PROJECT: A Resilient Shoreline on SR-A1A in Miami Beach

RECIPIENT: City of Miami Beach

FUNDS: \$34,965

SUMMARY: The Greater Miami and the Beaches 100 Resilient Cities partnership designated this as a priority pilot project due to the critical need toward local sea level rise adaptation efforts, as well as the road's regional importance and exposure. State Road A1A is an arterial roadway in the City of Miami Beach that serves as a hurricane evacuation route for the coastal community. As recently as 2017, the road has experienced chronic tidal flooding due to low road and seawall elevations, as well as aging infrastructure that make the roads unpassable to pedestrians and vehicles. This is of particular concern given that this residential and commercial section of the island depends solely on SR-A1A for ingress and egress. A resilient shoreline along SR-A1A in Miami Beach is a critical component of sea level rise adaptation for the area. There is an existing partnership between the City of Miami Beach and the Florida Department of Transportation to raise the roadway, rehabilitate the shoreline and protect this key transportation corridor from flooding. The Resilient Shoreline will utilize a green infrastructure design to buffer this new infrastructure and the surrounding community from storm and flood damage; it will create habitat; and, it will provide additional ecological benefits in a densely urbanized, highly trafficked area of Miami Beach. The planter will be constructed of a rock or concrete rubble base underlying layers of filler stone and top soil mixture of organic material and sand. The riprap will be configured to a peak extending 1.34 feet above the mean high water elevation to contain the soil and will incorporate five-foot-wide gaps at the north and south ends and every 100-feet along its length to allow for natural hydrodynamic flow and the passage of fish and wildlife into the habitat.