

The State of Climate–Informed Water Resources Action in the Southeast and Caribbean

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Supporting sustainable water resources is key to the well–being of human communities, habitats, and species. Water resources are under pressure from a variety of sources, including increased competition, drought, floods, pollution, rapid urbanization, and climate change, among others. Climate–induced effects on the water cycle will alter hydrologic systems and intensify extreme weather events in different ways throughout the Southeast and U.S. Caribbean. In turn, these changes will affect how managers, planners, and other practitioners approach water resources management, planning, and conservation. Different mechanisms are available to support climate–informed water resources action, including increasing water supplies, protecting ecosystems, increasing water resource use efficiency, and improving flood protection, among others.

EcoAdapt’s State of Adaptation Program is a research initiative designed to facilitate adaptation action by surveying practitioners, assessing adaptation activities, writing in–depth case studies to catalyze creative thinking, and synthesizing information collected to further develop the field of study and action. Since 2009, we have surveyed over 3,000 practitioners and produced over 400 case studies of real–life, practical climate adaptation examples from the coasts of North America, the western states and provinces, and the Great Lakes. The State of Adaptation Program and the Climate Adaptation Knowledge Exchange (CAKE; CAKEx.org) work in concert to identify where and how adaptation is happening, create in–depth case studies, and disseminate resources and tools to the global adaptation community. In the course of our work, we have noted a significant gap in capacity and reported activity around adaptation in the southeastern United States and Caribbean islands, especially in relation to climate–informed water resources.

This project surveyed, documented, and assessed climate adaptation activities, needs, and opportunities in water resources planning, conservation, and management in the Southeast and U.S. Caribbean. This presentation will include discussion of the current science, tools, and approaches for building climate resilience into water resources, as well as results from the needs assessment survey and case studies of on–the–ground action.