer, administrator, and implementer of state-led flood resilience planning via the Virginia Coastal Resilience Master Plan (CRMP) and the Virginia Flood Protection Master Plan (VFPMP). These plans are scheduled to be developed every 5 years and must include a "whole community" approach to outreach and engagement to inform and guide the plan development.

PROJECT BACKGROUND

Nearly six million people, or 70% of the state's population, call coastal Virginia home. Our coastal regions are thriving economic hubs, hold unique cultural resources, and offer unparalleled natural beauty, which collectively shape diverse landscapes and communities. However, coastal Virginia faces growing threats. As sea levels rise and severe weather intensifies, climate change is threatening our cherished coastal regions' economic, cultural, and environmental resources. And while flooding affects many Virginians, it does not do so equally. Each community faces varying levels of flood exposure, vulnerability to harm or damage, and associated risks. Some communities are well-resourced to focus on the challenges ahead, but others lack capacity or allocated funds to address growing flood risks.

With so much at stake, we cannot afford a hands-off approach. The CRMP charts a comprehensive path toward long-term resilience to protect people, homes, businesses, infrastructure, and ecosystems from the impacts of coastal

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flooding. The 2020 Coastal Resilience Master Planning Framework established the guiding principles, goals, objectives, and desired outcomes for the CRMP and related state resilience initiatives. The 2021 CRMP (Phase I) modeled current and future land exposure to coastal flood hazards; estimated the impacts of exposure on key assets; identified areas with both high social vulnerability and coastal flood exposure; established an inventory of locally driven coastal resilience programs; established an inventory of grant and loan programs; and created an online coastal resilience database and web explorer. Phase II of the CRMP is currently in development and will be released by December 2024. This phase of work will build on the Phase I plan by incorporating all major flood hazards, including precipitation-driven flooding; updating the analysis of impacts of flood exposure; and updating the coastal resilience programs and funding inventory.

PROPOSED PROJECT DESCRIPTION, ACTIVITIES, AND GOALS (300-500 WORDS)

Phase II of the CRMP will be released in December 2024. Section 10.1-658 of the Code of Virginia requires that the plan be updated at least every five years. Looking ahead to 2029, uncertainty is assured; scientific knowledge, our communities, and our resilience governance will continue to evolve. To ensure the plan's success, DCR and its partners must keep pace with these changing conditions by identifying measures of success for plan, monitoring and evaluating progress, and learning from our findings to adapt ahead of the next iteration of the plan.

Establishing metrics to monitor and evaluate success in climate adaptation strategies is a contemporary challenge and opportunity broadly acknowledged by practitioners and researchers globally. For example, the Fifth National Climate Assessment states: "Although valuable for decision-making and evaluating effectiveness, indicators of resilience, adaptation responses, and adaptive capacity remain relatively limited."¹ Though we quantify and track measures such as grant funding dollars accessed, number of flood resilience plans and projects, and number of government staff dedicated to adaptation initiatives, indicators that track desired outcomes for flood resilience and adaptation have not yet been identified for Virginia's coastal region.

The primary responsibility of the fellow will be to support DCR to develop the adaptive management plan for the CRMP. Key components of this plan will include: qualitative and quantitative monitoring metrics; a monitoring and evaluation approach and process (including engagement of external stakeholders); recommended roles, responsibilities and resources for plan implementation; and decision points that can be adjusted in response to this information as well as other stakeholder inputs and context. The fellow will be responsible for tasks such as conducting research, interviewing key stakeholders, presenting findings, and developing adaptive management plan content. The fellow may also participate in other activities to support the work of the Office, including outreach and engagement for the CRMP, supporting the development of the VFPMP, staffing the Technical Advisory Committee, supporting the Annual Flood Preparedness Coordination Meeting, and other duties as assigned.

The fellow will report to the Office of Resilience Planning Program Manager and work together closely with other Office staff to carry out his or her duties. Additionally, DCR ORP has contracted with top resilience planning and consulting firms to support the accomplishment of its work. The fellow will engage with the contracted consulting firms and other external stakeholders in carrying out the project activities.

¹<https://nca2023.globalchange.gov/chapter/appendix-4/>

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The chosen fellow should have an interest in climate adaptation policy, and environmental and flood impacts, and adaptation strategies.

CONTACT INFORMATION

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NAMES AND E-MAIL OF ADDITIONAL MENTORS

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