

Kerr McGee Phase I Restoration: Project Updates

Krista McCracken, Case Team Lead

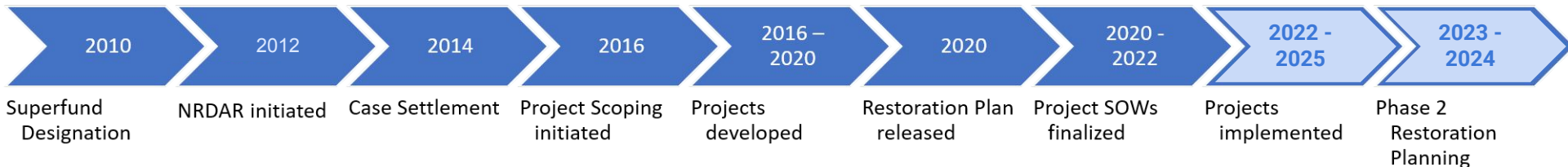
Natural Resource Trustee Council

NOAA Restoration Center



Kerr McGee: Natural Resource Damage Assessment & Restoration (NRDAR)

- 2012 NRDAR process initiated
- \$23M recovered for restoration of injured natural resources & services
- Final Phase 1 Restoration Plan Released June 2020
- Late 2020 - Present
 - Updating project timelines and budgets
 - Finalizing awards, Implementing projects

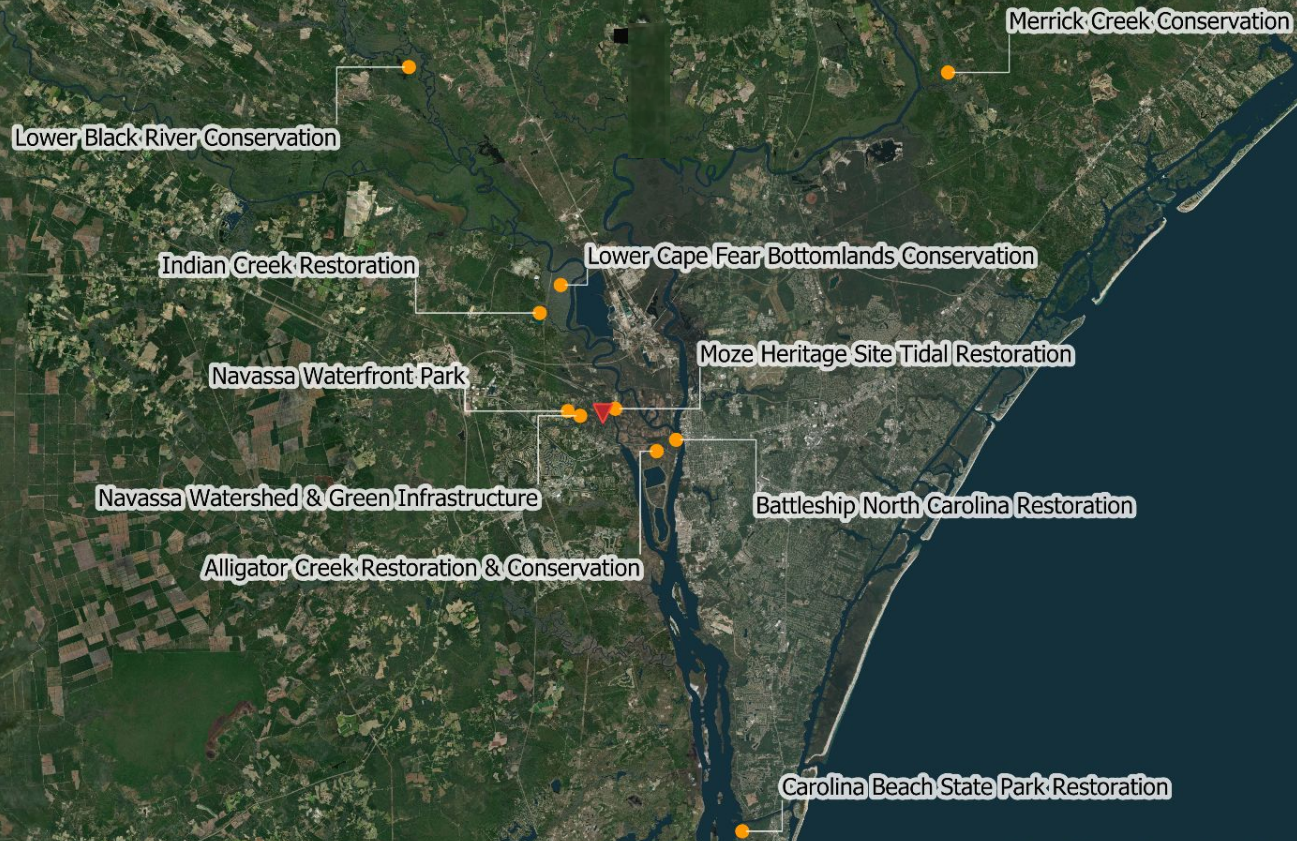


Project

Lead Organization

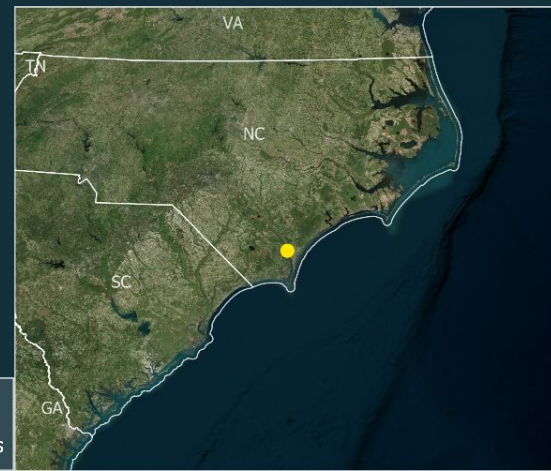
	Debris Removal	Wetland Restoration	Oyster Restoration	Shoreline Stabilization	Invasive Species Management	Conservation	Public Access
Alligator Creek Restoration and Conservation							
<i>Unique Places to Save</i>							
Battleship North Carolina Restoration							
<i>USS NC Battleship Commission</i>							
Carolina Beach State Park Restoration							
<i>NC Coastal Federation</i>							
Lower Cape Fear Bottomlands Conservation							
<i>NC Coastal Land Truste</i>							
Lower Black River Conservation							
<i>The Nature Conservancy</i>							
Merrick Creek Conservation							
<i>The Nature Conservancy</i>							
Indian Creek Restoration							
<i>Town of Navassa</i>							
Navassa Waterfront Park							
<i>Town of Navassa</i>							
Moze Heritage Site Tidal Restoration							
<i>Town of Navassa</i>							
Navassa Watershed and Green Infrastructure							
<i>Town of Navassa</i>							

Phase 1 Projects



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▼ Kerr-McGee NPL Site
● Restoration/Conservation Sites

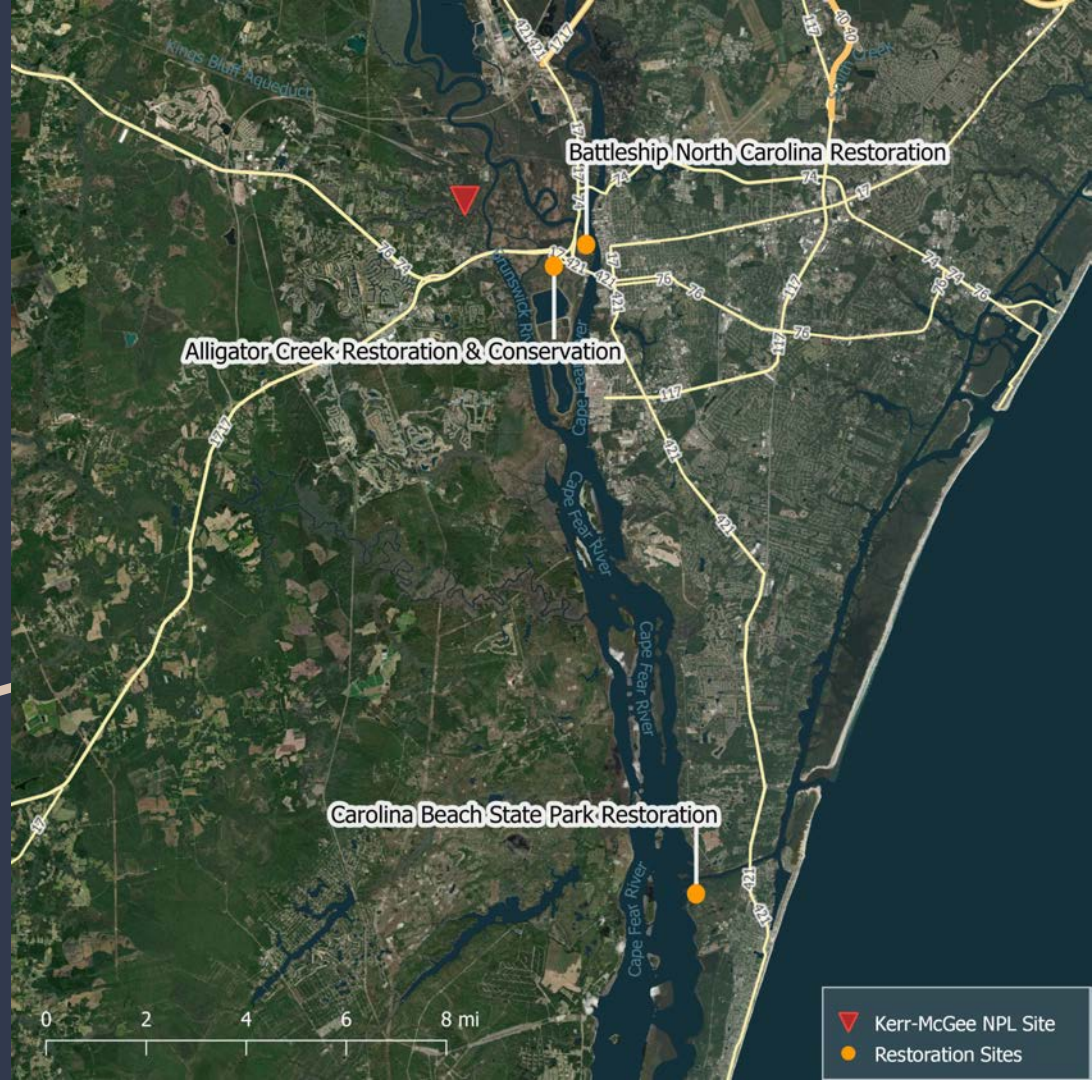


Restoration Project Updates:

Alligator Creek

Battleship North Carolina

Carolina Beach



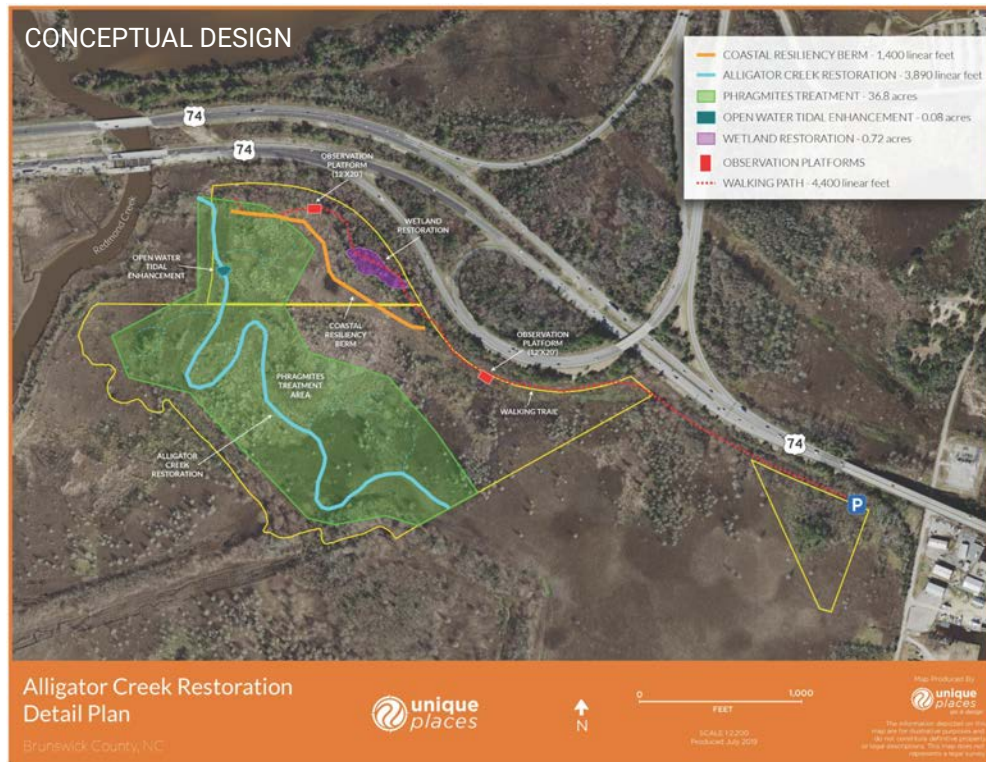
Alligator Creek Restoration & Conservation

Unique Places to Save

Goals: Re-establish hydrology along Alligator Creek (Eagle Island), restore marsh; public access and outreach.

Anticipated Timeline:

- Through Summer 2022: Baseline assessment, property acquisition
- Through Dec 2022: E&D, continued partner coord.
- Jan - April 2023: Permitting, partner coord. Pre-construction monitoring
- Fall 2023: Site preparation for construction
- Fall 2023 - Spring 2024: Construction



“Living With Water” Battleship NC Restoration

Battleship North Carolina

Goals: Restore marsh and shoreline, stormwater BMPs, education and outreach



Anticipated Timeline:

- Summer - Fall 2022: E&D, Permitting
- Fall - Winter 2022: Final Construction Plans, Bidding, Contractor Selection
- Jan - July 2023: Restoration
- Aug 2023-Nov 2025: Post-Restoration Monitoring
- Ongoing: Outreach

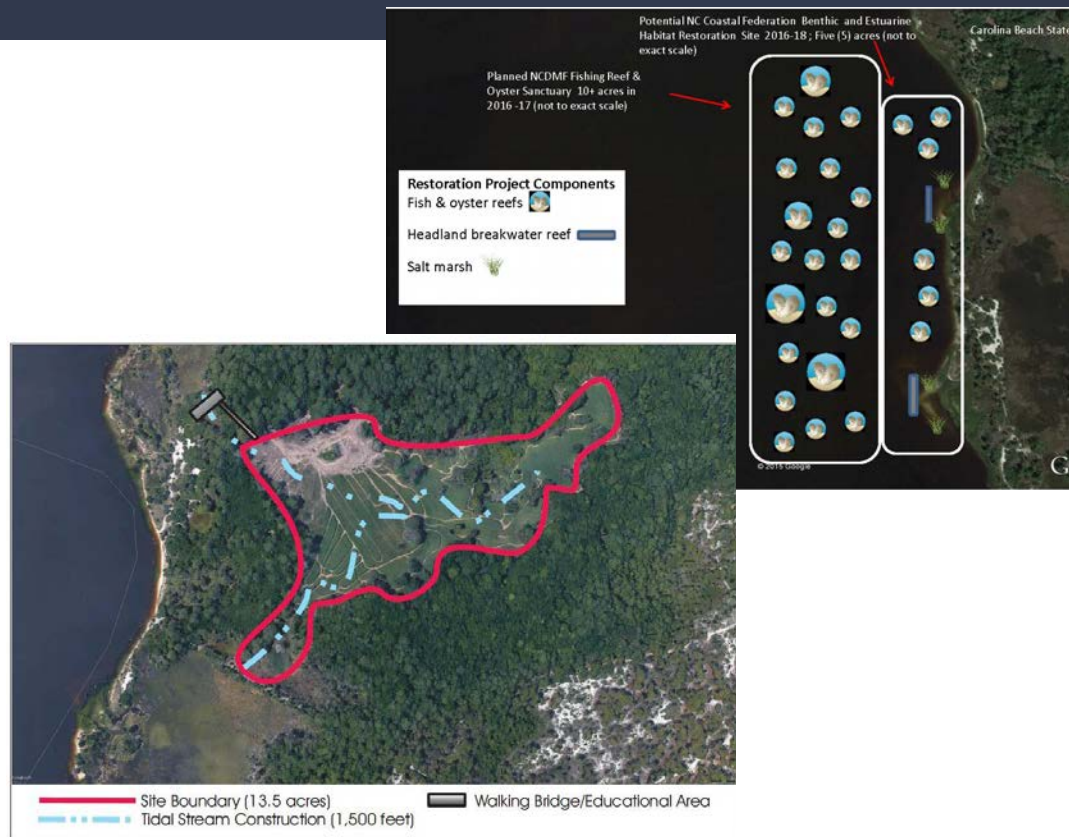
Carolina Beach State Park Restoration

NC Coastal Federation

Goals: Create benthic habitat, restore hydrologic and ecological function to degraded marsh

Anticipated Timeline:

- 2021-June 2022: Project Design for oyster, shoreline and marsh projects; permitting
- May - Dec 2022: Oyster/shoreline project construction, marsh restoration permitting, invasive species components
- Jan - March 2023: marsh restoration construction



Land Acquisition Project Updates:

LCF Bottomlands

Lower Black River

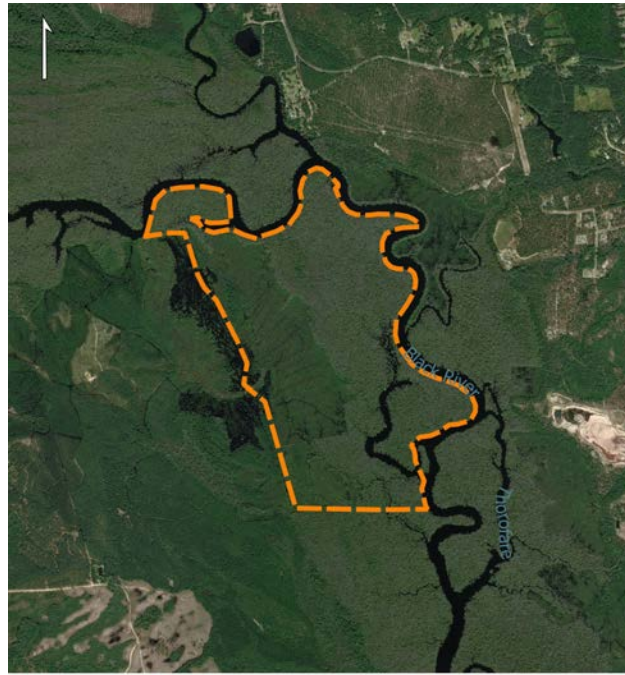
Merrick Creek



Land Acquisition Projects



Lower Cape Fear Bottomlands

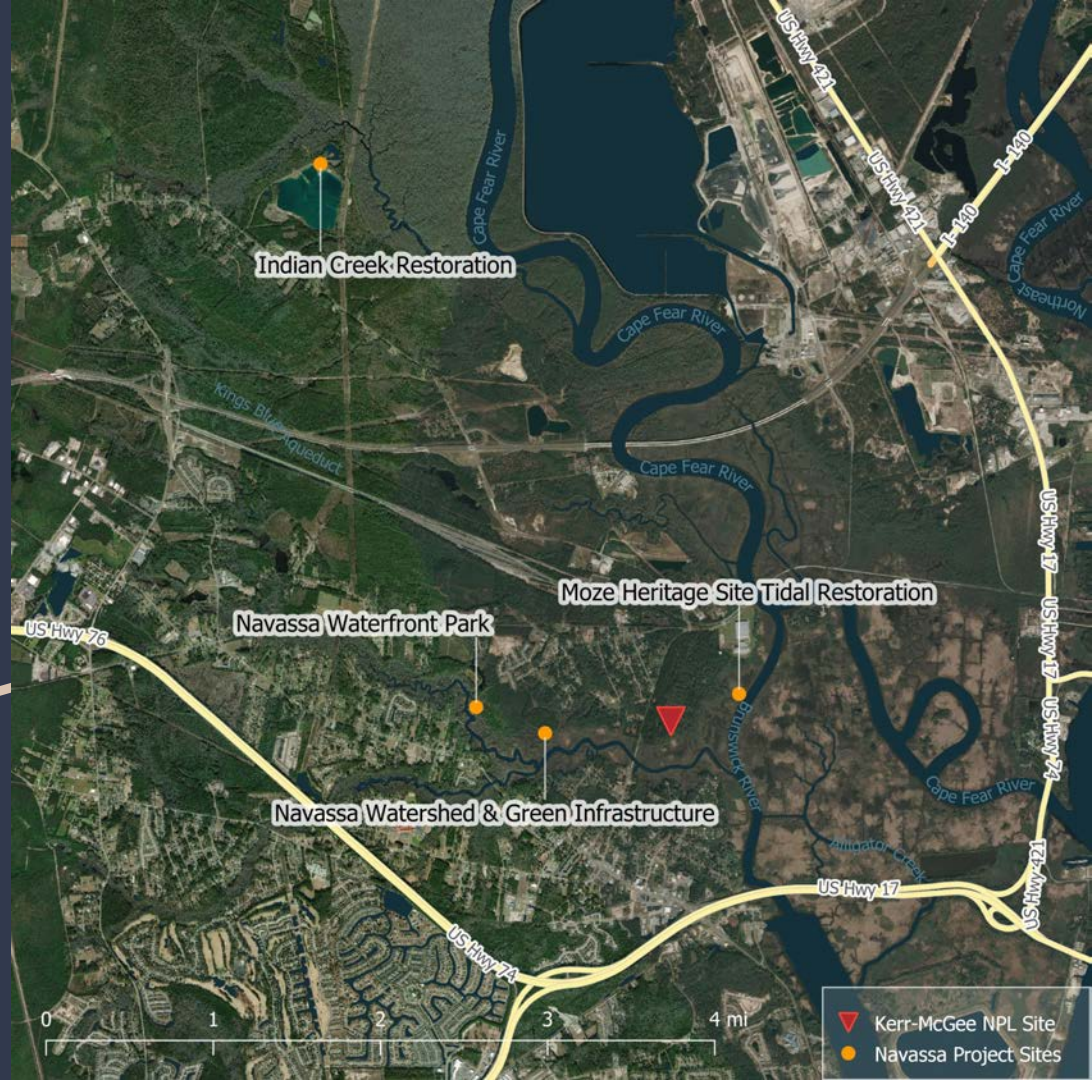


Lower Black River



Merrick Creek

Navassa Watershed & Green Infrastructure



Navassa Waterfront Park Restoration

Goals: Conserve tidal wetland along Sturgeon and Mill Creeks, public access

Anticipated Timeline:

- Jan 2022: Land Acquisition [COMPLETE]
- Jan - Sept 2022: Final Design, Permitting
- May - August 2022: Bush hogging, site prep, access road
- September - Oct 2022: Signage
- Nov - Jan 2023: Water access features
- Jan - Feb 2023: Pier installation

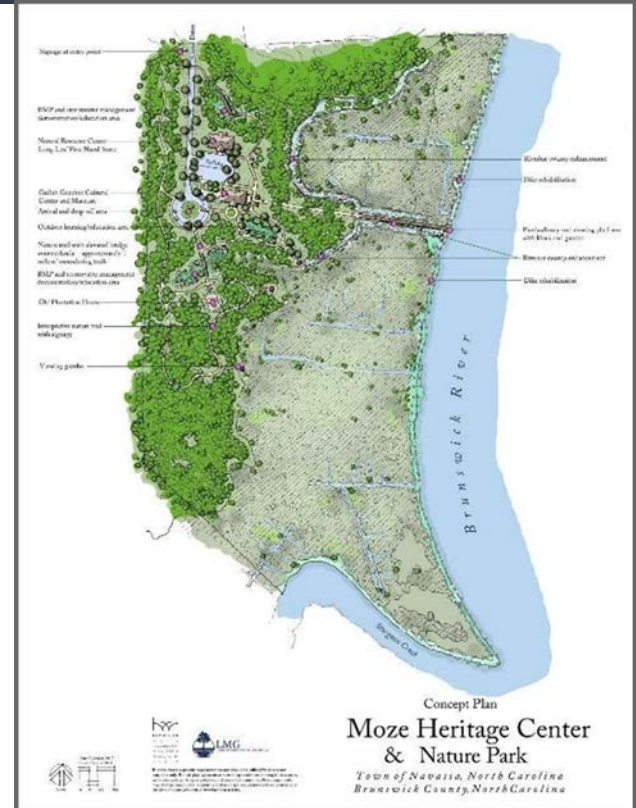


Moze Heritage Site Tidal Restoration

Goals: Conserve riparian buffer forest; enhance and preserve wetland habitats; provide public access and education resources

Anticipated Timeline:

- 2022: Finalize Land Donation
- Early 2023: Site Assessment/Evaluation
- Winter 2023: Design and Permitting
- Spring/Summer 2023: Mobilize construction

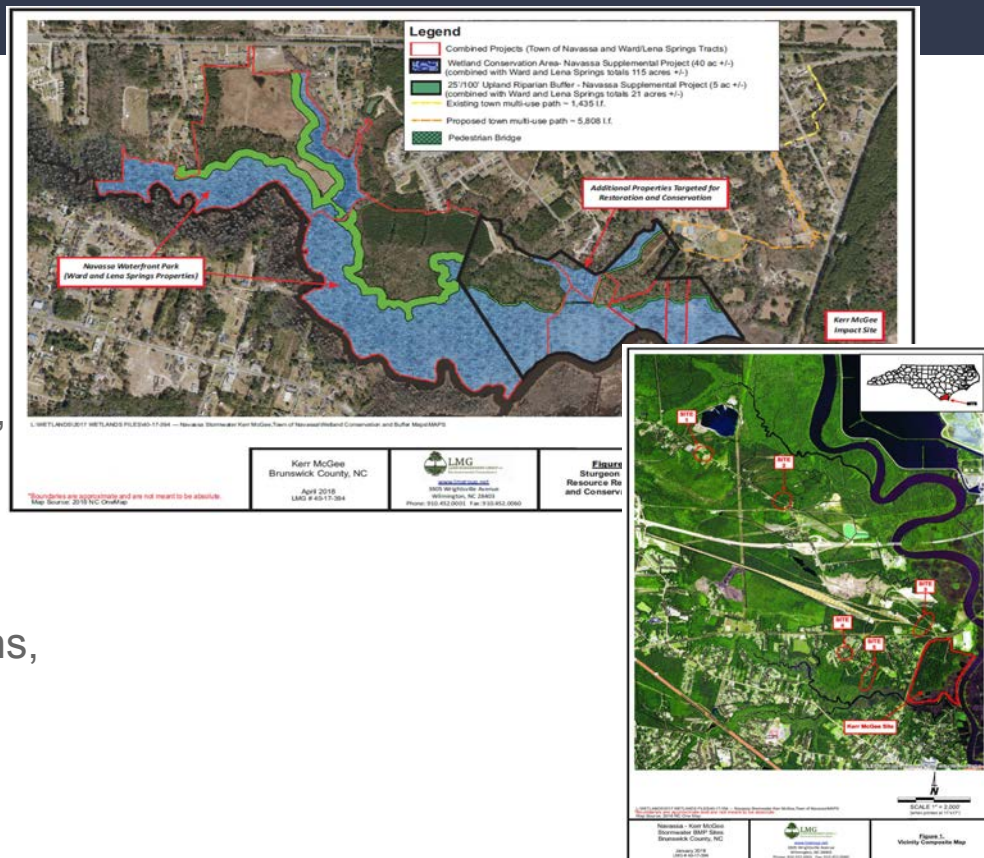


Navassa Watershed and Green Infrastructure

Goals: Develop and implement comprehensive watershed management plan, conserve and restore riparian wetlands and buffers

Anticipated Timeline:

- Jan - June 2022: Partnership coordination, watershed characterization
- June - Nov 2022: Watershed Plan Development
- Dec - March 2023: Pilot Project acquisitions, E&D
- 2022 - 2023: Sturgeon Creek/Redmon Creek Feasibility Assessment



Next Steps

- Near-term focus on the efficient and thoughtful implementation of Phase I projects
 - Construction activities projected through 2023 monitoring through 2025
- Employ an adaptive and flexible approach
- Phase II project scoping and restoration plan development tentatively planned for 2023-2024
 - Informal project submissions accepted at any time
- Improved resources and opportunities for communication

Natural Resource Trustees

NOAA

- Krista McCracken
- Ian Rossiter
- Howard Schnabolk
- Christina McDonald (NOAA Counsel)

US Fish and Wildlife Service

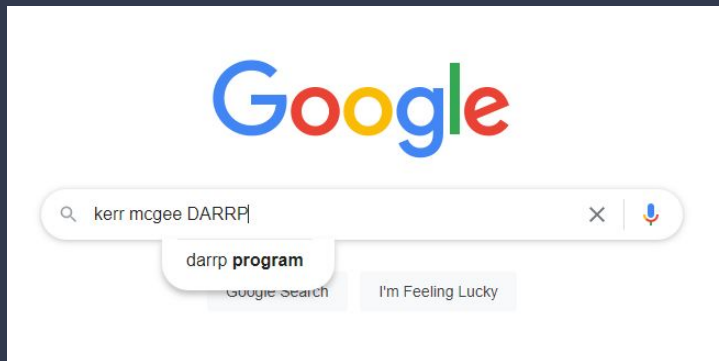
- Sara Ward
- Genette Gaffney (DOI Counsel)


NCDEQ

- Carolina Fonseca Jimenez
- Anjie Ackerman
- Doug Ansel (NCDEQ Counsel)



<https://darrp.noaa.gov/hazardous-waste/kerr-mcgee-chemical-corp-tronox>



**Damage Assessment, Remediation, and Restoration Program**

WHAT WE DO | OIL SPILLS | HAZARDOUS WASTE | SHIP GROUNDINGS | SCIENCE AND ECONOMICS | RESOURCES |

Kerr-McGee Chemical Corp. (Tronox)

Hazardous Waste Site | North Carolina | 1936 to Present

What Happened?

The Kerr-McGee Chemical Corporation Corp. site is a former creosote wood-treating facility located on a 250-acre parcel of land adjacent to the Cape Fear River, Brunswick River and Sturgeon Creek in Navassa, NC. The facility was established in 1936 and was operated by multiple owners until its final proprietor, the Kerr-McGee Chemical Corp., ceased operations in 1974.

The facility was dismantled between 1979 -1980. Creosote and sludge remaining from the wood treatment process were left on site, which led to the release of **SVOCS**, most notably **PAHs**, into the surrounding environment. In 2010, EPA designated the property a **Superfund site**. NOAA and other Trustees have continually coordinated their activities, with the cleanup actions performed by EPA and the North Carolina Department of Environment and Natural Resources.

What Were the Impacts?

PAHs were released into the soils, groundwater, and surrounding marsh sediments at the site. Levels of contamination in marsh sediments remain high enough to continue to have negative impact on the marsh habitat and the ecological service it provides. For example, the high levels of contamination present at the site harm the bottom-dwelling organisms that support the aquatic food chain. The surrounding aquatic environment provides important habitat for many types of fish and wildlife, including American shad, Atlantic sturgeon, Atlantic menhaden, southern flounder, and spotted and striped bass.

What's Happening Now?

A settlement was reached with the [responsible party](#) in January of 2014, providing more than \$23 million for restoration for this site. This settlement is part of a larger [\\$5.15 billion settlement](#) with Anadarko Petroleum Corporation, the largest environmental settlement in U.S. history at the time.

Planning and implementation of projects will occur in phases. In October 2019,



Aerial map illustration showing the location of the former Kerr-McGee wood-treatment processing plant in Navassa, NC.

"Restoration, creation, and protection of marsh and riverine habitats will help to make up for the environmental injuries from the Kerr-McGee Site by providing an opportunity to generate additional fish and wildlife in the Cape Fear Basin."

Howard Schnabolk
NOAA Restoration Center



View larger map