Clean Water
State Revolving Fund

WARDOLA-THOMPSON SCHOOL CREEK RESTORATION

STATE PROGRAM: North Carolina Department of Environmental Quality

ASSISTANCE RECIPIENT: City of Jacksonville

ASSISTANCE AMOUNT: Nearly $500,000

PROJECT DESCRIPTION

Wilson Bay and its tributaries, including the Thompson School Creek estuary, have been designated as primary nursery areas for anadromous fish species such as Red Drum, Blue Crab, Sea Trout, Bass, and Sturgeon. Two undersized drainage pipes under Wardola Drive used to drain residential stormwater into the Thompson School Creek watershed. The pipes were 75 percent filled with sediment and flanked by a dam on both sides, which reduced the flow of brackish water and turned the Creek into a freshwater ecosystem. This created velocity and behavioral barriers which prevented fish migration and spawning habitat. This blockage also inhibited proper drainage and periodically flooded the community during large rain events. To upgrade this drainage system and restore the fish passage to the estuary, the City of Jacksonville received nearly $500,000 from the CWSRF towards a $717,000 drainage improvement project. The project replaced two undersized culverts and a dam that blocked the Creek with a 30-foot-long bridge to improve connectivity for anadromous fish passage. This will help restore the estuary by creating over one acre of primary nursery habitat. The project enhanced approximately 230 feet of stream buffer and recorded a conservation easement through the replacement of invasive plants with native species. This drainage project will protect the estuary from increased tidal flux and will ensure the long-term conservation function of Thompson School Creek and Wilson Bay estuary habitat in a manner consistent with the Estuary Habitat Restoration Strategy.

To read more about this case study, please visit https://www.epa.gov/system/files/documents/2022-02/2021-pisces-compendium.pdf.