

Eroding Trust Building Resolve

How coastal erosion revealed decades of mismanagement by government agencies and prompted Buxton, NC, a coastal community to take action.



**North Carolina Beach, Inlets and
Waterways Association**

Fall Conference

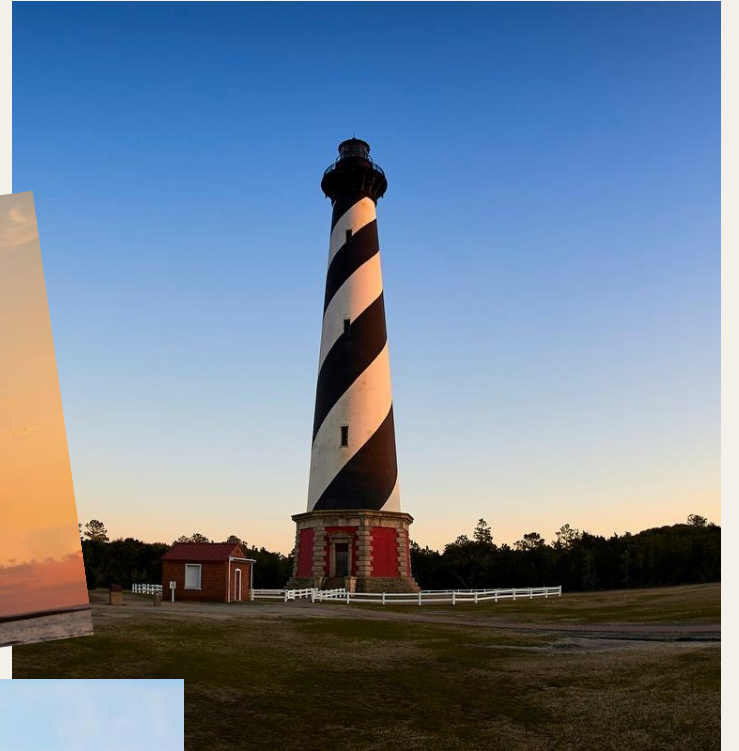
November 18, 2024

Wilmington, NC

Buxton, NC

> Outer Banks

> Hatteras Island





(Pullen, 2024)



How Did We Get Here?

- + 1953 – Cape Hatteras National Seashore Established
- + 1956 – Special Use Permit* Issued to US Navy
 - + 1956 – 1982 – Naval Facility Cape Hatteras
- + 1982 – US Coast Guard Assumed Use** from US Navy
 - + 1982 – 2010 – Coast Guard Group Cape Hatteras
- + 2010 – Returned to Management by National Park Service



Important Notes

- + Special Use Permit

11. The permittee shall remove all structures, foundations, and pavements, and clean up and restore the site prior to or immediately following termination of use.

- + US Coast Guard Refused Management of Several Buildings

 - + These buildings – “Building 19” and “The Driftwood Club” are the buildings that are now the center of some of the issues

- + 1998 – Area Declared “Formerly Used Defense Site” (FUDS)

- + Adjacent/Surrounding Area managed as Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) site by USCG

September 2023

- + Strong petroleum odors prompted closure of beach due to public health concerns

February 2024

- + Recurrence of strong odors and visible sheen on the ocean
- + Surfers complained of headaches, nausea, and film on wetsuits, skin, and on hair
- + Samples revealed TPH-DRO levels 65x the actionable level

Previous Cleanup Efforts

- + 1989 – USACE removed multiple aboveground storage tanks
- + 1998 – USACE completed additional cleanup efforts after USCG removed 27 underground storage tanks
- + 2001 – USACE prepares Corrective Action Plan which included additional groundwater monitoring wells, demolition, soil remediation

Previous Cleanup Efforts, *continued*

FINAL

Soil Cleanup Report
FORMER BUXTON NAVAL FACILITY
MULTIPLE SITES

BUXTON, NORTH CAROLINA
(252) 995-6437

Groundwater Incident # 6787
RISK – Low (110/D)

LATITUDE AND LONGITUDE OF RELEASE:
N35° 16' 45" W75° 1' 18"

January 2005

PREPARED FOR:
DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS (USACE)
100 West Oglethorpe Avenue
Savannah, Georgia 31401

PREPARED BY:
HORNE ENGINEERING SERVICES, INC.
311-J South Westgate Drive
Greensboro, North Carolina 27407
Telephone (336) 299-5151 • Fax (336) 299-0083

Project No. 3353

RECEIVED
JAN 24 2005
SUPERFUND SECTION

4006 tons or 2707 cubic yards of petroleum contaminated sediments (PCS) were removed by March 2004

During the CSA, contamination containing oil and grease-range components was discovered east of the road in the vicinity of the former pipeline. Naphthalene was the only petroleum-related groundwater contaminant found in excess of NCDENR standards.

As previously discussed in this report, Area I was not excavated to the full extent as presented in the Workplan due to the presence of underground concrete slabs and critical utilities. Refer to Figure 5. All sample locations and depths are presented in Figure 4.

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More Recent Action

- + After the February 2024 events of strong odors and visible sheen as well as erosion and storm events revealing substantial physical infrastructure and safety hazards, the community took action
- + Buxton Civic Association formed in April 2024 with the Buxton Beach Issues serving as a catalyst
- + Dare County Commissioners travelled to Raleigh to ask for assistance at a state level

Community Outcry

New Buxton Civic Association outlines the work ahead to fix Buxton Beach at heated public meeting

April 11, 2024 | Local News | By: Joy Crist

Buxton beach needs help

Published 12:48 pm Thursday, March 21, 2024

By Mary Helen Goodloe-Murphy

Buxton Beach frustrations simmer at Dare County Board of Commissioners meeting

September 4, 2024 | Local News | By: Joy Crist | 

NEWS

Buxton Civic Association forms to tackle pollution at old naval base

by: [Nick Broadway](#)

Posted: Jul 23, 2024 / 08:43 AM EDT

Updated: Jul 24, 2024 / 01:47 AM EDT

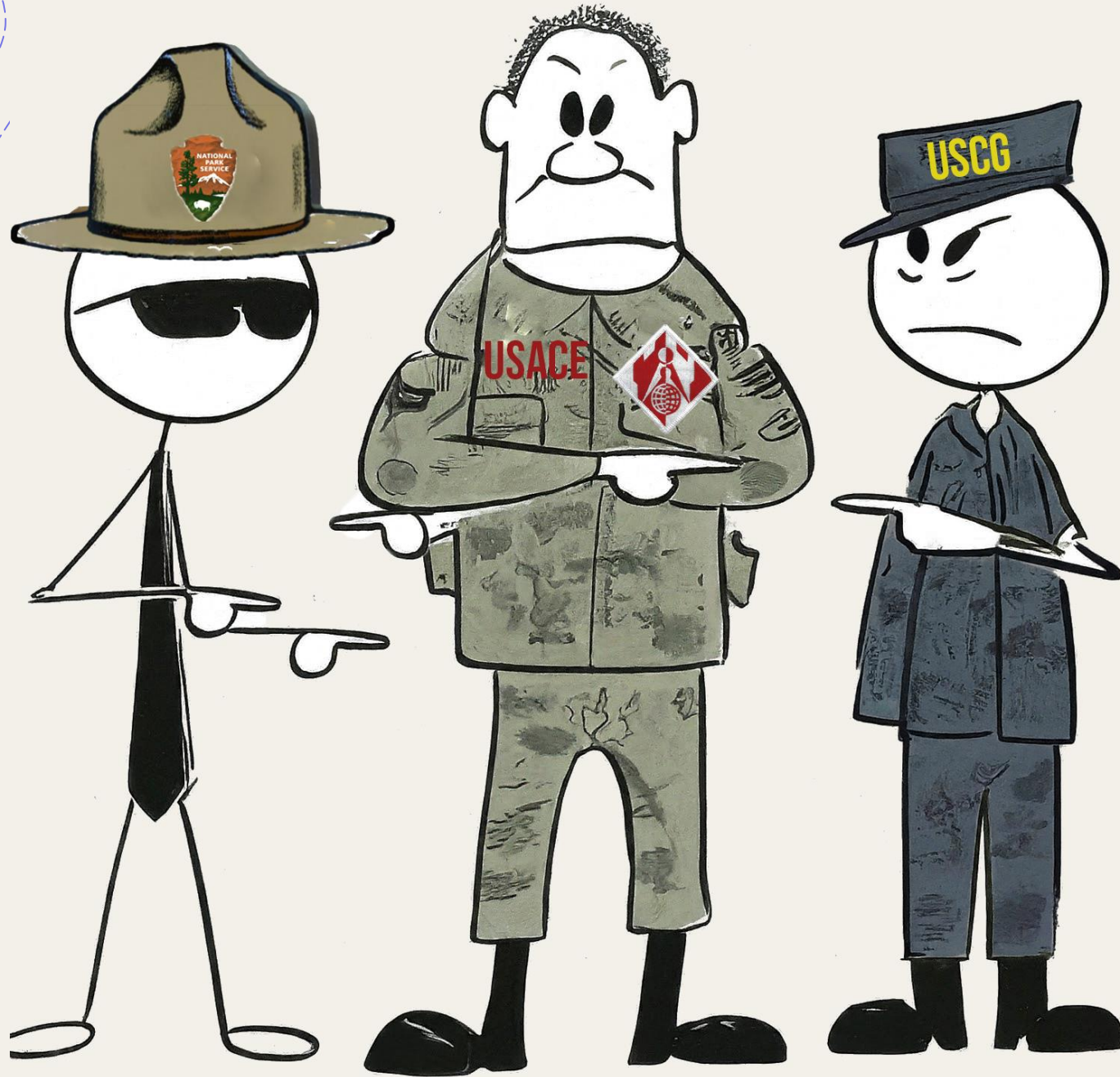
Dare County thanks community members, Buxton Civic Association for current remediation efforts at Buxton Beach

September 18, 2024 | Local News

Navy, USACE and Coast Guard told to provide work plan for Buxton beach cleanup

Published 8:20 am Sunday, April 28, 2024

By Mary Helen Goodloe-Murphy



If Not You,
Who?

US Army Corp of Engineers

+USACE division of DOD to execute the FUDS program

+FUDS Handbook States:

“The type of cleanup required varies from property to property, and can include cleaning up hazardous, toxic and radioactive waste sites; removing munitions and explosives of concern and munitions constituents; or doing building demolition and debris removal if the building or structure was unsafe at the time of transfer.”

US Army Corp of Engineers

BUT

+Current Stance on Buxton Beach:

“When the Navy ceased control of the Buxton Naval Facility in 1982, buildings and structures were safe and the vast majority of the facility was subsequently and beneficially used by the U.S. Coast Guard. Current unsafe conditions are a result of the remnant Navy infrastructure being exposed by erosion on the beach. These conditions did not exist when the property was transferred from Navy control in 1982. For these reasons, USACE does not have the authority under the FUDS Program to address these conditions. This question has been considered and evaluated by USACE’s highest organizational levels.”

WAS

IT?

Most Recent Efforts by USACE

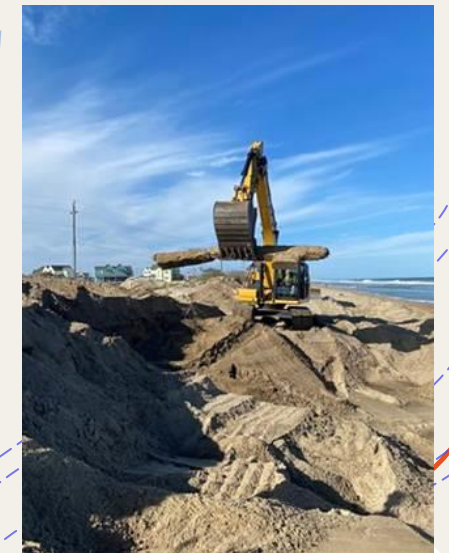
- + May 2024 – 70'-80' Section of Pipe Removed
 - + Test Results still "Pending" but did reveal actionable levels of petroleum
- + September 2024 – team deployed to perform more immediate remediation action
- + At that time, there was still no commitment to removing infrastructure, physical hazards

USACE TAKES ACTION

+ Fall 2024 – Huge Steps Forward

Approximate Cumulative Removal Quantities (as of 10/30/24)

Petroleum-Impacted Soil (Cubic Yards)	Petroleum-Impacted Water (Gallons)	Concrete (Pounds)	Pipe (Feet)	Metallic Debris, Cable/Wire (Feet)
505	11,000	84,400	1,133	1,030



(USACE, personal communication, November 6, 2024)



What Have We Learned

????

We Need Beach Stabilization.

Now.



Buxton Beach Late 1960s

- US Navy Contracted with the US Army Corp of Engineers to construct the jetties
- Built to address coastal erosion that was threatening the Navy Base as well as the historic Cape Hatteras Lighthouse



(US Department of Interior, National Park Service, 1972)



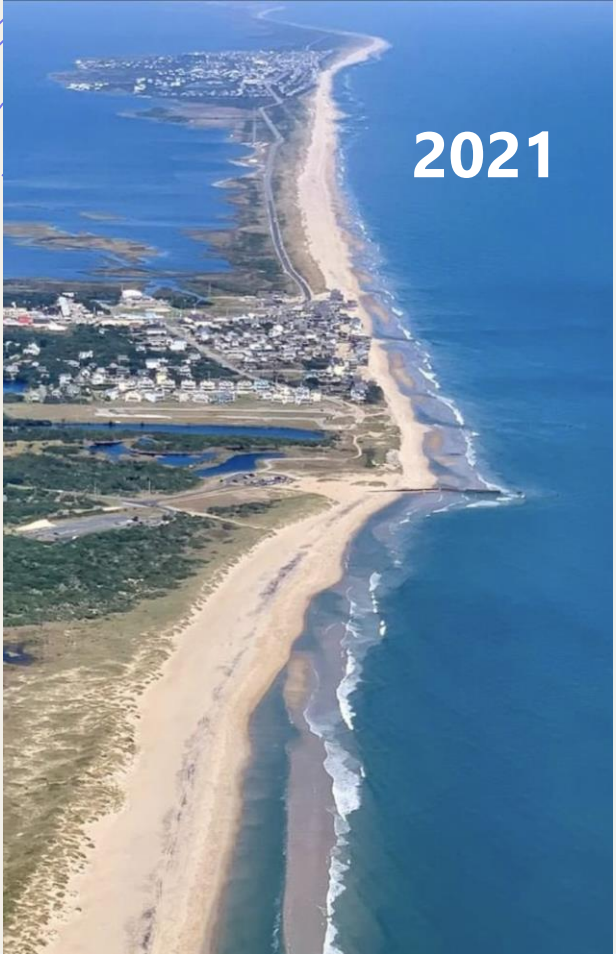
1991



1999



Early 1980s



2021



1972



1995

↔ : 142 px
⬇ : 269 px

Beach Nourishment

2017-2018



<https://www.thecoastlandtimes.com/2019/06/09/beach-nourishment-coming-to-buxton-in-2021/>

2022



<https://www.darenc.gov/government/beach-nourishment/buxton-beach-nourishment>

“Buxton’s beach is narrower than other sections of beach on Hatteras Island. Normal waves are directly impacting developed property, and highway NC 12 is frequently flooded. The only road providing access to historic villages and park resources along Hatteras Island, NC 12 accommodates millions of visitors each year and serves as a critical lifeline for the health and safety of Hatteras communities.”

“Continued beach erosion would impact natural, cultural, and human resources.”

“There could be loss of bird and turtle nesting habitat seaward of the dune line and loss of vehicle access to communities at Cape Hatteras.”

(US Army Corps of Engineers, US Department of Interior, National Park Service, 2015)



2009



2013



Jan. 2015



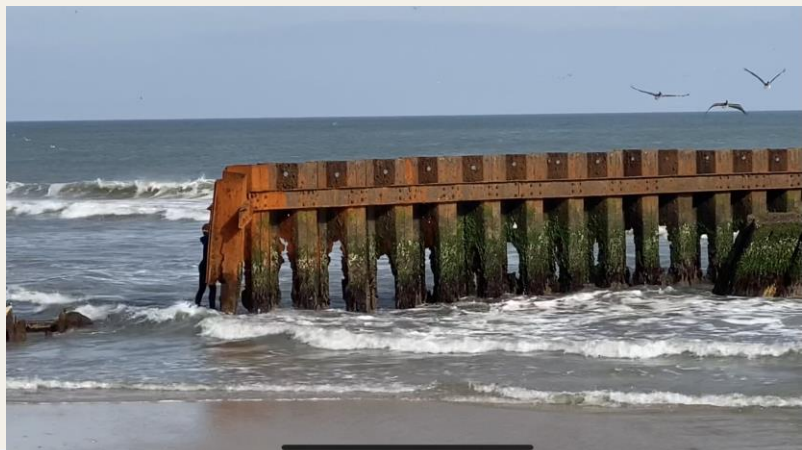
Oct. 2015



Sept. 2016



Sept. 2017





2019



2021



2022



2024

Thank You



References

Pullen, D. (2024). Buxton beach closure and ongoing diesel fuel leakage [Online Images]. https://www.danielpullen.co/blog/buxton-beach-closure-and-diesel-fuel-leakage?fbclid=IwZXh0bgNhZW0CMTAAR22Ktz-T2dEYgeJjFRpxDT3lps0rYccZC_-Jj-jVpqCcwIL6iv1TKnys_E_aem_UWHDKHXNRdNApoAwwE20qw

US Army Corps of Engineers, US Department of Interior, National Park Service. (2015, September 15). Beach restoration to protect NC highway 12 clean water act 404 and NPS special use permits at Buxton, Dare County, North Carolina. *Environmental Assessment*. <https://sawreg.usace.army.mil/Proj/NC12/FINAL-Environmental-Assessment-1.pdf>

References

US Department of Interior, National Park Service. (1956, February 9). Special use permit authorizing the use of certain land within the Cape Hatteras national seashore, North Carolina, by the department of the navy as a site for a navy installation.

US Department of Interior, National Park Service. (1972). Beach erosion and beach nourishment. Cape Hatteras North Carolina.
<https://npshistory.com/publications/water/nrr-4.pdf>