

Clear Run Branch Drainage Improvement and Stream Restoration Project

FUNDING SOURCE & AMOUNT

National Fish and Wildlife Foundation - Emergency Coastal Resilience Fund (ECRF)

- > \$1,410,345 award
- \$4,500,000 matching funds committed by City of Wilmington

TIMEFRAME

Awarded March 2020 Period of Performance is February 1, 2020 to June 30, 2022

GRANT ADMINISTRATOR

City of Wilmington, NC

GRANT PARTNERS

City of Wilmington, NC Moffatt & Nichol Kris Bass Engineering

SUMMARY / DESCRIPTION

The Clear Run Branch sub-watershed, within the larger Bradley Creek Watershed, encompasses an urban center for City of Wilmington and major transportation route for egress and ingress into the City via S. College Road. Clear Run Branch drains to Bradley Creek, which then drains into the Intracoastal Waterway and the Atlantic Ocean (as shown in the adjacent aerial image). Bradley Creek is classified as a Primary Nursery Area (PNA). The sediment that enters Bradley Creek from streambank erosion in the Clear Run watershed has a negative environmental impact on the functioning of this PNA. Restoration and stabilization of Clear Run's banks will improve the functioning of the downstream Bradley Creek PNA.

A comprehensive watershed management plan was prepared for Bradley Creek in 2011 using EPA Section 319 grant funding. The City and other stakeholders continue to implement various parts of this plan since it's adoption. The work to restore the floodplain and stream channel of Clear Run Branch is part of this larger effort and the creation of additional floodplain along Clear Run is viewed favorably in the Bradley Creek restoration plan.

This grant project will construct a stable stream channel that can safely accommodate high flows of urban runoff from upstream development during storms and alleviate flooding along the channel. Project will restore/enhance 7.5 acres of floodplain habitat and 5,900 feet of stream channel.

GRANT GOAL(S)

- Design and implement a stable channel that will effectively transport the sediment load from the watershed while maintaining its dimension pattern and profile.
- Alleviate existing problems with nuisance flooding along the stream reaches.
- Provide habitat and water quality improvements for resident aquatic species by reducing the load of fine sediment moving through the system, introducing woody structures and variable channel bed form, replanting disturbed sections of the floodplain buffer, and removing invasive plant species throughout the stream corridor.
- Improve drainage velocities and water quality along approximately 7,500 linear feet (1.4 miles) of stream leading into Bradley Creek, which is classified as a PNA and drains into the Intracoastal Waterway and the Atlantic Ocean. Restoration and stabilization of Clear Run's banks will improve the function of the downstream Bradley Creek PNA.
- Implement a minimum of 3 years of monitoring per state and federal permit compliance.













