

CEAM FALL 2025 CONFERENCE

of Engineers_® **Baltimore District**

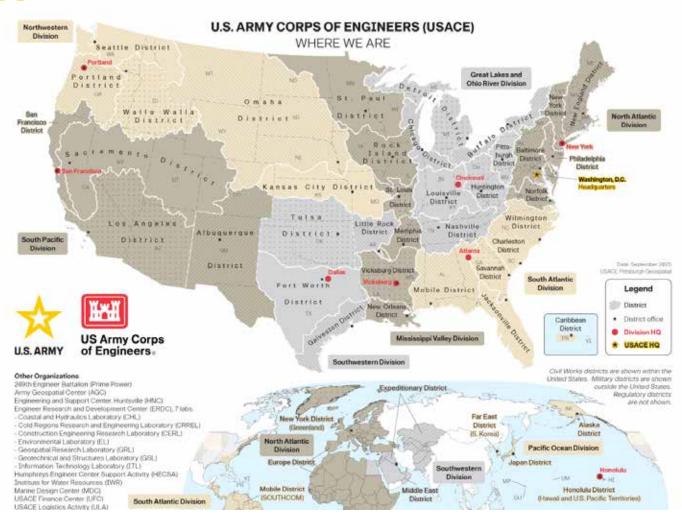
SEPTEMBER 18, 2025 COL FRANCIS PERA COMMANDER, U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT





USACE ORGANIZATION

- 9 Regionally-aligned Divisions
- 44 Geographic Districts
- 9 Centers and Laboratories
- 40+ Centers of Expertise
- 1 Active-Duty Unit (249th Prime Power Battalion)
- 2 Army Reserve Theater Engineer Commands (412th and 416th)
- 8 Centers of Standardization
- Engagement in 110+ Countries
- Physical Presence in 39 Countries



ENGINEERING SOLUTIONS FOR THE NATION'S TOUGHEST CHALLENGES

CHIEF OF ENGINEERS: THREE HATS









DIRECT REPORTING UNIT COMMANDER

Provide Vital Engineering Services and Capabilities to Armed Forces and Nation

ARMY STAFF PRINCIPAL

- ü Engineering Advisor to SECARMY, CSA & ASA (CW)
- **ü** Topographer of the Army
- **Design and Construction Agent**
- Executes MILCON, Energy and Water Security & Resilience, Facilities System Safety Sustainability and Environmental Management and Remediation Initiatives and Programs

ADVISOR SENIOR MENTOR TALENT & MANPOWER

Engineer Branch Chief of the Corps of Engineers

Lieutenant General William H. "Butch" Graham, Jr. 56th Chief of Engineers and Commanding General of the U.S. Army Corps of Engineers



BALTIMORE DISTRICT



Mission

Deliver vital engineering solutions in collaboration with our partners to serve and strengthen the Nation, energize the economy and reduce disaster risks.

Vision

Forward thinking, collaborative and trusted team of teams, building organizational readiness and enduring national resilience.



BALTIMORE DISTRICT LEADERSHIP



Colonel Francis B. Pera

District Commander



Lieutenant Colonel Mark W. Pollak

Deputy District Commander

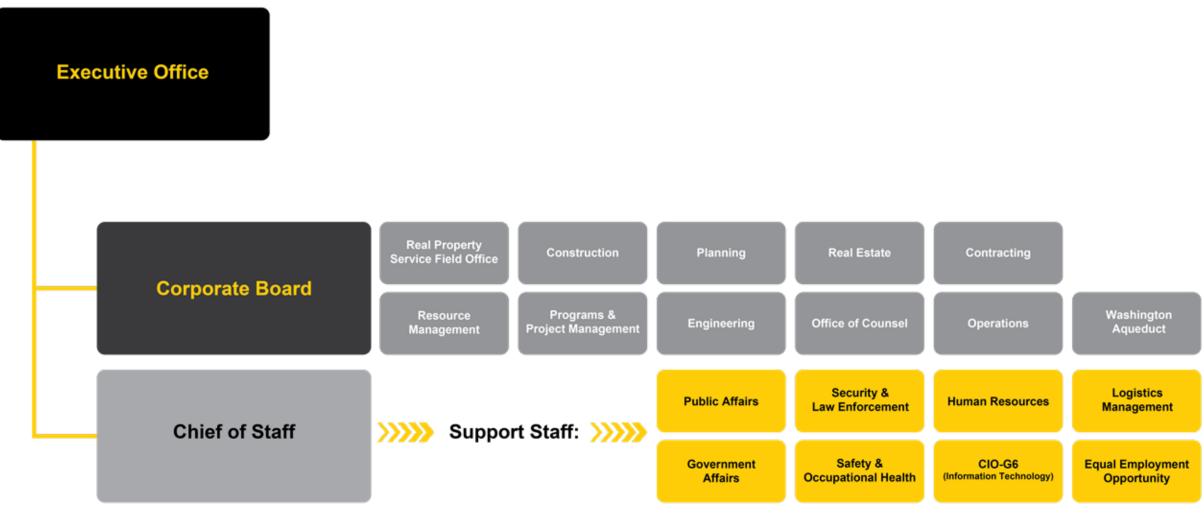


Daria Van Liew, PE

Deputy District Engineer for Program and Project Management



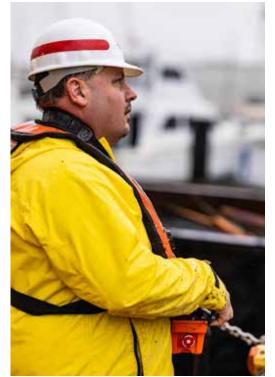
BALTIMORE DISTRICT ORGANIZATION





WHO WE ARE

Largely civilian workforce of approximately **1,100** delivers a program of **over \$2.2 billion** in FY24 to provide vital engineering, design, construction, and water resource management solutions to the National Capital and mid-Atlantic regions (six states and the District of Columbia) including the Susquehanna River, Potomac River, and Chesapeake Bay watersheds, and **7,000 miles** of coastline.

















WHAT WE DO

- Maintain 290 miles of federal channels through dredging and drift clearance
- Inspect ~150 miles of federally constructed levees
- Regulate 16 flood risk management reservoir projects
- Prevent \$16 billion in flood damages to date
- Operate and maintain 11 recreation projects with
 15+ million visitor hours annually
- Restore 1,715 acres of remote island habitat in the Chesapeake Bay
- Provide 135 million gallons of water per day to one million people and Government/Defense Facilities throughout the National Capital Region
- \$420 million obligated to small business in FY24



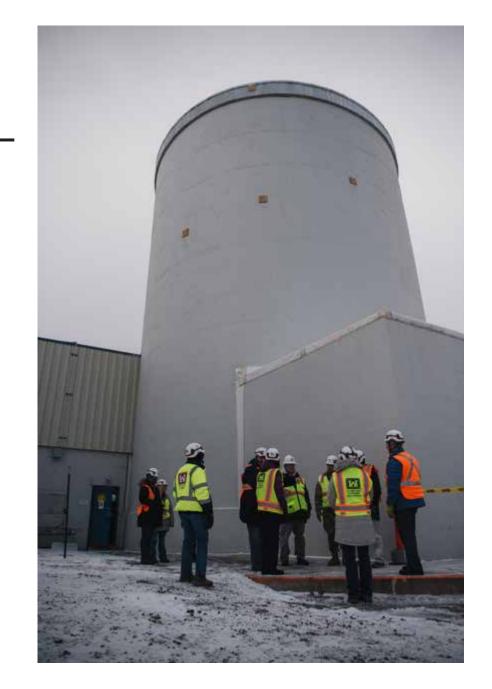






CENTERS OF EXPERTISE

- Regional Hazardous, Toxic and Radioactive Waste (HTRW) Design Center & National Environmental Military Munitions Design Center
- National Hurricane Program Office manages all USACE technical support as part of FEMA's program
- Regional Center of Expertise for Subsurface Investigations and Soil Mechanic Laboratory Testing; Enhances Use Leasing Program; Fire Protection Engineering; and Military Master Planning
- Defense National Relocation Program





CIVIL WORKS

We manage water resource planning, engineering design and construction related to navigation, recreation, flood risk management and infrastructure and environmental stewardship in the **Susquehanna and Potomac** watersheds and upper Chesapeake Bay, encompassing 64,000 square miles and 7,000 miles of coastline through \$335 million in expenditures in FY24.





NAVIGATION

- The hydrographic survey section actively supports the Baltimore District's Navigation Branch, Operations Division by encompassing the design, construction and maintenance of over 100 Federal navigation projects on the Chesapeake Bay and its tributaries.
- Baltimore Harbor's Debris Unit patrols and collects debris within the Patapsco River and its tributaries in an area covering 24 square miles; The Washington DC Debris Unit operates in the Anacostia and Potomac River patrolling and collecting debris covering 27 miles around the Nation's Capital.







SUPPORT TO OCEAN CITY

- USACE conducted emergency dredging of the OC Inlet this summer, based on the need for the U.S. Coast Guard to be able to respond in the event of an emergency
- Almost 8,000 cubic yard of material were removed via side-cast dredge Merritt
- Atlantic Coast of Maryland Shoreline Protection
 Project reduces coastal storm risk through an elevated beach berm, protective sea wall built into boardwalk and vegetated dune system
- Since its completion in the early 1990s, the project has prevented more than \$927 million in damages to Ocean City







SUPPORT TO THE PORT OF BALTIMORE

- USACE conducts routine operation and maintenance activities that support safe navigation to and from the Port of Baltimore
- Dredging and removal of approximately 3 million cubic yards of material annually
- Hydrographic surveys are conducted routinely to provide channel conditions to ship pilots and other navigation interests
- \$61 million in FY25 Work Plan for Operations and Management that supports the Port of Baltimore







SUPPORT TO THE PORT OF BALTIMORE

- Baltimore Harbor & Channels, Seagirt Loop
 Project will deepen the entire Seagirt-Dundalk
 access channel system to promote safe and effective
 navigation
- Baltimore Coastal Storm Risk Management Study recommends Congress fund about \$77 million for structural floodwalls to manage coastal storm damage risk and flooding to the I-95 and I-895 tunnel entrances and associated critical facilities to improve infrastructure resiliency in the metro region
- The project would include approximately 9,500 feet of fixed floodwalls along the southern approach tunnel entrances and corresponding tunnel ventilation buildings, as well as closure structures for openings in the floodwalls where needed





ENVIRONMENTAL INFRASTRUCTURE/ ECOSYSTEM RESTORATION

- Our team of dedicated professionals are protecting and restoring portions of the Chesapeake Bay watershed, including the Anacostia, Potomac, and Susquehanna rivers. Ecosystem restoration projects play a pivotal role in protecting endangered species, preserving shorelines affected by erosion and building new habitat for our region's wildlife
- \$81.9 million in FY25 work plan towards Poplar and Mid-Chesapeake Bay Islands, partnership projects with the Port of Baltimore that restore eroded wetlands and create wildlife habitat while keeping vital shipping lanes







FLOOD RISK MANAGEMENT

- Baltimore District regulates 16 multi-purpose reservoirs in the States of Maryland, West Virginia, and New York as well as the Commonwealth of Pennsylvania
- All 16 dams were built primarily for flood risk management. Other project purposes include recreation, water supply, water quality, hydroelectric power, and low-flow augmentation for downstream environmental benefits
- Jennings Randolph Lake, tucked between Garrett County, Maryland, and Mineral County, West Virginia, provides recreation, flood risk management, water quality, low flow augmentation, and serves as a water supply for the Washington Aqueduct, which provides water to the National Capital Region









PROJECT PLANNING – STUDIES & INVESTIGATIONS

- Baltimore District is authorized to investigate and perform studies related to core mission areas including Navigation, Flood Risk Management and ecosystem restoration, to determine if Congressional authorization and implementation are warranted.
- Civil Works Planning is the start of the "pipeline" for addressing water resources needs.









TECHNICAL SERVICES

- USACE provides strong technical services through a variety of programs to address an array of water resources issues in the Chesapeake Bay region.
- These programs grant USACE the ability to provide technical water resources services through federal funding or a combination of federal and local funding without the need for Congressional authorization.

- üNational Hurricane Program
- üContinuing Authorities Program (CAP)
- üFloodplain Management Services
- üPlanning Assistance to States
- üRehabilitation and Inspection Program
- üSilver Jackets programs



Click to learn more



CRISFIELD STORMWATER FLOOD IMPROVEMENT PLAN

- USACE began field surveys on August 11 as part of the Crisfield Stormwater Flood Improvement Plan, which aims to develop a planning-level strategy to reduce the risk of flooding in areas of the city most affected by stormwater.
- Federally funded project, requested by the City of Crisfield under the USACE Floodplain Management Services Program
- Section 206 of the Flood Control Act of 1960 provides the full range of technical services and planning guidance needed to support effective floodplain management





CONTINUING AUTHORITIES PROGRAM (CAP)

- Under CAP Section 107, USACE can plan, design, and construct navigation improvement projects with a total cost of generally \$15 million or less.
- Rhodes Point Navigation project components included realignment of a portion of the federal navigation channel in Sheep Pen Gut through dredging; construction of two jetties to prevent shoaling in the channel and to reduce the continual need for dredging of material; and creation of a stone sill along the shoreline to prevent further erosion and contain the dredged material from the project, reused for ecosystem restoration.
- The navigation improvements are anticipated to have long-term beneficial impacts to the local economy, navigation, recreational boaters and safety.



Rhodes Point, located along the SW shoreline of Smith Island in Somerset County.



REGULATORY

- Protects the Nation's aquatic resources while allowing reasonable development through fair, flexible and balanced permit decisions.
- Issued/verified more than 1029 authorizations in FY25, exceeding past six fiscal years









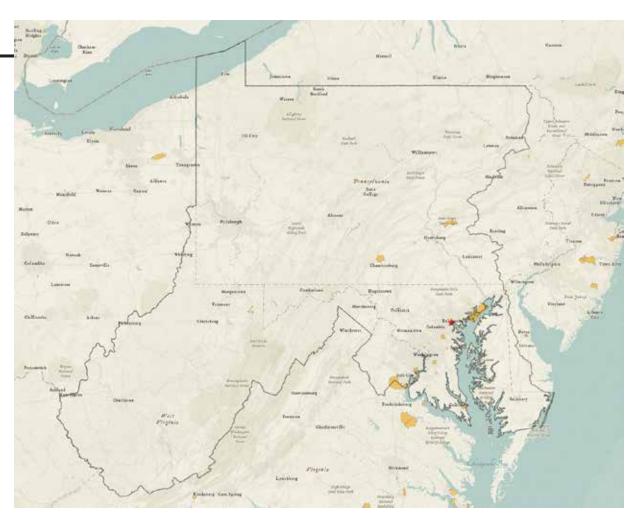


MILITARY PROGRAM

We provide primary water resources, renovation and construction support to 14 military installations in MD, VA, DC, PA and WV through \$1.69 billion in expenditures annually and support one of the largest and most visible military missions in the country due to our work in the National Capital Region.

In Maryland:

- Fort George G. Meade
- Aberdeen Proving Ground
- Adelphi Laboratory Center
- Joint Base Andrews
- Fort Detrick





MILITARY PROGRAM KEY PROJECTS IN MARYLAND

- East Campus Program at Fort George G.
 Meade- \$4 billion, 242-acre campus for National Security Agency and US Cyber Command
- F-16 Mission Training Center at Joint Base Andrews
- Medical Waste Incinerator at Fort Detrick
- Real Estate support to 300+ Armed Forces recruiting stations and 180+ housing units
- Real Property Services Field Office supporting the Intelligence Community with Real Estate and E&C services





ENVIRONMENTAL AND MUNITIONS DESIGN CENTER

- Environmental cleanup program focuses on reducing risk and protecting human health and the environment in a timely and cost-effective manner
- Cleaning up sites contaminated with hazardous, toxic or radioactive waste or ordnance through the Formerly Used Defense Sites program within PA, MD, DE, and VA
- Oversight of SM-1 and SM-1A Deactivated Nuclear Power Plant Decommissioning and Dismantlement projects









WASHINGTON AQUEDUCT

- Federally owned and operated public water supply agency that produces an average of 135 million gallons of water per day at two treatment plants located in the District of Columbia
- Produces drinking water for approximately one million citizens living, working, or visiting the National Capital Region, as well as all three branches of government, the Pentagon, and the many federal agency headquarters and offices centralized within the area
- Ongoing three-year, \$3 million feasibility study for backup water supply – secondary water source and additional water storage capacity









CONTRACTING AND SMALL BUSINESS SUPPORT

- Comprehensive acquisition services to ensure timely execution of requirements while upholding best value, quality, ethics, and compliance
- Business opportunities to work with USACE for individuals and firms, such as HubZone, Veteran-Owned, Small Disadvantaged Business and Small Women-Owned businesses, in the civilian community through our engineering and construction management work

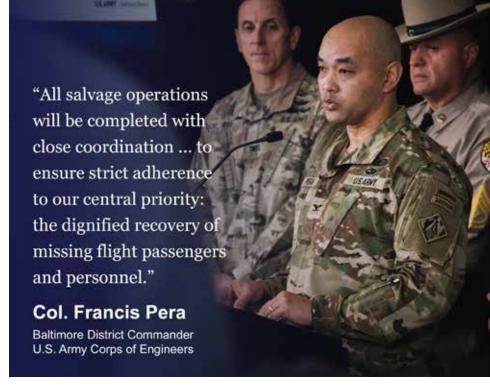






EMERGENCY OPERATIONS

- Reduce Disaster Risk through partnerships with local, state and federal Emergency Management Agencies and stakeholders
- Strengthen National resilience
- Provide vital engineering and technical expertise during emergency response and recovery









CLEAR FEDERAL CHANNEL

ABOUT THE FORT MCHENRY CHANNEL

Since 1917, the Baltimore District of the U.S. Army Corps of Engineers has been Congressionally authorized to construct and maintain the Baltimore Harbor and Channels federal navigation project, which includes the federal Fort McHenry channel. In 1970, Congress authorized the Fort McHenry channel to a minimum depth of 50 feet and minimum width of 700 feet. Baltimore District conducts maintenance dredging of the Fort McHenry channel every few years, removing the equivalent of about 28,125 dump trucks of mud and silt that collects on the bottom of the channel.











Sections 0 and 1 removed to allow access to the Limited Access Channel

ECONOMIC IMPACT







\$100 BILLION
TO THE NATIONAL ECONOMY

20,000

PORT OF BALTIMORE JOBS AFFECTED

VEHICLES HANDLED BY THE PORT OF BALTIMORE 850,000

Estimate based on the 2023 Economic Impact of the Port of Baltimore in Maryland report

PRIORITIES

CLEAR FEDERAL CHANNEL

- · Establish limited access channel
- · Establish wreckage consolidation point
- Position cranes to remove bridge span from M/V DALI
- · Clear wreckage from M/V DALI
- Remove wreckage from Federal Channel





REFLOAT & REMOVE M/V DALI

- Assess cargo and remove containers as necessary
- Stage assets for repositioning of M/V DALI
- Refloat and move M/V DALI from hard grounding

CLEAR REMAINING WRECKAGE

- Systematically clear wreckage from outside of the Federal Channel
- Facilitated under the direction of Maryland Department of Emergency Services











CLEAR FEDERAL CHANNEL

PRIORITY 1 OBJECTIVES

CLEAR FEDERAL CHANNEL

ACCESS —— Rig, Cut, and Clear
Span 18, Section 0, 1,
and part of 2

*Salvage cleared - April 22, 2024

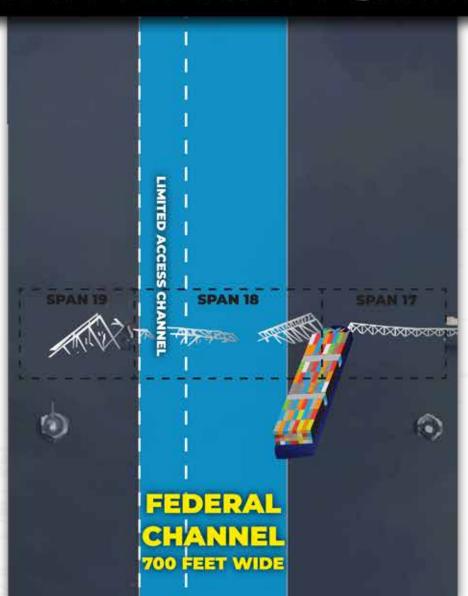
FEDERAL CHANNEL

Rig, Cut, and Clear Span 18, Section 2/3

Rig, Lift, Cut, Clear Span 18, Section 4







LIMITED ACCESS

- 35 Feet Minimum Depth
- 300 Feet Wide
- 214 Foot High Clearance
- Some larger deep draft vessels, large marine tugs, MARAD vessels.

FEDERAL CHANNEL

- 50 Feet Deep
- 700 Feet Wide
- · 214 Foot High Clearance
- Restoration of normal port operations.

WRECKAGE WEIGHT







ESTIMATED TONS OF STEEL & CONCRETE

WEIGHT OF MORE THAN **FULLY LOADED DUMP TRUCKS**

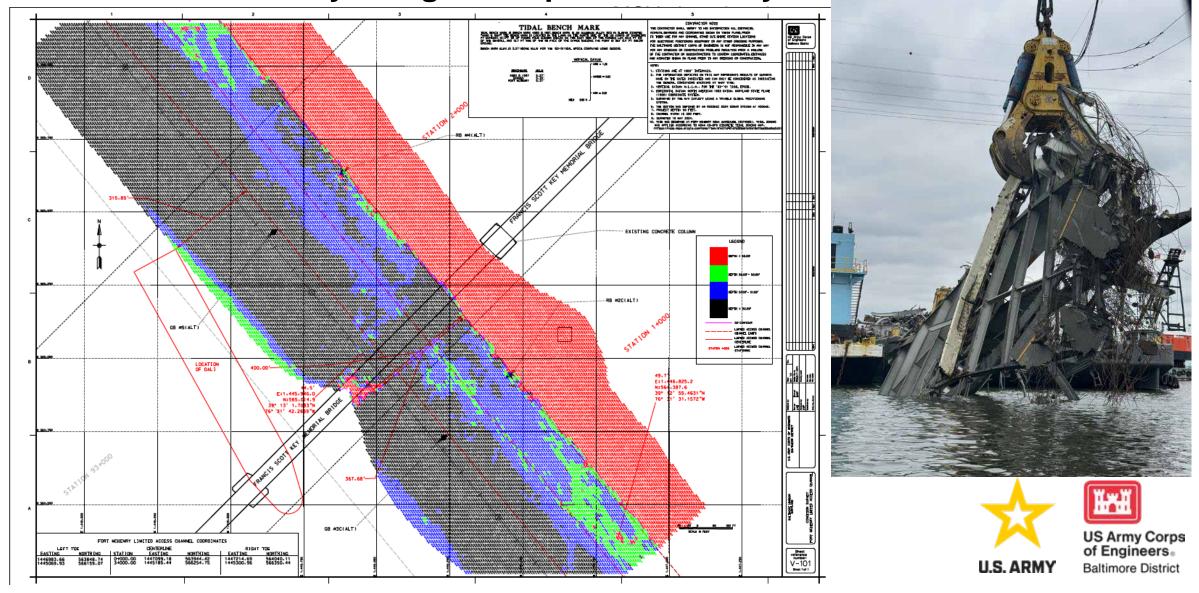
*Based on an average 13-ton weight of a fully loaded dump truck



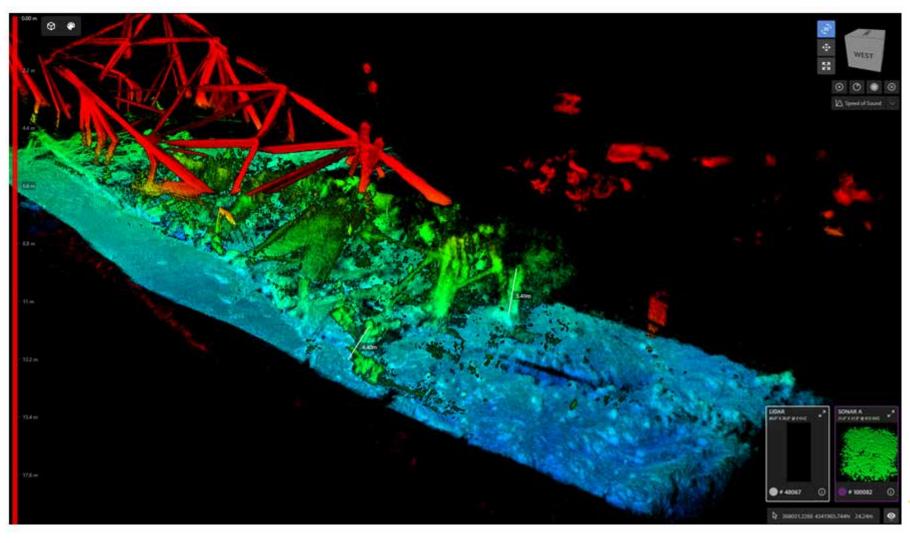


SURVEY AND DEBRIS REMOVAL MISSIONS

Francis Scott Key Bridge Collapse – Recovery / Salvage Effort



SURVEY AND DEBRIS REMOVAL MISSIONS Francis Scott Key Bridge Collapse – Recovery / Salvage Effort







BY THE NUMBERS

- At the highest point, Unified Command led the response efforts among ~56 federal, state, and local agencies, represented by 1,587 individual responders.
- ~500 specialists from around the world operated a fleet of 44 vessels of various sizes and capabilities, as well as 36 barges, 27 tugboats, 22 floating cranes, 10 excavators, a dredger, a skimmer, and Coast Guard cutter.
- Subject matter experts from all over the U.S. also provided essential technical knowledge to the Unified Command.







USACE BALTIMORE WEBSITE AND SOCIAL INFO



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nab.usace.army.mil

