Resilience Knowledge Capture and Transfer Project Overview

Project Overview

The National Fish and Wildlife Foundation (NFWF) commissioned Eastern Research Group, Inc. (ERG) to conduct a yearlong project in 2021 to gather and share best practices from coastal resilience practitioners to enhance implementation of coastal resilience efforts across the United States. The project encompassed a review of more than 100 source documents, as well as interviews with resilience practitioners. NFWF and ERG used the findings from this research to develop eight case studies documenting successful projects throughout the country.

Methods

NFWF employed the following methods to develop the case studies:

- **Grant document review** (64 documents total) across three NFWF grant programs: the Hurricane Sandy Coastal Resiliency Grant Program, National Coastal Resilience Fund, and Emergency Coastal Resilience Fund. Document review focused on capturing basic project characteristics (e.g., award year, funded amount, organization type, project type), as well as project challenges, solutions, and lessons learned.

- **Literature review of grey and peer-reviewed literature** (14 sources total) based on key terms such as resilience/resiliency, coastal resilience/resiliency, permitting, coastal restoration, project implementation, best practices, and lessons learned.

- **Assessment of existing learning products related to coastal resilience** (21 products total) developed by other resilience practitioners and organizations, including academic articles, instructional videos, trainings, and other tools. The learning products provided insights into the existing landscape of information and potential data gaps and information needs. They also served as models to consider in developing NFWF's own learning products under this project.

- **Semi-structured interviews with coastal practitioners** (60 respondents total), including from the three NFWF grant programs mentioned above, as well as other resilience practitioners identified through the document review. These individuals represented a broad range of organizations (e.g., academic institutions, nonprofit organizations, and government agencies) from a variety of coastal geographies. Interview topics included project goals, challenges, and successes, as well as stakeholder engagement and implementation strategies. Interviewees were also asked about their preferences for learning product formats and dissemination channels.

- **Beta testing of the developed case studies** (eight total) with eight coastal resilience practitioners, including NFWF grantees and others involved in learning product development and dissemination. Beta tests consisted of a brief interview with the practitioners to inform case study revisions and gather feedback on the learning products and determine their clarity, usability, transferability, and visual appeal.

Key Findings

Collectively, this research showed that resilience practitioners face many challenges in getting projects designed and implemented. Key challenges include policy constraints, rigid regulatory frameworks, organizational barriers such as limited staff capacity to undertake projects, and data and knowledge gaps related to site conditions, climate projections, and other topics.

In analyzing the approaches practitioners used to overcome these challenges, the following strategies were key elements of successful projects:

Partnerships are essential in helping practitioners navigate the complex landscape surrounding resilience projects and foster productive relationships with team members, partner organizations, and regulators.

Engagement strategies need to be effective, accessible, and inclusive so practitioners can strengthen outreach to and collaboration with the public in order to build political will and community support for project implementation.

Adaptive management approaches can often help practitioners manage project uncertainties and reduce risk in the face of changing environmental, social, and political conditions.

The research also illuminated gaps in the existing landscape of learning products and provided insight into the types of learning products practitioners find most useful. Learning product gaps included a need for information on transferrable community engagement and outreach strategies, descriptions of long-term resilience project outcomes, and examples of innovative approaches for designing resilience projects.

In the interviews, practitioners did not voice a preference for a particular NFWF learning product format but did express a desire for layered content that could be skimmed to understand the broad outlines of a project or explored more deeply for additional details. Practitioners also stated a need for descriptive resources and project contact information so they could learn more if desired.

Learning Product Development

To address identified gaps and provide practitioners with detailed learning products that offer applicable and transferrable project strategies, NFWF and ERG developed a series of eight project case studies in a web-based, printable PDF formats. To target areas where coastal resilience practitioners often face challenges, and present strategies to overcome these challenges, the case studies focus on the three topical key elements of success described above. The case studies represent a range of resilience interventions and project types from a cross section of U.S. coastal states and territories. The projects include using an adaptive management approach to guide dam removal and partnering with local communities to restore culturally significant wetlands. The web format was chosen to provide easy links to other resources, as well as the layered approach preferred by the practitioners interviewed.

More Information

For more information regarding this project, methods used, and the case studies, please contact NFWF's Program Director for Coastal Resilience, Jessica Grannis (Jessica.Grannis@nfwf.org).