

# Church Creek Restoration Project

In 2021, Google announced a new <u>water stewardship commitment</u> to replenish more water than we consume by 2030 and support watershed health projects that benefit communities and ecosystems. The Church Creek Restoration Project in South Carolina is one of the projects Google is supporting as a partner.



The project plan includes creating wetlands, flood benches, stream rehabilitation, and bioswales around Crosstowne Church and West Ashley Circle.



Location of Church Creek in Charleston, SC.



The mouth of Church Creek where the floodplain widens and becomes tidally influenced.

# The Challenge of Increased Flood Risk

From increasingly high tides to stronger hurricanes to extremely heavy rainfall events, the Charleston, South Carolina area is experiencing multiple flood events each year that adversely impact businesses, tourism, homeowners, and emergency management services. The City of Charleston is making efforts to adapt to rising waters and to manage associated risks, including through various initiatives laid out in its <u>Flooding and Sea Level Strategy</u>. This strategy recognizes the value of enhancing natural floodplain function as an important approach to flood mitigation.

## **The Project**

The Church Creek Restoration Project is part of the City's efforts to enhance natural floodplain function to reduce flood risk and restore habitat. The project will benefit the residents of the West Ashley neighborhood of Charleston, which is part of the 5,000-acre Church Creek watershed that is heavily impacted by flooding. The current phase of the project is focused on reconnecting 20 acres of floodplain wetlands for the purpose of flood mitigation.

### **Impact**

This project will provide storage capacity for excess water during rain events. The project will provide the additional benefits of improving water quality, creating habitat, and restoring the ecosystem for 20 acres of land to a more natural state.

In the long term, the Project seeks to use a series of nature-based strategies to eventually connect a large saltmarsh on the southern end of the watershed with an extensive forested wetland complex on the northern end of the watershed. These strategies will eventually include restoration of 33 acres of floodplains, 28.5 acres of land, 2.5 miles of streams, and 29.5 acres of wetlands. These nature-based solutions will help mitigate flooding and enhance the ecosystem and health of the Church Creek watershed.

### **Partners**

Google, which has a data center to the north in Moncks Corner, South Carolina, is one of several funding partners of the Church Creek Restoration Project. Additional partners include: the City of Charleston, The Nature Conservancy (TNC), the National Fish and Wildlife Foundation's Emergency Coastal Resilience Fund, South Carolina Sea Grant Consortium, Clemson Extension, and the Water Institute of the Gulf.

