

THE CHESAPEAKE ENGINEER

WINTER 2021



**US Army Corps
of Engineers**[®]
Baltimore District

ENGINEERING SOLUTIONS FOR OUR
NATION'S TOUGHEST CHALLENGES

THE CHESAPEAKE ENGINEER

MAGAZINE

The mission of the U.S. Army Corps of Engineers, Baltimore District, is to deliver vital engineering solutions in collaboration with our partners to serve and strengthen the Nation, energize the economy and reduce disaster risks.

DOD Disclaimer

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ON THE COVER:

Contractors work to install a pipe to re-route water in the stilling basin at Foster J. Sayers Dam in Centre County, Pennsylvania, Aug. 19, 2020. (U.S. Army photo by Christopher Fincham)

THE DISTRICT ENGINEER



I have had many incredible experiences serving as the Commander of Baltimore District over the past three years. I am extremely proud of the vast array of projects and services we’ve provided to our partners throughout our region and the nation, particularly during the pandemic. I am especially proud of our District workforce and the resiliency they continue to display throughout the pandemic.

In this edition, you’ll learn a little more about my time with the District – from our high-profile projects, to some of the challenges; our volunteer deployers; our top-earning recreation sites; continuing our production of quality drinking water at the Washington Aqueduct through leadership transition and much more.

I will certainly cherish the memories, partnerships and friends I’ve made during my tenure.

Baltimore District will officially change command in July, and I know the District will be in great hands.

Thank you, all.

BUILDING STRONG!

COL John Litz
Commander and District Engineer
Baltimore District



Col. John T. Litz, commander and district engineer, U.S. Army Corps of Engineers, Baltimore District, at the COVID-19 Alternate Care Facility at the Walter E. Washington Convention Center in Washington, D.C. (U.S. Army photo by Brittany Crissman)

Q & A

WITH THE DISTRICT ENGINEER

INTERVIEW CONDUCTED BY SARAH LAZO

As Baltimore District Commander, Col. John T. Litz prepares to change command in the summer of 2021, he reflects on the three years he has spent serving our region and the Nation in this role.



Commander and District Engineer Col. John T. Litz, U.S. Army Corps of Engineers, Baltimore District. (U.S. Army illustration by Christopher Fincham)

Q: What are you most proud of during your time with Baltimore District?

A: A few things. First are our people – our team. We execute a large, complicated and diverse mission set - geographically dispersed across the mid-Atlantic, yet we still have a sense of being a cohesive team. We have 44 total locations across multiple states where people go to work every day, which can be a leadership challenge. I am particularly proud that our two largest geographically dispersed

divisions, the Washington Aqueduct and Realty Property Services Field Office, have strengthened their bonds within the District over the past few years.

I am proud of our mission execution, as we continue to deliver our programs to meet our customers' needs. New clients such as the Bureau of Engraving and Printing and the U.S. Department of Agriculture came to us because of our reputation and belief we could execute a replacement facility for them, like we've done for

other high-profile agencies. At the Washington Aqueduct, we continue to deliver high-quality drinking water in enough volume, all while meeting EPA standards, which is a challenge given the age of the infrastructure. Our Regulatory Program is achieving its permitting numbers. Our Operations teams continue to maintain and operate dams, survey the channels and maintain our recreation sites. Everyone is hitting their programmatic goals and delivering across the District. That didn't stop when coronavirus came.

I am also proud of how our workforce has adapted since April of 2020 to a predominately remote workforce in response to the pandemic. Approximately 70-80 percent of our workforce was able to work continuously and effectively in a remote environment. Everyone has adapted well and I'm very proud of that.

Q: What is the greatest challenge you've had to face, and how did you work to overcome it?

A: The District's response to the coronavirus for sure. We continue to adapt and make improvements in our posture all the time as we learn and adjust to new information.

Another significant challenge involved increasing our personnel end-strength, which was a problem across the region. We had experienced a three-year continuous decline, which was beginning to affect our capacity to execute our missions and negatively impacted morale. The District worked with the North Atlantic Division to set up a human resource "surge cell" to get better visibility on our hiring shortfalls and upcoming actions. Baltimore District's division deputies were key to getting visibility and action on hiring personnel requirements and hiring actions, so we set up weekly meetings with key staff and division deputies. Through a couple years of focused effort, we've been able to bend the curve upward and we are about where we need to be, but it's taken a lot of effort. This is a challenge we've met well, and I credit many people across HR and our management structure. We have somewhere between 80 to 100 more people on board than when I arrived, which has increased our workforce diversity, increased morale, decreased stress and enhanced our capacity to meet our customers' and stakeholders' needs.

We also had a significant change in leadership at our Washington Aqueduct with the general manager retiring after more than 25 years of service in that position. I spent a lot of time there to help the Aqueduct establish continuity of leadership and advance some of their strategic initiatives, like addressing their aging infrastructure and enhancing security. We're not done by any means, but we've made a lot of headway. The Aqueduct is a world-class organization, and they have a critical mission – I am very proud of that team.

From a project perspective, the USAMRIID laboratory MILCON project commissioning and its associated steam sterilization plant on Fort Detrick has been the most challenging and certainly the most difficult technical problem to solve due to the directional airflow requirements. These projects have required a lot of leadership involvement from across the Army and DOD. I am very proud of the way the entire stakeholder group has come together to provide resourcing and prioritization for this project as well as great work and cooperation from our industry partners.

Q: What is your favorite memory or trip?

A: It's hard to think of a favorite since most of my trips and interactions with the team have been interesting and rewarding. I've really enjoyed getting out to our remote sites including our dams, Regulatory field offices, Washington Aqueduct sites, just meeting folks, getting their perspectives and hearing their stories. We have more than 40 office locations, as well as two employees in Texas and one in Florida. I was focused on visiting all our sites over my first year in the District to ensure accountability of all our folks and check out their

working environments and our infrastructure. A lot of our sites are remote, and many of the personnel grew up at these remote locations, and this is where they will spend most of their working careers. It's a different way of life from those who work at the District headquarters in Baltimore, yet we're still on the same team. I've enjoyed the variation of locations such as touring remote sites in southern New York, taking in the scenery, and then 12 hours later being in DC in the middle of a city doing something else. There is so much variety and variation in our portfolio.

Q: What was the most unique project or program you worked on?

A: There are several unique aspects within our District. If you think of it as "the only one of that" – it's the Washington Aqueduct. It's the only public water utility in USACE. There aren't communities of practice for it. It's incumbent upon the District to champion their issues – it's bottom-up decision making, not top-down. The Aqueduct is also the most critical mission area in the District as it supplies water for systems cooling, drinking water and fire protection in our Nation's Capital. I don't think the Aqueduct team can get enough credit for what they continuously do daily.

We also have our East Campus recapitalization project on Fort Meade for the Intelligence Community. When are we going to build a state-of-the-art campus that large again? Possibly never. Other USACE districts perform work for their IC and secure stakeholders, but the East Campus Integrated Procurement Office is certainly unique.

The Real Property Service Field Office is also a one-of-a-kind division in the Baltimore District. They started supporting the Intelligence Community with real estate services back in the 1980s

Q & A

but now provide a wide array of real property and engineering services to nearly every agency in the IC and to many parts of the Department of Defense with secure requirements. Operating out of a secure facility in Maryland, yet performing work across the Nation and even overseas, the RSFO provides a great deal of value to their clients, and I think they punch way above their weight class.

Q: What will you miss the most about Baltimore District?

A: Interacting with the team. It's been a privilege to have the freedom and means to move around to our sites and offices. I'll also miss the personal communications – the emails and notes exchanged with my teammates ranging from personal matters to important mission-related matters. I see the District as a big team – our divisions do different things, but they find ways to work together. I see how it all connects, and I really enjoyed that.

Q: How has this assignment compared to others in your career?

A: It's hard to compare, but this certainly was an incredible experience. I've never had a bad assignment in my Army career. I've always enjoyed them. With my time at Baltimore District – the size, complexity and variation has been a challenge. It's hard to get your head around everything the District does. We are different than other industries that tend to focus on certain things that are related. A large district like Baltimore is responsible for executing many varied mission areas that aren't necessarily closely related. We're not light in any program area, which is what makes us one of the flagship districts across USACE.

I had USACE experience coming in, but there was still an incredible amount I had to learn. I had to rely on our people, and our incredible team made that easy. I can't think of anything I've done previously that was this big of a leadership challenge. That's the way the Army system works – increasing challenges. We also can't forget about the small projects and services we provide to stakeholders because those are just as important as the large ones that get all the headlines.

I AM NOT THE SOLE REASON ANY OF THIS WORKS WELL,

board; it's a stark reminder that we are in the people business – it's not just about program delivery, infrastructure and process.

I don't think we can ever recognize our people enough. We have great employees and supervisors who execute our missions in a decentralized way. I am not the sole reason any of this works well, but the great Division Chiefs, supervisors down to the first line and our individual employees deserve the credit.

Q: What do you see for the future of Baltimore District? What are the next big projects on the horizon?

A: I am very optimistic about our future. I have seen how the District reacted to COVID-19, and that has shown that we're very adaptable, and we will continue to adapt – whether in a pandemic or something else. We're postured for success. We have the right culture. Our people step forward to volunteer as demonstrated with our Alternate Care Facility mission and our recent Project Inclusion initiative to help understand our employees on a personal level and aid in our diversity effort. We used to struggle filling our Emergency Management planning and response teams, but not anymore thanks to the willingness of many to make personal sacrifices for the greater good. With those sorts of indicators, I would say the District is postured for success across all our mission areas.

We have plenty of work coming in. We're geographically positioned well in the mid-Atlantic and National Capital regions,

and I think we will continue to get interesting work that will keep us technically proficient and gainfully employed – even when work wraps up on Poplar Island, the Public Health Center on Aberdeen Proving Ground, and the Bureau of Engraving and Printing replacement facility. I think the future of the District is very bright.

Q: What advice do you have for the incoming commander?

A: You have a great team, and you can trust them. Open as many channels of communication as you can with your new team and the District's stakeholders. Make time early in your tenure to get out and meet the District's people. You will get all the feedback you need to develop priorities and understand where to focus effort. There are many stakeholders of the Baltimore District and all of them are important. Prioritize your effort and share the load with your team since they are absolute professionals, and you can't do it all. ■

BUT THE GREAT DIVISION CHIEFS, SUPERVISORS DOWN TO THE FIRST LINE & OUR INDIVIDUAL EMPLOYEES DESERVE THE CREDIT.



Col. John T. Litz, commander and district engineer, U.S. Army Corps of Engineers, Baltimore District. (U.S. Army illustration by Christopher Fincham)

WOMEN HAVE STEPPED UP IN LEADERSHIP ROLES THROUGHOUT THE DISTRICT TO HELP GUIDE THE TEAM DURING SOME OF THE MOST CHALLENGING TIMES.

LEADING THE WAY

GIRLS NOT ONLY HAVE THE INTELLIGENCE FOR A POSITION IN THE ENGINEERING FIELD, BUT GIRLS ARE ALSO GREAT AT WORKING WITH OTHERS IN A COLLABORATIVE WAY TO SOLVE SOME OF THE MOST COMPLEX ENGINEERING CHALLENGES OUR COUNTRY FACES.
DARIA VAN LIEW



“BE MINDFUL THAT YOU ARE THE DESIGNER OF YOUR LIFE AND CAREER, SO MAKE SURE THAT YOU ARE DELIBERATE IN MAKING CHOICES, EMBRACING OPPORTUNITIES AND BEING FLEXIBLE IN THE FACE OF UNCERTAINTY.”
FRANCINE DIGGS

“YOU CANNOT BE AFRAID TO BEND THE RULES AND BREAK THE MOLD AS IT PERTAINS TO NOT ONLY DESIGNS BUT THE SOCIETAL PERCEPTION OF GENDER ROLES.”
JAH-RAS HODGE

“NEVER UNDERESTIMATE YOURSELF & FOLLOW YOUR INSTINCTS.”
MARY FOUTZ

SEAGIRT LOOP

CRITICAL STUDY WILL HELP PORT OF BALTIMORE MEET VESSEL NEEDS

BY NICOLE STRONG

With its existing 50-foot deep channel and Neo-Panamax cranes, the Port of Baltimore is already able to accommodate some of the largest container ships in the world, and has experienced significant growth in containers in recent years. Baltimore District is teaming up with the Maryland Port Administration (MPA) to ensure future capacity needs are met.

Baltimore District works tenaciously to monitor and maintain more than 290 miles of federal channels within the Susquehanna River watershed through its navigation mission. Maintaining safe marine navigation in the Baltimore Harbor to provide access to the Port of Baltimore — a major economic generator — is a key aspect.

Efficient and safe navigation is necessary to keep the Port running smoothly, and a critical study to help meet the future needs of the Port of Baltimore Harbor is the most recent effort for Baltimore District's vital navigation mission.

Baltimore District signed a Feasibility Cost Share Agreement Sept. 22, 2020, in partnership with the Maryland Department of Transportation MPA, to commence a \$3 million, three-year study to improve capacity, safety and efficiency at the Baltimore Harbor Anchorages and Channels project.

The end goal of the study is to identify one or more solutions like channel widening and deepening that can safely accommodate the current and projected increase

in the number and size of post-Panamax vessels calling at the Port.

The Seagirt Loop Channel that serves the Seagirt Marine Terminal is the destination for a majority of container traffic in the Port. Seagirt Loop is made up of the Seagirt West Branch Channel that tracks along the Seagirt Marine Terminal, and portions of Dundalk/Seagirt Connecting Channel and West Dundalk Branch Channel. It connects to Fort McHenry Channel, which is used by ships entering and exiting the harbor.

"We value our partnership with the U.S. Army Corps of Engineers, and we are very excited to move forward with them on developing the Seagirt loop Channel to accommodate today's ultra-Panamax container ships," said MDOT MPA Executive Director William P. Doyle. "As our container volumes continue to grow and we expand the Seagirt Marine Terminal, a wider, deeper loop channel that's safely navigable for vessels is critical."

The study is being carried out under Section 216 of the Rivers and Harbors Act of 1970, which allows modifications to existing water resources projects including navigation if physical or economic conditions have changed significantly since project completion. The original Baltimore Harbor Anchorages and Channels Study was completed in 1998. The Water Resources Development Act (WRDA) of 1999 authorized improvements to the Dundalk, Seagirt and South Locust Point branch channels, and the deepening of Anchorages 3 and 4 in the Baltimore Harbor.

Since the completion of

these significant navigation improvements in 2003, larger vessels in terms of length, width and draft have been transiting through the Port in concert with the expansion of the Panama Canal, necessitating a new study that evaluates current and future conditions and needs.

The channels in Baltimore Harbor that form the Seagirt Loop are authorized to 42 feet and are maintained to depths varying from 42 to 51 feet. Post-Panamax container vessels can carry twice the cargo capacity and require deeper drafts than the ships used to design the 42-foot access channels to the Seagirt Marine Terminal.

The scope of the study includes the following: widening and deepening the Seagirt Loop Channel; redesigning an anchorage to allow 50-foot draft vessels to stand by within Baltimore Harbor; examining the deepening of the South Locust Point Branch Channel and Turning Basin; and considering and evaluating other structural and non-structural measures that will result in improved transportation efficiencies.

"The overall goal of the study is to maximize Baltimore Harbor's contribution to national economic development, consistent with protecting the nation's environment, by improving the existing navigation system's ability to safely and efficiently serve the forecasted vessel fleet," said Luis Santiago, Baltimore District community planner. ■



The Gunde Maersk at the Port of Baltimore. (Photo courtesy of the Maryland Department of Transportation, Maryland Port Administration)

DEVELOP SOLUTIONS THAT:

Meet current & forecasted future capacity needs for container traffic.

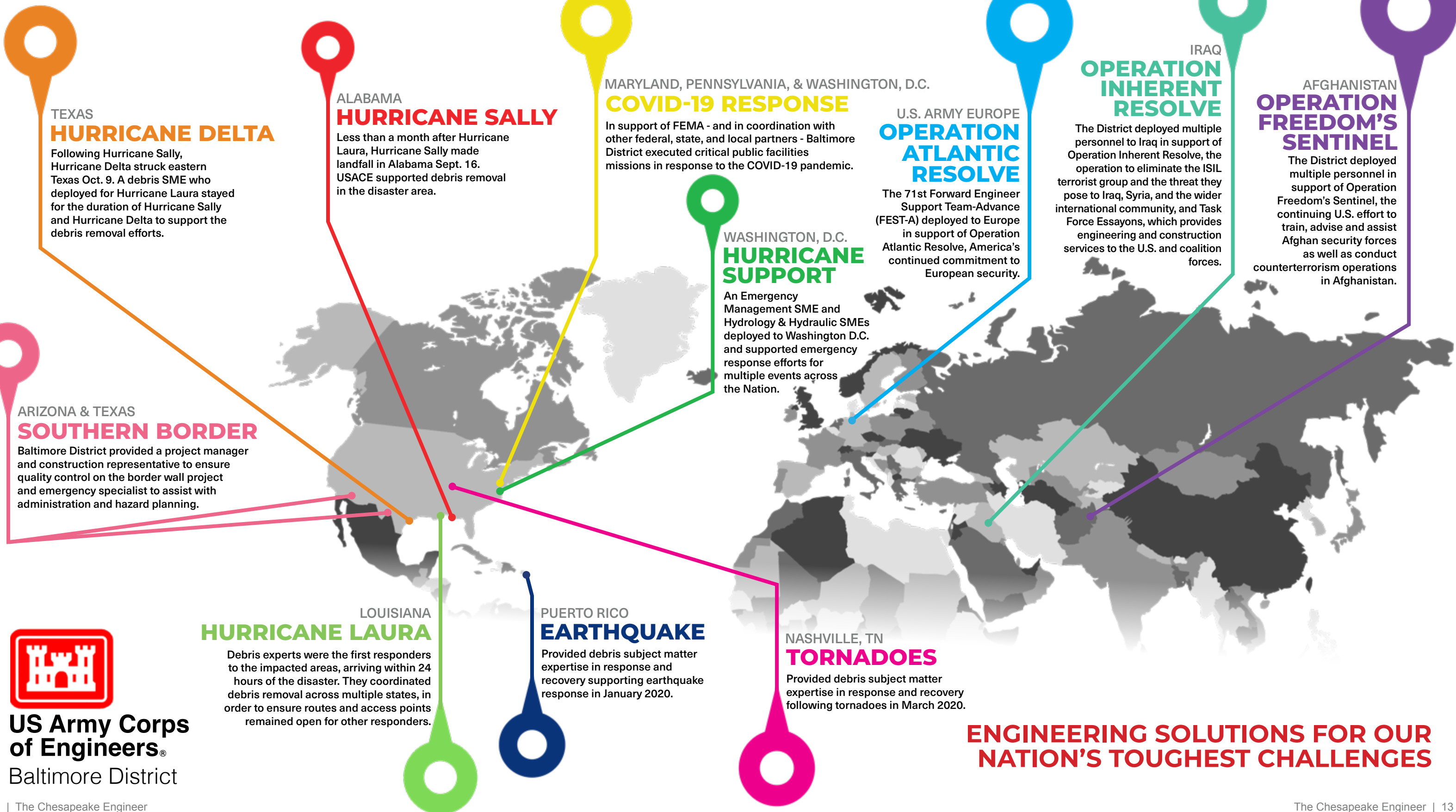
Improve navigability and increase safety for vessels.

Decrease delays to vessels.

Increase efficiencies for vessels.

DEPLOYABLE

The U.S. Army Corps of Engineers, Baltimore District, is always prepared to assist the Nation in times of crisis. Throughout 2020, the District deployed Subject Matter Experts (SME) to support a variety of missions around the world.



US Army Corps of Engineers®
Baltimore District

ENGINEERING SOLUTIONS FOR OUR NATION'S TOUGHEST CHALLENGES

DAM SAFETY PROGRAM

The Baltimore District performs an engineering dam safety mission for 15 dams in Maryland, West Virginia, Pennsylvania, and New York.

The Baltimore District executes a risk-informed dam safety program that includes inspections and repair work for its dams.

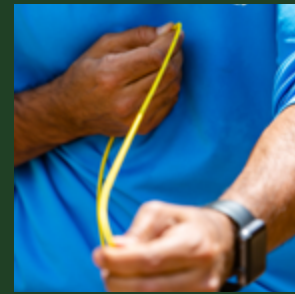
Annual inspections are a key component of the dam safety program. They ensure the geotechnical engineering staff stay familiar with the features and condition of the dams and help strengthen the relationships between the engineers and the USACE dam operators. The inspections are also frequently combined with reading of instruments at the dams.

During these inspections, the geotech team looks for items that require maintenance, monitoring, and changes in condition that

could result in unexpected dam behavior.

“Examples of things we look for on the embankment include settlement, unexpected seepage, and slope instability,” explained Brain Glock, the dam safety program manager.

While the dam operators monitor and maintain the dams on a daily basis, the engineering inspections provide a second set of eyes to help identify issues that may need further attention and can help elevate associated needs to District leadership. The inspections therefore help ensure the dams remain in top condition to effectively perform their critical role in reducing flood risk to the downstream public. ■



CLOCKWISE FROM TOP: A cable and sensor device sits on the ground near a marked pipe - a piezometer - along the side of Alvin R. Bush Dam. ■ A smaller tube inside the marked pipes drops down to a specific depth in order for engineers to measure pressure within the earth and rockfill dam. ■ Raj Singh, an engineer with the Baltimore District Geotechnical Branch lowers a sensor and cable into piezometer number 10. ■ Singh checks the measurement on the cable after being alerted by the sensor and pulling it back to the surface. ■ There are numerous marked piezometers that allow pressure to be regularly monitored at various depths and locations. ■ A view of the bridge to Alvin R. Bush Dam. ■ Engineers with the USACE, Baltimore District, Geotechnical Branch conduct inspections at Alvin R. Bush Dam. ■ The view downstream from the crest of the embankment at Alvin R. Bush Dam, located approximately 8.4 miles above the mouth of Kettle Creek and about 15 miles above Renovo, Pennsylvania, Aug. 18, 2020. (U.S. Army photos by Christopher Fincham)



PROSPEROUS SUMMMER

THE BALTIMORE DISTRICT IS HOME TO TWO OF THE TOP-EARNING CAMPGROUNDS AT U.S. ARMY CORPS OF ENGINEERS RECREATION PROJECTS ACROSS THE COUNTRY.

BY BRITTANY CRISSMAN

When Recreation.gov released their FY20 campground revenue report listing approximately 770 USACE campgrounds, Raystown Lake's Seven Points Campground came in at number one, and Tioga-Hammond and Cowanesque's Ives Run Campground came in at number three.



Baltimore District's facilities were allowed to reopen safely during the 2020 recreation season despite the COVID-19 pandemic.

Health and safety have always been the top priority at USACE recreation facilities, and in 2020 the team followed CDC guidelines and encouraged visitors to do the same.

"The health and wellness of our team, contractors, partners, and the public have always been and will continue to be our top priority," said Allen Gwinn, Raystown Lake's supervisory park ranger. "We adapted well to the changing environment and modified operations where we could."

With trust embedded in Baltimore District's recreation employees and staff who serve at every facility, the sites welcomed high visitation. The sites provided visitors an excellent and safe opportunity to get outdoors - an essential physical and mental health activity during the pandemic.

"COVID-19 impacted a lot of people in negative ways, including people being somewhat isolated," said Steve Sporer, Tioga-Hammond and Cowanesque Lakes' supervisory park ranger. "One of the silver linings was that many people wanted to get out and reconnect with the outdoors; it was a way for people to be self-contained but still get out and make memories with their families. For us, it was a balancing act between enforcing safety measures, customer service and providing people with a positive outdoor experience - and that's what we did."

USACE campgrounds offer opportunities to hike and ride on trails, hunt and fish, and of course, camp with your family.

"All in all, the opportunity to serve the public safely is what we are most satisfied with, and we will continue to ensure this in the future," said Gwinn. ■

TOTAL REVENUE **\$728k** REGISTERED CAMPERS **26,918**

SEVEN POINTS

TOTAL REVENUE **\$490k** REGISTERED CAMPERS **16,467**

IVES RUN





THE WASHINGTON

AQUEDUCT

BY CYNTHIA MITCHELL

The U.S. Army Corps of Engineers designed, built, and, in 1859, began operating the Washington Aqueduct. Since then, USACE has substantially expanded and improved the capacity and function of the Aqueduct from its original mission of supplying raw river water to a sparsely populated District of Columbia.

In late September 2020, Thomas Jacobus retired after serving in the Washington Aqueduct General Manager role for more than 25 years.

“During this period of transition at the Washington Aqueduct, the U.S. Army Corps of Engineers remains committed to ensuring high standards for drinking water in our nation’s capital that Mr. Jacobus championed for more than two decades,” said Col. John Litz, Baltimore District commander. “The Washington Aqueduct has thrived under Tom’s leadership. He leaves behind an incredible team of experts who are committed to providing safe, sustainable, cost-effective water. Tom is an incredible leader who served his country in uniform and as an Army Civilian for 53 years. I am proud of Tom and his significant accomplishments, and I wish him all the best in his retirement.”

Of note, Jacobus and his

team developed a series of pilot alternative water treatment processes including the integration of UV disinfection and ozonation to defeat pathogens and also researched and studied backup water sources should the Potomac River become unusable or contaminated.

In late 2020, Rudolph (Rudy) Chow stepped in as interim GM. Chow comes to the aqueduct from the City of Redlands in California in which he served as the director of the Municipal Utilities and Engineering Department. He was previously appointed as the director of Baltimore City’s Department of Public Works and also spent more than 20 years with the Washington Suburban Sanitary Commission, serving Montgomery and Prince George’s counties. In 2019, he was named “Top Ten Public Works Leaders” by the American Public Works Association, among several other

awards.

“Under Mr. Chow’s leadership, much needed upgrades were made to Baltimore’s aging infrastructure. He also established a small business program and created a water industry mentorship program to help underemployed or unemployed city residents enter the water utility field,” said Litz.

The Washington Aqueduct provides 135 million gallons of safe, reliable and cost-effective drinking water per day to more than one million people in D.C. and Northern Virginia. All funding for operations, maintenance, studies and capital improvements for Washington Aqueduct comes from revenue generated by selling drinking water to its three wholesale customers: DC Water, Arlington County and Fairfax Water.

The Washington Aqueduct is the U.S. Army’s only public utility. It has been owned and

The Washington Aqueduct produces an average of **135 million gallons** of drinking water per day for approximately **one million citizens** in the District of Columbia and northern Virginia.



The Dalecarlia Water Treatment Plant in Washington, D.C. (U.S. Army photo)

operated by the U.S. Army Corps of Engineers for more than 160 years. Capt. Montgomery C. Meigs, an Army Corps officer and an 1832 graduate of the U.S. Military Academy at West Point, was personally directed by Congress to design and build an aqueduct to provide Potomac River water to the nation’s capital. Service began Jan. 3, 1859, supplying fresh water via gravity from Great Falls for domestic and commercial use, as well as for firefighting. ■



RESTORATION REGULATION

A \$30 million project on the Manokin River in Somerset County is on track to be the world's largest oyster restoration effort. The Manokin River, on Maryland's Eastern Shore, is one of 10 tributaries identified through the 2014 Chesapeake Bay Watershed Agreement that established goals and outcomes by 2025 for the restoration of the Bay.

A goal of 441 acres of oyster restoration was set for the Manokin River, and approximately 20 acres of the goal were already achieved through existing habitat. The remaining 421 acres would need to be created through a combination of constructing reefs using rock or mixed shells and planting spat (baby oysters) or spat on shell on suitable habitat.

For any restoration project, permits are required to evaluate potential project impacts - both positive and negative - on the environment before work can proceed. While

USACE has been the lead for reef construction efforts on other tributaries, in the case of the Manokin, USACE played the role of regulator. Through the USACE Regulatory Program, regulators have an obligation to come to the most responsible and fair decisions when considering permit applications.

Each application has specific and unique issues and impacts that must be considered, with regulators weighing the potential benefits and detriments to the Chesapeake Bay watersheds and its users. Regulators objectively consider numerous public interest review factors when reviewing applications. Five issues that are

commonly identified include potential impacts to navigation, recreation, endangered species, historic features, and tribal rights.

As the oyster restoration project lead for the Manokin tributary, the Maryland Department of Natural Resources (DNR) submitted state and federal permit applications to the Maryland Department of the Environment and Baltimore District's Regulatory Branch, respectively. In 2015 and again in 2019, USACE authorized DNR to plant up to three inches of oyster seed within the Chesapeake Bay and its tributaries, including the Manokin River. The regulatory reviews determined that the project complies with USACE's Nationwide Permit 27, which authorizes restoration of aquatic resources, since the Manokin River historically supported native oyster populations.

In 2020, DNR submitted an additional application to MDE and USACE for authorization to place additional materials to construct reefs at 31 sites, comprising 333 acres of the targeted 421. The project proposed that once additional materials were deposited, these areas would then be planted with 1 to 3 inches of oyster seed.

Among other elements, Baltimore District regulators assessed the potential for navigation impacts created by the proposed work, given the location of several federal channels in the vicinity. This review was done in close coordination with several resource agencies and the USACE Navigation Branch. The regulatory team used available geographic information system (GIS) data to map traffic patterns within the Manokin River, and the data was compared to the proposed placement sites. After determining that the project would not impede navigation or present safety concerns, the additional work was authorized in December 2020. ■

USACE has been regulating activities in the Nation's waters since 1890. The mission of the Regulatory Program is to protect the nation's aquatic resources, while allowing reasonable development through fair, flexible, and balanced permit decisions.

AROUND THE DISTRICT



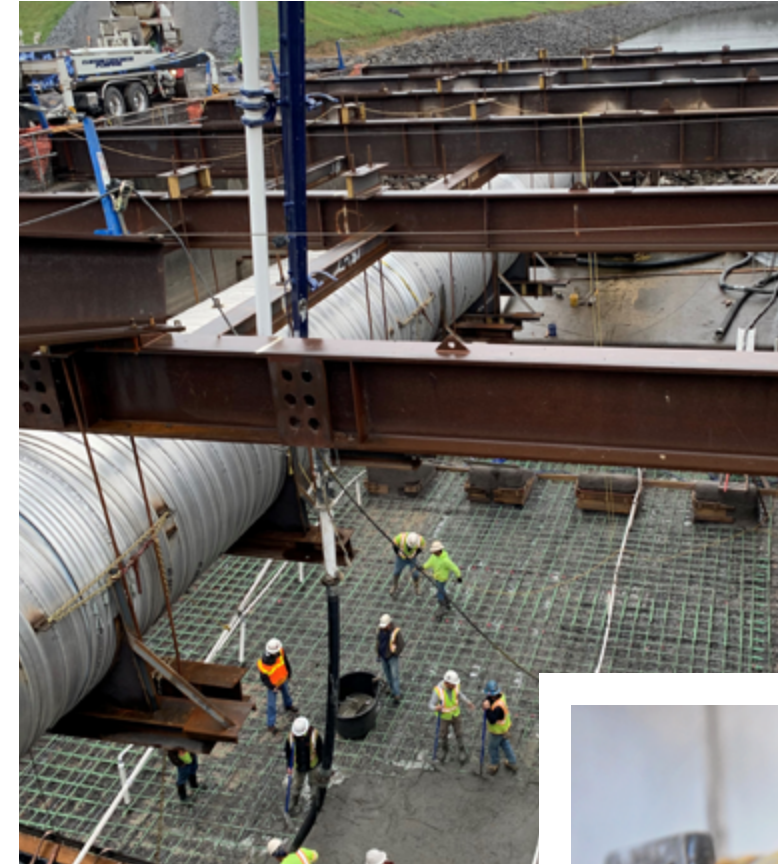
ORDNANCE TRAINING SUPPORT FACILITY

The U.S. Army Ordnance Training Support Facility (TSF) at Fort Lee, Va., is the first training support facility in the U.S. Army and is part of the U.S. Army Museum Enterprise and the Center of Military History. The development of this LEED-Certified facility was a collaborative effort with the design managed by Norfolk District and executed by teams from the Norfolk District (Project Management Site, Geotech) and Baltimore District (Design Management, Architecture, Structural, Mechanical, Fire Protection, Electrical and Communications). The mission of the Ordnance TSF is to support Soldier training, education, leader development and to facilitate the preservation of historically significant artifacts and equipment. (Photo courtesy of S.B. Ballard Construction Company)



BALTIMORE HARBOR DEBRIS

Joe Huber, a Baltimore District small craft operator, uses a chainsaw to break down debris collected from the Baltimore Harbor, Oct. 21, 2020. The Baltimore Harbor Debris Unit clears floating hazards within the Patapsco River and its tributaries in an area covering 24 square miles. (U.S. Army photo by Christopher Fincham)



SAYERS STILLING BASIN

Construction to repair deteriorated concrete is performed within the stilling basin of Foster Joseph Sayers Dam, located in Centre County, Pa., Oct. 9, 2020. The area where people are standing is typically under approximately 20 feet of water, and the flow is temporarily being diverted through the large overhead piping system. The purpose of the stilling basin is to dissipate the energy of the flow from the outlet tunnel before it enters the downstream channel. Continued maintenance is key to the operation of critical flood risk management infrastructure like Sayers Dam. While the stilling basin damage may not be visible or pose an immediate threat, over time, erosion could impact the dam's structural integrity. (U.S. Army photo)



SPRING VALLEY MUNITIONS

Munition debris items recovered in the past from 4825 Glenbrook Road remedial action required complete demilitarization prior to recycling of the metal. The operation was conducted Jan. 27, 2021, with no issues. Thirteen munitions were cut and verified as scrap. The Spring Valley Formerly Used Defense Site (FUDS) consists of approximately 660 acres in the northwest section of Washington, D.C. (U.S. Army photo by Cynthia Mitchell)



17TH STREET LEVEE CLOSURE

The National Park Service performed its annual test installation of the 17th Street closure in Washington, D.C. on Oct. 6, 2020. The closure is a removable structure that can be erected in the event of high water to attach to the floodwalls on both sides of 17th Street. It is situated between the Lincoln Memorial and the Washington Monument, is regulated by USACE and operated and maintained by NPS. The closure is part of the District of Columbia (Potomac Park) Levee System. (U.S. Army photo by David Gray)

U.S. Army Corps of Engineers,
Baltimore District



2 Hopkins Plaza
Baltimore, MD 21201

\$21,077,257

**BALTIMORE DISTRICT DOLLARS OBLIGATED
TO SERVICE-DISABLED VETERAN-OWNED
SMALL BUSINESSES IN FISCAL 2020**

The involvement of small business in our military and civil works programs is vital to our mission. Much of our success is due to the initiative, imagination, and productivity of thousands of small business concerns.

**SMALL BUSINESS UTILIZATION
IS JUST GOOD BUSINESS.**



@USACEBaltimore



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