

Emergency Inlet Dredging prior to Peak Tourism Season at Lockwood Folly Inlet

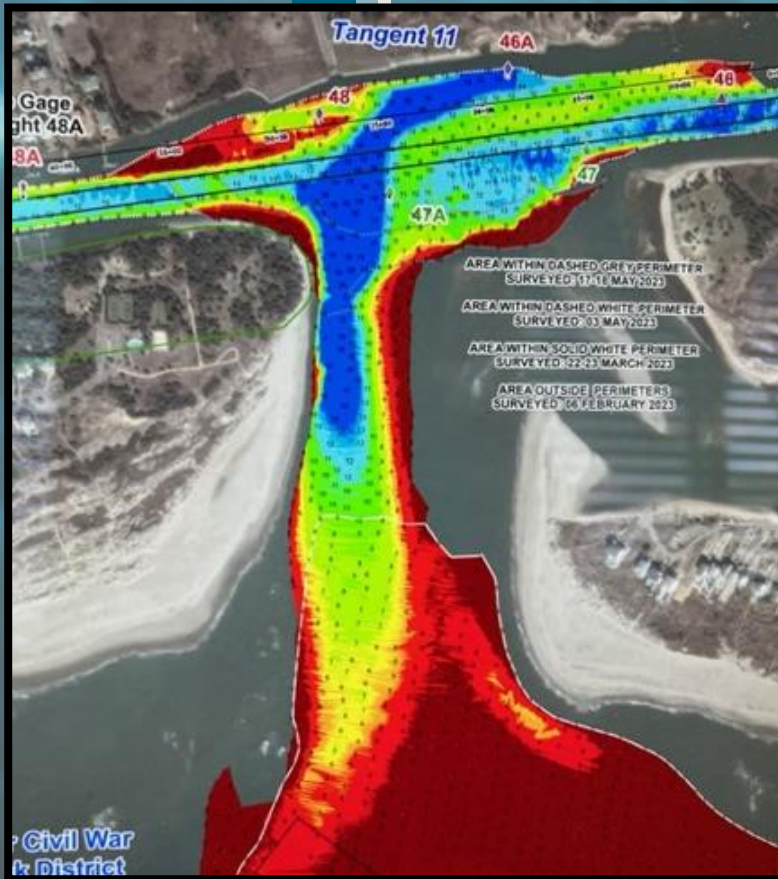
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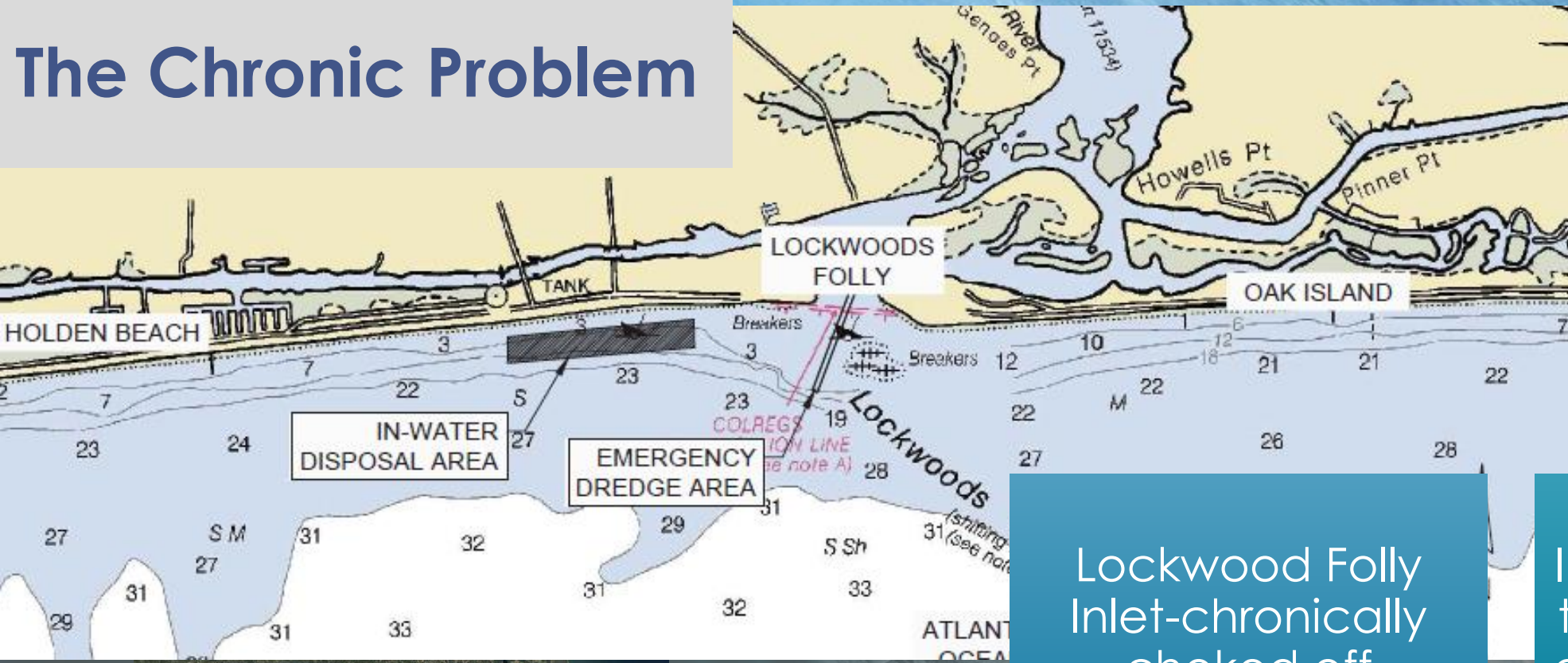
Coastal, Environmental, Marine & Water Resources Engineering

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Civil War
District

The Chronic Problem



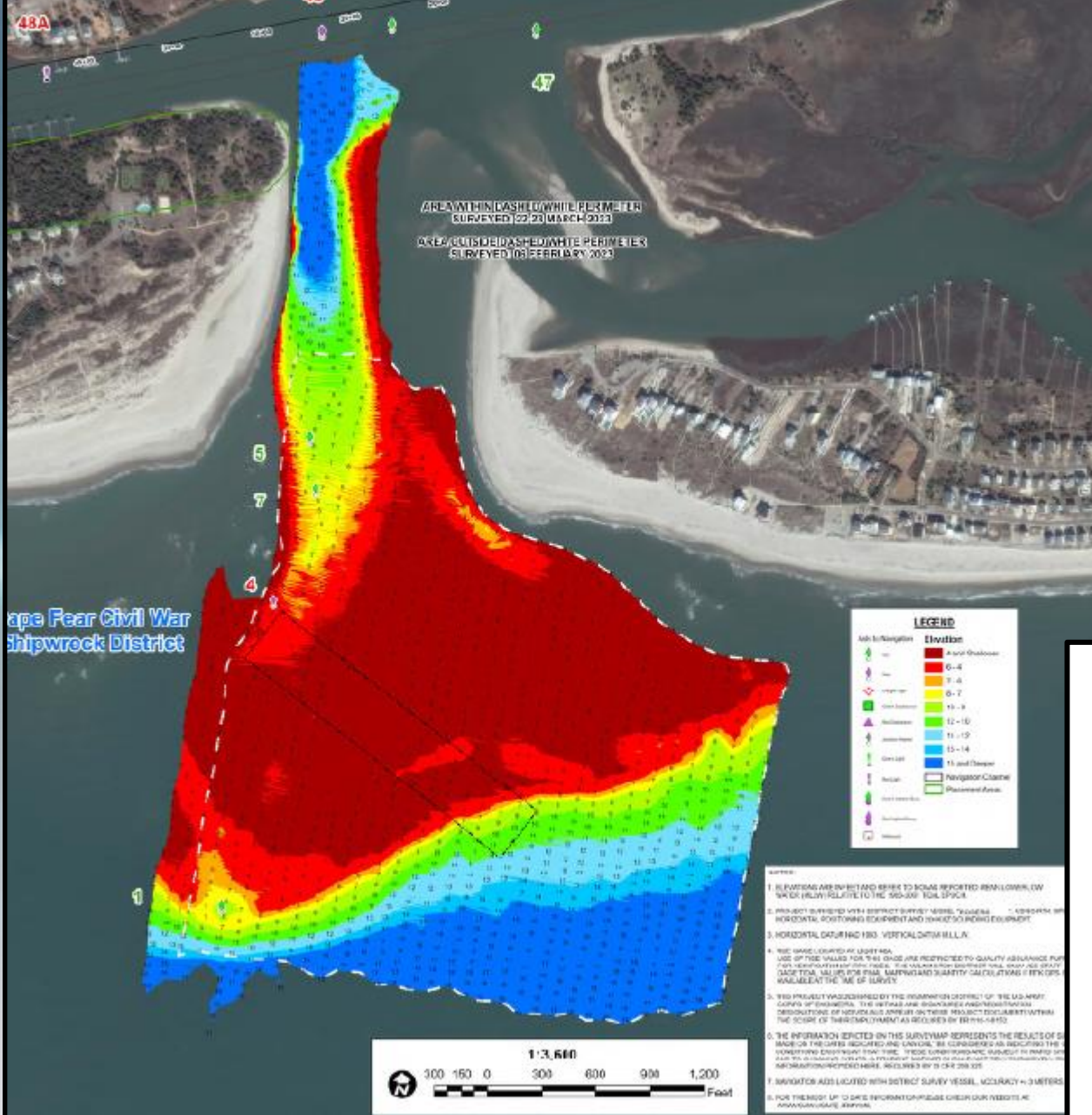
Lockwood Folly Inlet-chronically choked off

Impedes economy, tourism, recreation, and is a safety issue

Corps' fleet is limited and national assets

Corps' fleet is not designed to dredge once inlet becomes too shallow





Inlet Conditions Just Prior to Prime Tourist Season



- THE FOLLOWING AIDS TO NAVIGATION HAVE BEEN DISCONTINUED TO DUE TO SEVER SHOALING IN INLET REDUCING DEPTHS TO TWO FEET MEAN LOW WATER.
 - A. LOCKWOOD FOLLY INLET LIGHTED BUOY 2 (LLNR 31015 [33°54.4776N / 078°14.3764W, 33.907960 / -78.239606]) – TEMPORALLY DISCONTINUED.
 - B. LOCKWOOD FOLLY INLET BUOY 3 (LLNR 31020 [33°54.6221N / 078°14.3734W, 33.910369 / -78.239556]) – TEMPORALLY DISCONTINUED.
 - C. LOCKWOOD FOLLY INLET BUOY 4 (LLNR 31025 [33°54.7466N / 078°14.3558W, 33.912443 / -78.239264]) – TEMPORALLY DISCONTINUED.
 - D. LOCKWOOD FOLLY INLET BUOY 5 (LLNR 31027 [33°54.8607N / 078°14.3301W, 33.914345 / -78.238835]) – TEMPORALLY DISCONTINUED.



New Option



Miss Katie private dredge commissioned by the Oregon Inlet Task Force

Periods of Inactivity - opportunity for LWF

EJE Dredging Service contacted about LWF use

Permits in hand

Navigation related so Shallow Draft Inlet funding eligible

Technicalities-Engineering Side

Table 1. Proposed Dimensions of the SDI-5 Projects.

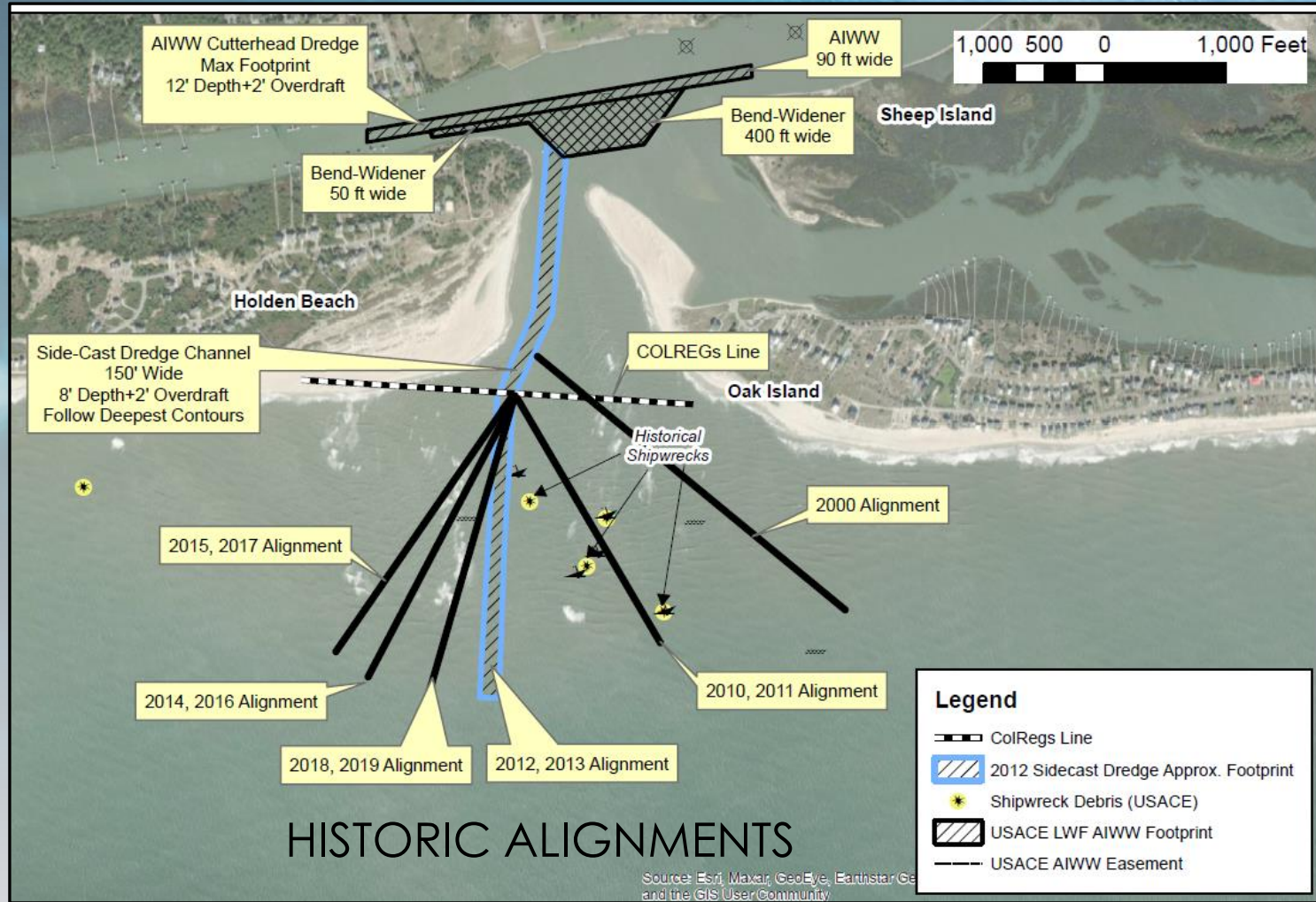
Applicant	Dredging Dimensions			Sand Placement	
	Length	Width	Depth (+ Allowable Overdepth)	Typical	Max. Potential
Emerald Isle (Bogue Inlet)	<ul style="list-style-type: none"> • AIWW: 5,400 ft • Bogue Inlet: 6,100 ft • Connecting Channel: 10,400 ft 	<ul style="list-style-type: none"> • AIWW: 90 ft • Bogue Inlet: 150 ft • Connecting Channel: 90 ft 	<ul style="list-style-type: none"> • AIWW: -12 + 2 ft MLW • Bogue Inlet: -8 + 2 ft MLW • Connecting Channel: -6 ft + 2 ft MLW 	2,700 lf	32,700 lf
Topsail Beach (New Topsail Inlet)	<ul style="list-style-type: none"> • AIWW: 7,800 ft • New Topsail Inlet: 7,800 ft • Topsail Creek: 8,000 ft • Banks Channel: 21,100 ft 	<ul style="list-style-type: none"> • AIWW: 90 ft • New Topsail Inlet: 150 ft • Topsail Creek and Banks Channel: 80 ft 	<ul style="list-style-type: none"> • AIWW: -12 + 2 ft MLW • New Topsail Inlet: -8 + 2 ft MLW • Topsail Creek and Banks Channel: -7 ft + 2 ft MLW 	2,500 lf	23,900 lf
New Hanover County (Carolina Beach Inlet)	<ul style="list-style-type: none"> • AIWW: 3,900 ft • Carolina Beach Inlet: 6,300 ft 	<ul style="list-style-type: none"> • AIWW: 90 ft • Carolina Beach Inlet: 150 ft 	<ul style="list-style-type: none"> • AIWW: -12 + 2 ft MLW • Carolina Beach Inlet: -8 + 2 ft MLW 	2,600 lf	4,900 lf
Holden Beach (Lockwoods Folly Inlet)	<ul style="list-style-type: none"> • AIWW: 7,700 ft • Lockwoods Folly Inlet: 4,100 ft 	<ul style="list-style-type: none"> • AIWW: 90 ft • Lockwoods Folly Inlet: 150 ft 	<ul style="list-style-type: none"> • AIWW: -12 + 2 ft MLW • Lockwoods Folly Inlet: -12 + 2 ft MLW 	2,800 lf	23,700 lf

SDI 5 Permit in hand years before in case this scenario occurred

Coordination with dredging company and agencies

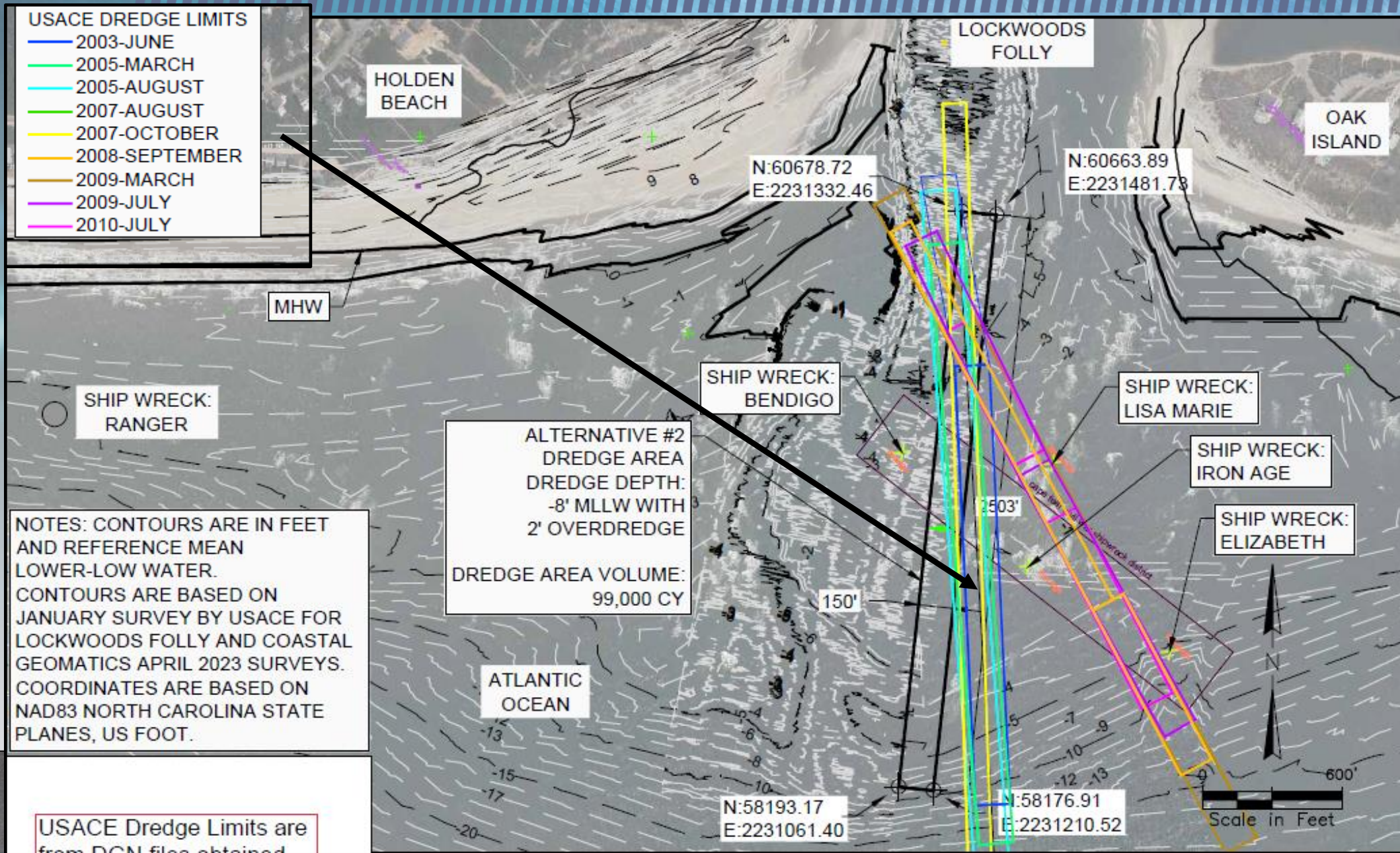
Best path through the middle of the historic shipwrecks- means agency buy-in

CHANNEL ALIGNMENT – FOLLOW DEEP WATER



- AVOID ALL WRECKS
- HISTORIC WRECK BUFFERS
- DEEPEST WATER BETWEEN HISTORIC WRECKS

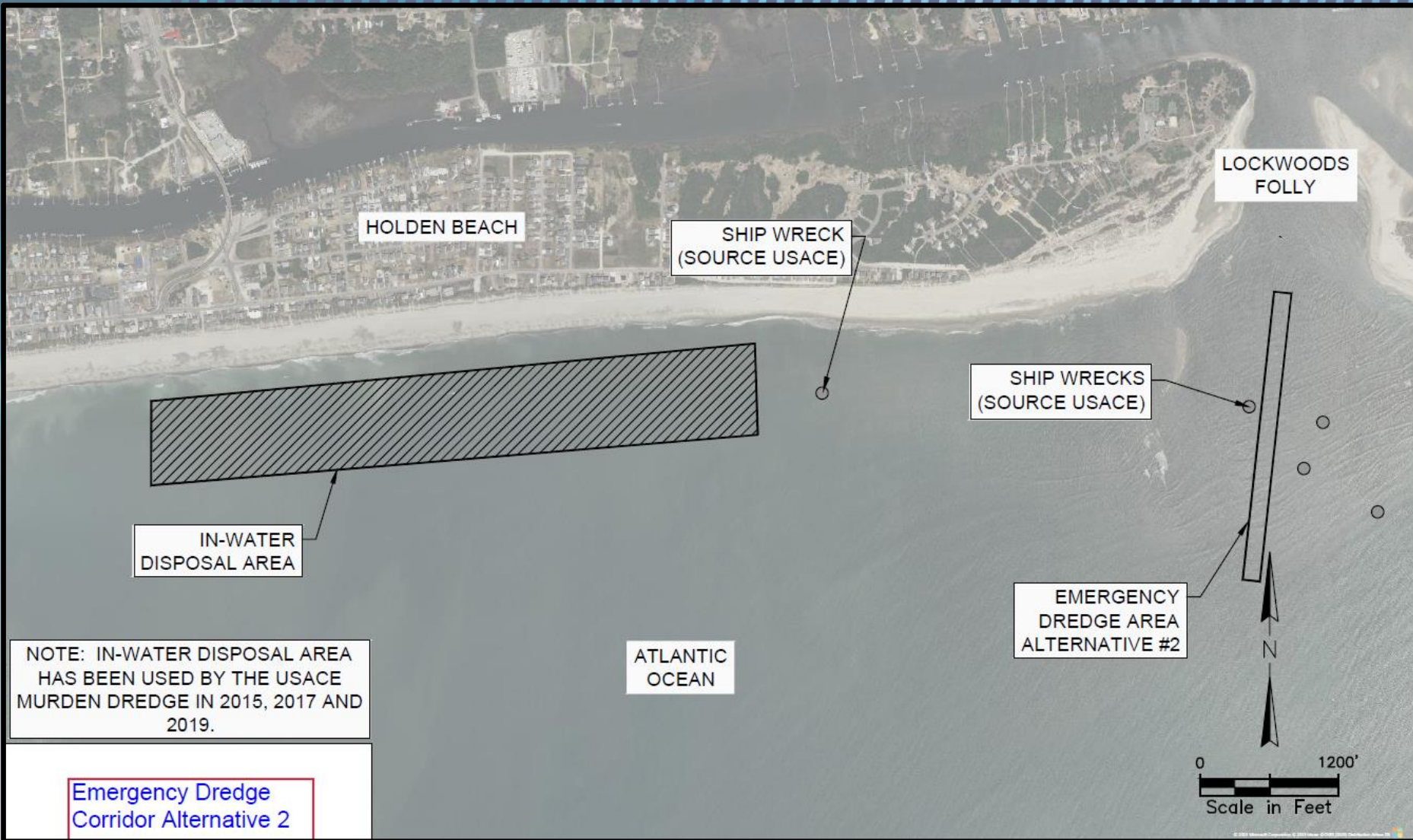
CHANNEL ALIGNMENT – FOLLOW DEEP WATER



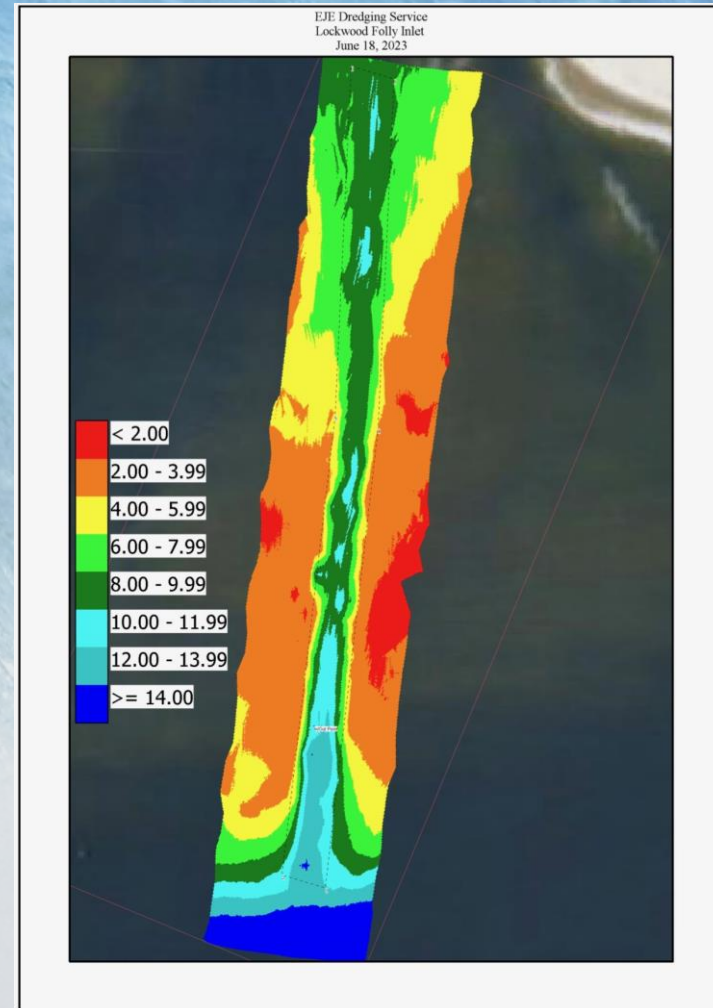
**Previous
Corps
Routes**

USACE Dredge Limits are from DGN files obtained

PROJECT OVERVIEW



- EMERGENCY DREDGING
- MAY 20 START
- ENVIRONMENTAL WINDOW AGENCY INVOLVEMENT
- ONLY WORK HIGH TIDES FIRST WEEK
- HOPPER AND SIDECAST DREDGING
- AGENCIES AND CONTRACTOR PREFERRED HOPPER DREDGING OVER SIDECASTING





Questions

