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CITY OF CHARLESTON

# Church Creek Flood Storage and Resiliency Action Plan

Charleston, South Carolina



Small pockets of rich lowcountry wetland systems that remain within the basin are priorities for protection.

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*A flood-prone region of Charleston, South Carolina turns to nature-based solutions for protection and resilience.*

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## SERVICES

Ecological Restoration  
Conservation  
Climate Change  
Coastal  
Infrastructure  
Water  
Urban Ecology  
Community

Charleston, South Carolina's Church Creek Basin includes nearly 5,000 acres between the Ashley and Stono Rivers. Once a low-lying forested wetland that was regularly inundated, the area was managed heavily for rice cultivation and phosphate mining, then remained in fields and forest until suburban development intensified in the 1970s and 80s. Today, it experiences persistent flooding from rain and tidal events. As part of the City of Charleston's ongoing efforts to improve flood control in the basin, and as an outcome of the recent resilience planning in Dutch Dialogues Charleston™, the City sought new, multi-benefit solutions.

Biohabitats is working with the City to identify, evaluate, and prioritize opportunities to implement nature-based solutions and green infrastructure to protect the basin, promote community resilience, improve recreation and connectivity to natural spaces, and enhance ecosystem services and hydrological function. The project involves two primary components: evaluating and developing green infrastructure installations on residential properties that have been acquired by the City for flood mitigation; and identifying and developing nature-based approaches, such as floodplain, wetlands, bioretention, and stream re-naturalization, on larger properties to create regional stormwater storage and native habitat.

Biohabitats is currently designing forest and wetland restoration projects on 20 acres in the basin, which will proceed to construction by 2022.