

# Town of Vandemere

## Drainage Improvements



### LOCATION

Pamlico County, NC

### FUNDING SOURCE

N.C. Department of Environmental  
Quality – Resilient Coastal  
Communities Program (RCCP)

### FUNDING AMOUNT

\$250,000

### Community Context

The Town of Vandemere is a small coastal community located where Vandemere Creek meets the Bay River. **Frequent flooding from heavy rainfall, high tides, and coastal storms has long affected roads, homes, and public access areas.** Aging drainage infrastructure and limited capacity for maintenance made it difficult for the Town to manage stormwater effectively, increasing flood risks and disrupting daily life.

### The Approach

Through the Resilient Coastal Communities Program (RCCP), Vandemere identified drainage improvements as a top resilience priority. Building on earlier RCCP planning and assessments, the Town implemented targeted infrastructure upgrades combined with nature-based solutions to improve stormwater flow and reduce flooding.

### Project Elements

The completed improvements have **significantly reduced localized flooding** during heavy rain and high-tide events. Improved drainage now protects roads, nearby homes, and public spaces while restoring more natural water movement through the system.

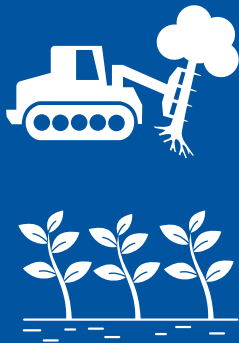
Nature-based features slow runoff, improve water quality through natural filtration, and enhance habitat connectivity. **By combining traditional infrastructure with natural solutions, the project delivers durable flood protection while supporting environmental health.**

Vandemere's drainage improvements demonstrate how small coastal communities can use practical, cost-effective strategies to reduce flooding and prepare for future climate impacts. **The project shows that integrating natural and engineered solutions can strengthen resilience, protect residents, and improve local waterways.**



*Before drainage improvements*

## Town of Vandemere Before/After Improvements



### Key project elements included:

- Replacing undersized and deteriorated culverts
- Clearing, widening, and regrading drainage ditches
- Removing sediment and debris to restore flow capacity
- Reconnecting portions of the Town's historic, tidally influenced ditch network
- Stabilizing eroding areas with vegetated riprap and native plantings

### Project Partners & Next Steps

This project was funded by the N.C. Department of Environmental Quality's Resilient Coastal Communities Program (RCCP). The Town of Vandemere partnered with TRC to design and implement the improvements.

With construction complete, the Town will continue monitoring and maintaining the upgraded system to ensure long-term performance. Lessons learned will help guide future resilience projects in Vandemere and across coastal North Carolina.



North Carolina  
Coastal Resiliency

