

ASBPA Update



- 1. Events Update
- 2. Blue Flag Beaches
- 3. Government Affairs
- 4. Science & Technology

Nicole Elko, Ph.D. Science Director, American Shore & Beach Preservation Association (ASBPA)

97 Years of Science-Based Advocacy





"The scientific studies of the NRC...contributed largely to the creation of the ASBPA."

ASBPA is open and inclusive!





https://asbpa.org/

About Us Conferences

Resources

Members

Get Involved

O

Science and Technology



2022 Best Restored Beach Ocean Isle Beach, North Carolina





ASBPA is dedicated to preserving, protecting and enhancing our

coasts by merging science and public policy.

LATEST NEWS

Breaking News: First Blue Flags Awarded in Continental US

@ April 26, 2023

Blue Flag USA is proud to announce the first Blue Flags in the continental United States have been awarded to beaches in California and Florida. Westward Beach between the Zuma Lagoon and Birdview Avenue in Malibu and Delray Beach Municipal Beach between Casuarina Road and Laing Street in Delray received the recognition from the Blue...

UPCOMING CONFERENCE: 2023 NATIONAL COASTAL CONFERENCE



Upcoming Conference

ASBPA's 2023 National Coastal Conference

"Anchors Aweigh: Revolutionary

Times for Coastal Habitats"

October 10-13 - Providence, Rhode Island

Abstracts Due: June 1

Register: www.asbpa.org

Award Nominations & Poster Abstracts Due: August 1





Blue Flag Beach Awards

International Jury awarded the first sites in the continental US!

- Delray Beach, Florida
- Zuma Beach, California

New assessments open

2023 Blue Flag USA Summer Series





https://blueflag.us/

blueflagusa@asbpa.org



Government Affairs and Policy

2023 Legislative & Federal Agency Agenda for Coastal Resilience

- 1. Policy
- 2. Investment
- 3. Implementation
- 4. Strengthen support



or nearly a century, the American Shore and Beach Preservation Association (ASBPA) has been the leading voice in Washington, DC, advocating for the resilience of our nation's beaches, coasts, and shorelines. While a lot has changed in the past 100 years, ASBPA's science-guided commitment to coastal restoration and protection has not wavered.

ASBPA recognizes that the health of the nation's shorelines is instrumental to advancing the economic vitality of the entire country. We can and must do more to protect our precious coastlines. To that end, and to ensure that coastal resources remain available for generations to come, ASBPA has the following federal priorities for the 118th Congress:

Maintain the biennial schedule of the Water Resources Development Act

WRDAs are the key legislative vehicle for ensuring that the policies and procedures of the U.S. Army Corps of Engineers (USACE) prioritize and promote coastal communities. ASBPA applauds passage of WRDA 2022 which included the Shoreline



Health Oversight, Restoration, Resilience, and Enhancement (SHORRE) Act. This signature legislation re-establishes protection and restoration of shoreline as a primary mission of USACE, enhances project implementation and advances equity by prioritizing underserved communities.

- Work with USACE on the implementation of WRDA 2022 and request prioritization of implementation guidance for coastal provisions.
- Communicate to Members of Congress the importance of passing WRDAs on a biennial basis.
- Seek to graduate the beneficial use of dredged materials pilot

program to a permanent program in WRDA 2024.

Support sustained funding for coastal programs in the annual appropriations bills

In order for investments in coastal resiliency to be realized, sustained funding from a variety of key coastal programs is needed.

- Support at least \$55 million for USACE Shore Protection.
- Support at least \$30 million for USACE Regional Sediment Management (RSM) and Beneficial Use of Dredge Materials (BUDM).
- Support at least \$46 million for USGS Coastal and Marine Geology Program (CMGP).
- Support at least \$30 million for the National Oceanic and Atmospheric Administration (NOAA) Title IX/Coastal Resilience Grants.
- Support at least \$87 million or BOEM's Marine Minerals Program
- Support at least \$10 million for EPA Beaches Environmental Assesssment and Coastal Health (BEACH)



Science & Technology

01

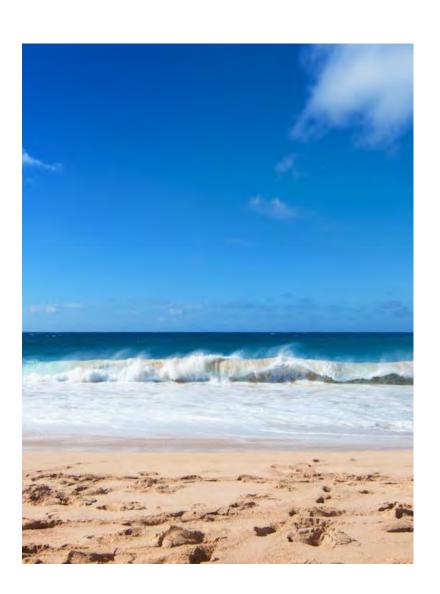
Sediment

02

Coastal Flooding

03

Research



Sediment as a Resource for Coastal Resilience



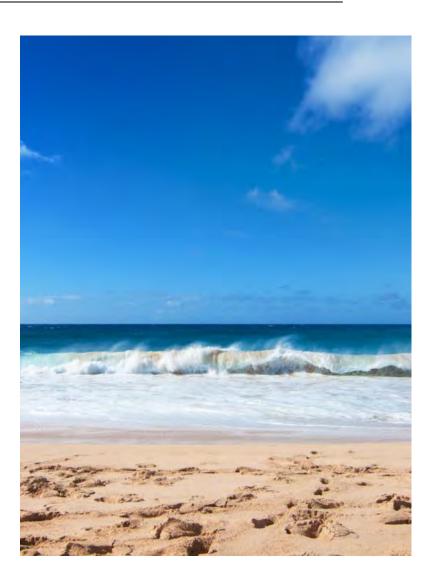
National Beach Nourishment Database



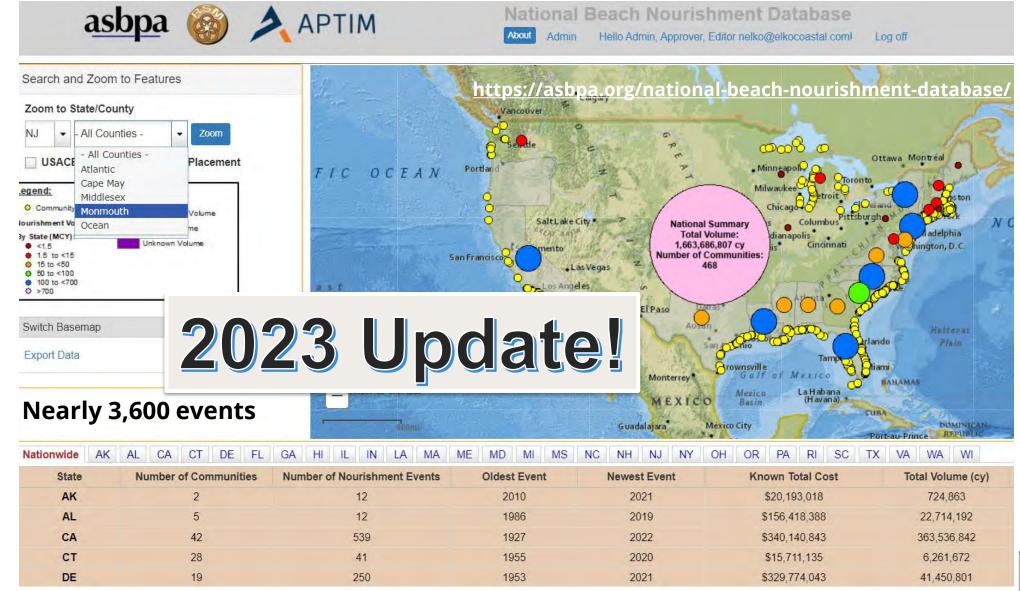
Offshore Sediment Resources Use Conflicts

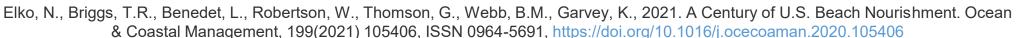


U.S. Sediment Placement Regulations



A Century of U.S. Beach Nourishment

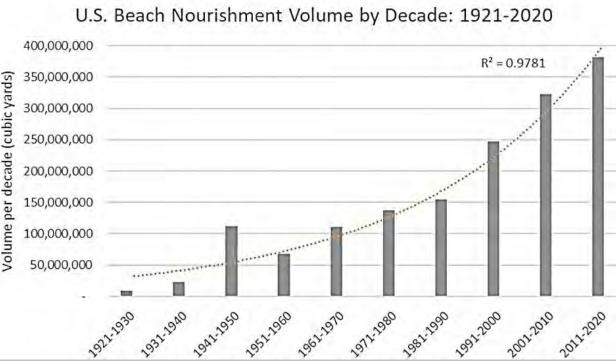




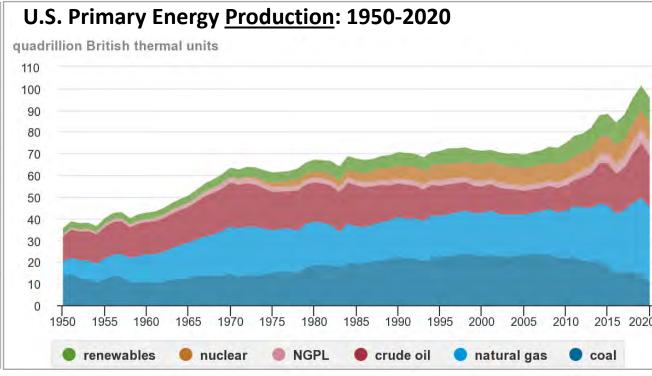




Demand for Sand and Energy



Elko et al., 2021.



Source: U.S. Energy Information Administration, *Monthly Energy Review*, Table 1.2, April 2021, preliminary

data for 2020

 \mathfrak{U}^{\prime} Note: NGPL is natural gas plant liquids.





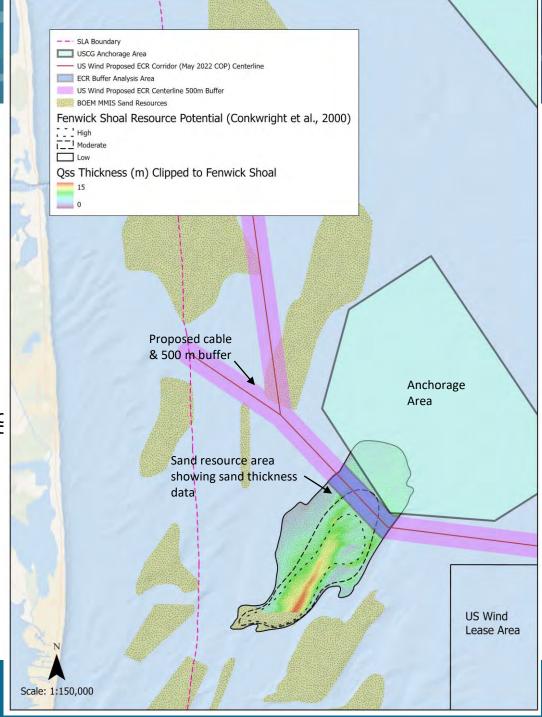


Industry-Recommended Buffers

- Buffers The CSRIC submarine cable working group* recommends:
 - For water depths up to 75 meters, a separation distance of 500 meters (on both sides of cable)
- BOEM uses buffers and available data (e.g., sand thickness) to
 - assess the impacts of proposed renewable energy export cables on potential sand resource areas (e.g calculate volume of sand that may become inaccessible),
 - o mitigate conflicts, &
 - o inform siting of proposed cables.

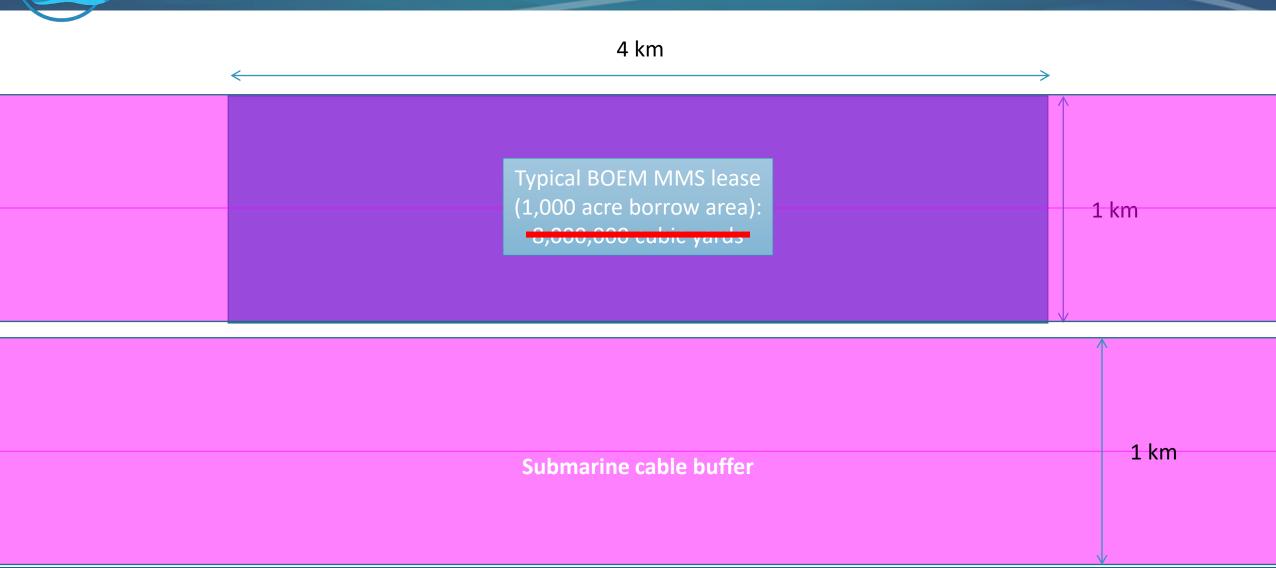
^{*} The Communications, Security, Reliability and Interoperability Council IV (FCC, BOEM, FERC, industry reps)







Potential consequence of hypothetical conflict



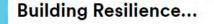
- National and regional summaries
- **35 Coastal State and Territory Profiles**
- Regulatory information for BUDM and sediment placement.
- **14 Case Studies**
- Successful approaches partners have taken to increase BUDM.
- **60 State and Federal**

Recommendations on:

- o Policy and regulation,
- Interagency collaboration,
- Funding,
- Project development, and
- Research needs.

50 subject matter expert interviews 250+ state/federal coastal managers











Sediment Placement

States and Territories:

Sediment Management

Towards Regional

Implementation

Regulations of U.S. Coasta







Coastal sediment regulations for BUDM placement (and contaminants testing triggers*) 85:15 93:7* 85:15 90:10* 90:10 MA, RI: 90:10* NJ: 75:25 80:20 MD: 90:10 90:10 90:10 90:10 90:10 HHII Quantitative Qualitative Case-by-case









Introduction

The N.C. Department of Environmental Quality (DEQ) Division of Coastal Management (DCM) regulates sediment placement. DCM carries out the state's Coastal Area Management Act (CAMA, N.C.G.S. § 113A-100), the Dredge and Fill Law (N.C.G.S. § 113-229) and the federal Coastal Zone Management Act of 1972 in the 20 coastal counties, using rules and policies of the N.C. Coastal Resources Commission (CRC). The U.S. Army Corps of Engineers (USACE) Wilmington District (SAW), as well as the state and local governments, conduct dredging projects in North Carolina. Relevant federal agencies are consulted on all coastal permit applications.

Permit Table

Permit	Authority	Description
Joint Coastal Management Permit	N.C.G.S. 113A-118 15A NCAC 07J .0201	NC DEQ CAMA permit is required for dredging or nourishment. General permits for less than 1,000 cy. Major permits serve as an "umbrella" application and review process for several state agencies, and often for the Corps of Engineers.
Water Quality Certification	N.C.G.S. 143-215	Issued by NC Division of Water Resources, incorporated into CAMA permit.
Right of Entry Letter	N.C.G.S. 146-6; 146-12	NC State Property Office, issues Right of Entry letters for state land covered in water

Policies

- BUDM Required: Clean, beach quality material dredged from navigational channels within the active nearshore, beach or inlet shoal systems shall not be removed permanently from the active nearshore, beach or inlet shoal system. This dredged material shall be disposed of on the ocean beach or shallow active nearshore area where it is environmentally acceptable and compatible with other uses of the beach, NC Dredge and Fill Law, § 113-229 h(2), 15A NCAC 07M SECTION 1100
- NBS Encouraged: It is the policy of the State of North Carolina that material resulting from the maintenance of navigation channels be used in a beneficial way wherever practicable, 15A NCAC o7M SECTION .1100. Beach nourishment, land use planning, relocation, and vegetation management suggested for erosion mitigation. 15A NCAC 07M SECTION .0200, 15A NCAC 07M .0202.
- NBS Encouraged: Bulkheads, jetties, groins, breakwaters prohibited, with the exception of up to 6 terminal groins § 113A-115.1.15A NCAC 07H .0308.
- Hydrodynamics Required: Projects which would directly or indirectly block or impair existing navigation channels, increase shoreline erosion, deposit spoils below normal high water, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters are considered incompatible with the management policies of public trust areas, 15A NCAC 07H, 0207 (d)

Physical Sediment Conditions

- Quantitative:
- BUDM: Sediment completely confined to the permitted dredge depth of a maintained navigation channel or associated sediment deposition basins within the active nearshore, beach or inlet shoal system shall be considered compatible if the average percentage by weight of fine-grained (less than 0.0625 millimeters) sediment is <10%;
- Other Borrow Areas: fines cannot exceed native + 5%. Granular sediment (>= 2 mm and < 4.76</p> mm) must not be >10%. Gravel (>=4.76 mm and < 76 mm) must not be >5%. No more than 2x native of sediment >1 in and shells >3 in. Calcium carbonate must not be >15%, 15A NCAC 07H .0312.

Sand Source

 Sediment in public disposal sites shall be needs to occur 2x in maintenance char SECTION 1100

Water Quality

 Water quality may not be degraded in .0208 (a) (5)

Endangered Species & Crit

- Minimize: Projects will be permitted to minimize impacts to fish, shellfish and
- Avoid: Project timing designated by sta permitting process (see Statewide Proc Migratory birds, and Essential fish habit

Placement Guidelines & Restrictions

- Maintenance sediment dredged from inlets must be placed on the beach or in the nearshore. Restoration of estua waters is strongly encouraged. NC Dredge and Fill Law, § 113-229 h(2), 15A NCAC 07M SECTION .1100
- Dredged sediment may not be placed on wetlands. 15A NCAC 07H .0208(b)(1)(C)

Resources

NC DEQ:

https://deq.nc.gov/about/divisions/division-coastal-management

NC Beach and Inlet Management Plan:

https://deg.nc.gov/about/divisions/coastal-management/coastal-management-oceanfront-shorelines/beach inlet-management-plan

Statewide Programmatic Biological Opinion:

https://www.boem.gov/sites/default/files/non-energy-minerals/NC-BogueB-anks-FWSSPBO.pdf

Thin Layer Project Guidance:

https://deg.nc.gov/about/divisions/coastal-management/estuarine-shorelines

 Shallow Draft Navigation Channel Dredging and Aquatic Weed Fund, N.C.G.S. § 143-215.73F. Special revenue fund for State's cost share for dredging to keep shallow draft navigation channels navigable and safe.

Example State Profile









Sediment Placement Regulations of U.S. Coastal States and Territories

Application of dredged material onto degraded salt

NC Thin Layer Project Guidance

The demand for BUDM projects like TLP is increasing; however, federal and state regulatory agencies do not have clear guidance or protocols for use in permit reviews. Regulators in N.C. are collaboratively and proactively addressing this need by developing permitting guidelines that intended to streamline the process for these new projects, identify suitable sites, and closely monitor project outcomes...

During 2022, guidance for the permitting of "thin layer" placement (TLP) projects on tidal marshes in North Carolina was developed by an interagency working group. The Guidance Document includes a range of site assessment and monitoring protocols that aims to help regulatory agencies and project sponsors determine the suitability of proposed sites how a project will be monitored, and how impacts and project outcomes will be evaluated. While the guidance has not yet been tested on a proposed project, this proactive example of interagency collaboration is worth monitoring.



Desan Science & USFWS

Project Overview

Collaborative guidance for project planners was developed in 2022 by agencies that play key roles in permitting coastal projects in North Carolina. Agencies agreed that sediment placement will temporarily impact the existing wetland habitat, and developed criteria to assess and monitor temporary impacts and the long-term condition. The Guidance Document recommends that planners develop quantitative objectives, assess the suitability of the site, and develop a monitoring plan with success criteria before proceeding. The recommended items are important or helpful for project scoping, interagency permitting reviews, and future outcome evaluations.

The guidance recommends that a site assessment be used to determine the extent and likely cause of the degradation of a tidal marsh site of interest, and the likelihood that TLP can produce desired results in terms of the specific restoration goals at the selected site.

Guidance also recommended that monitoring associated with TLP projects align with a priori specified objectives (e.g., restoration vs enhancement). It recommended that the monitoring plan be designed to (1) determine whether the TLP project goals and objectives are met, (2) evaluate whether the project was built as designed (as-built survey), and (3) evaluate the effects of the project on populations of interest (e.g., Spartina spp., bird nesting). The guidance recommends that monitoring It said that monitoring should be conducted at least once before sediment addition and once yearly for a minimum of five to seven years. It also recommends initial sediment elevations be measured immediately following sediment addition, again between 3-6 months later to assess sediment compaction, and after hurricanes or other large-scale events as needed.

Partners

Partners: NC Division of Coastal Management, U.S. Army Corps of Engineers, National Marine Fisheries Service, U.S. Fish and Wildlife Service, N.C. Division of Marine Fisheries, N.C. Division of Water Resources, N.C. Wildlife Resources Commission, U.S. Army Corps of Engineers Regional Sediment Management Center of Expertise in Jacksonville, FL, and NOAA's National Center for Coastal Ocean Science in Beaufort, N.C.

Key Information

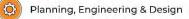
- Project type: Interagency Collaboration & Permitting
- Keywords: wetland creation/ restoration; fines; thin-layer placement;
- regulation/guidance; partnership
- Location: Coastal North Carolina
- Jurisdictions: NC

Matching Supply to Demand













Monitoring

Lessons Learned

Proactively discussing the permitting process for future TLP projects has positioned N.C. to avoid regulatory confusion and delays when the inevitable applications are submitted.

Additional Links

State Website: https://deq.nc.gov/about/divisions/coastal-management/estuarine-shorelines

Guidance Document

https://deq.nc.gov/media/31315/open

Sediment Placement Regulations of U.S. Coastal States and Territories

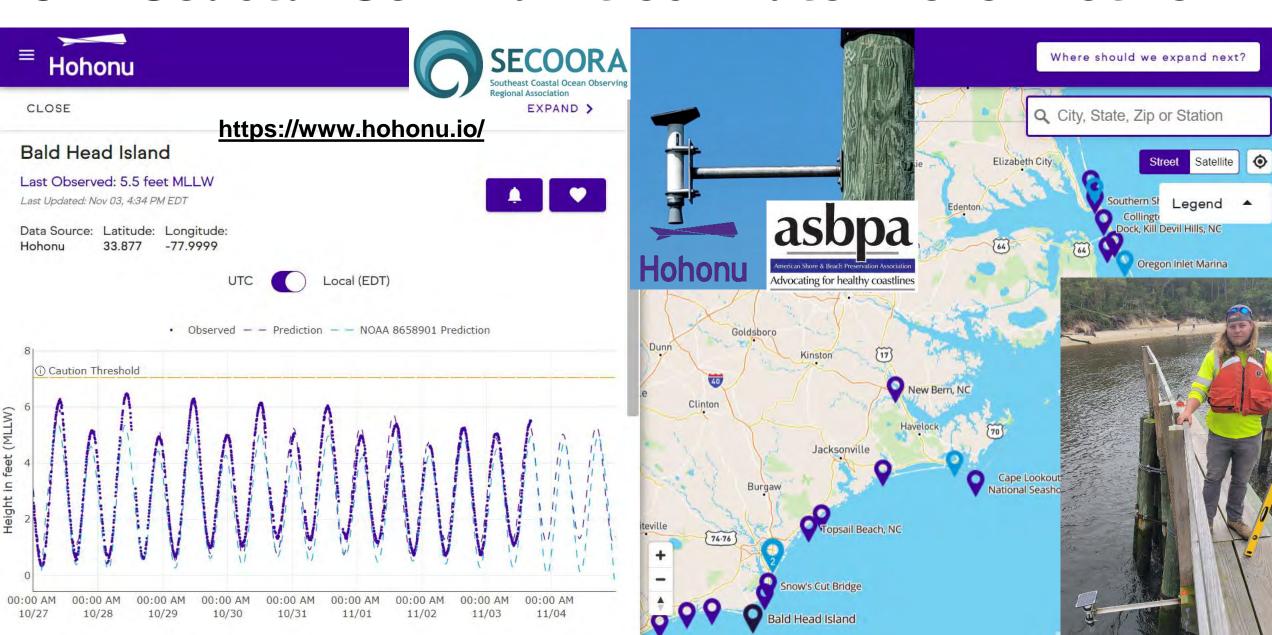






ASBPA and CSO worked with coastal states, USACE, and key partners on this national-scale comparative policy analysis of BUDM policies and sediment placement regulations. Recommendations and case study highlights were developed through expert interviews and regional practitioner workshops.

S.E. Coastal Communities' Water Level Network







USCRP research proposals funded across 2 states totaling \$14.6 million.

40.4% of all awarded funding spent in NC totaling \$5.9 million.

awards to NC academic institutions & PIs totaling \$2.3 million.

awards to non-NC PIs performing research in NC totaling \$3.6 million.

academic team members across NC universities

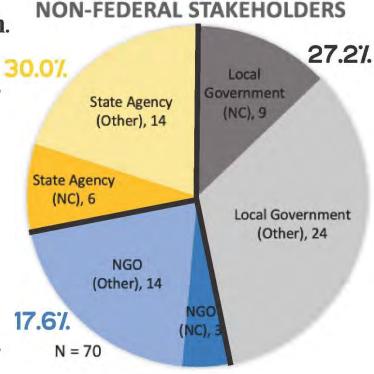
NC-based students supported Duke ECU UNCW











Many NC-based stakeholders involved in these projects

OUR PARTNERS



































Get Involved!Join an ASBPA committee

3rd week of each month 2pm, Zoom



S&T

Science & Technology

Tuesdays

Nicole.Elko@asbpa.org

Next: May 16, 2023

ASBPA

GA

Government Affairs

Thursdays

managing@asbpa.org

Next: May 18, 2023

https://asbpa.org/get-involved/



