### NEW YORK DISTRICT



### IN CONGRESS. JULY 4. 1770

HISTORY

## More than 200 years of history, from the Revolutionary War to today

In 1776, General George Washington authorized his army's engineers to defend New York against the British, marking the start of the New York District's long history.

In 1776, the British attacked New York. The Revolutionary War had begun a year earlier, and General George Washington tasked Army engineers with building fortifications, planning encampments, surveying terrain, and clearing roads. This defense marked the start of the New York District.

In the coming years, the district's engineers would continue to strengthen the nation's defenses. During the War of 1812, the district's fortifications around New York Harbor convinced the British to avoid attacking New York. More than 100 years later, during World War II, the district oversaw the top-secret production of the atomic bomb, code-named the "Manhattan Project." Today, the district's military construction mission has expanded to support all six branches of the U.S. Armed Forces.

In addition to military construction, the district also has a civil works mission to build public infrastructure projects. In 1834, the district began its first civil works project to straighten and deepen the Hudson River, improving safety for commercial navigation. Throughout the 19th century, the district's engineers would continue to build lighthouses, jetties, and piers, survey roads, map navigation channels, and remove sandbars, snags, and other navigation hazards.

"Surrender of General Burgoyne," by John Trumbull (1826), depicts the surrender of British General John Burgoyne to the Americans at Saratoga, New York on October 17, 1777. This victory led the French government to officially recognize the independence of the United States of America. General Rufus Putnam, New York District's first district engineer, is visible directly behind the man wearing all white.



### Engineering solutions to secure the nation, energize the economy, and reduce disaster

MISSIONS

With five major mission areas, USACE strives to deliver engineering solutions for the nation's toughest challenges.

New York District's \$1.1 billion program oversees some of the largest infrastructure projects in the nation from its headquarters in bustling lower Manhattan.

As one of 38 districts nationwide, New York District's mission areas include navigation, environmental regulation, coastal storm and flood risk management, military construction, and emergency operations across a 26,000-square-mile region. The district's work maintains waterways, protects coastlines, and responds to disasters of all kinds.

The district also plays a critical role in ensuring the safety and well-being of the communities it serves. The district serves millions of people across five states, including New York, New Jersey, Vermont, Massachusetts, and Connecticut. Although the district has military leadership, its employees are mostly civilians, ranging from engineers to accountants.

Project Engineer Brendan Roddy (right) speaks to Project Manager David Gentile at the site of a beach renourishment project in Union Beach, New Jersey. "I manage and work with contractors to review and modify contracts, inspect installed work, and test material," says Roddy. "The projects I work on increase the resiliency of infrastructure for neighborhoods, municipalities, and the people who live within them."

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# Keeping waterways open to power the economy

The New York District's drift collection crew works around the clock to keep New York Harbor and surrounding areas clear of debris so commercial ships can deliver goods without interruptions.

Every year, thousands of cargo ships pass through New York Harbor on their way to the Port of New York and New Jersey. These vessels rely on USACE to keep the harbor free of floating debris known as "drift." Drift can be anything from trees and abandoned boats to vehicles, helicopters, airplanes - and even dead whales.

USACE has three patrol boats that monitor the harbor for drift that could damage a ship or navigation. When a patrol boat spots drift, it radios one of the three big drift collection vessels. These drift collection vessels use nets and bulldozer-like claws to collect up to 500,000 cubic feet of drift per year.

But there's more to the navigation mission than just drift collection. The district maintains more than 700 miles of navigation channels, dredging sand from riverbeds to deepen and widen waterways that improve safety for commercial tows hauling goods to ports. In upstate New York, the district's lone lock and dam allows vessels to lock upstream and downstream at the Troy Lock and Dam.

Marine Superintendent Bill Lyness walks by the DCV DRIFTMASTER, one of three large drift collection vessels based out of USACE's Caven Point Marine Terminal in Jersey City, New Jersey. "We work closely with our partners, including the Coast Guard, New York Police Department, New York Fire Department, and the maritime community, to find and remove hazardous drift," says Lyness.



#### REGULATION

### Developing and managing water resources through permitting

Rain or shine, the district's regulatory team spends hours in the field and in the office, evaluating environmental permits and making science-based decisions.

If you're building a dock on a lake, dredging a pond, installing utility lines over a wetland, or doing any other work that alters wetlands or water, you probably need a USACE permit. Even if you don't think you need a permit, it's best to check - performing work without a permit can have serious consequences, including legal action, fines, and imprisonment.

When considering a permit, regulators evaluate how the proposed activity will affect more than 21 factors, including environmental conservation, economic growth, historic value, land use, navigation, water quality, and human welfare. On the rare occasion that a permit is denied, regulators work with the applicant to help them redesign the project and reapply.

But the regulatory career field isn't just paperwork. The district's regulators spend up to 25% of their time in the field identifying wetlands, some of which can look forested or completely dry. These site visits help the regulatory team protect the nation's water resources and the critical role they play in preventing flooding, improving water quality, and providing fish and wildlife habitat.

Left to right: Archaeologists Kailey Loughran, Ryan Clark and Arianna Stimpfl search for historical artifacts on the grounds of the U.S. Military Academy at West Point, New York. "As a federal agency, USACE is required to evaluate every project's impacts on cultural resources," says Loughran. "I coordinate with state agencies, tribal nations, and local communities to ensure these resources are preserved as much as possible."



#### WATER MANAGEMENT

## Protecting communities from storms and flooding

USACE's engineers restore eroded beaches and build levees and floodwalls to help prevent flooding.

Every time a storm hits the coast, it erodes beaches. Heavy rain, strong wind, and waves wash away sand, collapse homes, flood streets, and endanger lives.

New York District engineers combat coastal erosion through two methods: hard structural features and nature-based non-structural features. Structural features that "harden" the shoreline include seawalls, breakwaters, groins, rip-rap, and levees. Non-structural features that mimic natural conditions include beach nourishment, wetland protection and restoration, and oyster reef and barrier island restoration.

While coastal storm risk management projects focus on fortifying ocean shorelines, inland flood risk management projects focus on fortifying river banks. Hard structural features like levees, floodwalls, pump stations and road closure gates help keep communities safe and dry during storms and other high-water events. The district currently has 21 coastal storm risk management projects and studies, and 10 flood risk management projects and studies in the states of New York, New Jersey, Connecticut, and Vermont.

Project Manager Alek Petersen stands within the interior, protected side of a floodwall and pump station system in Middlesex, New Jersey. "I work on flood risk management projects that help prevent flooding-related losses that affect the environment, economy, public health, and safety," says Petersen. "Our projects help build more resilient communities."



#### MILITARY CONSTRUCTION

### Building military facilities and cleaning up military-related environmental contamination

Engineers design and build facilities for the nation's soldiers, and help protect human health and safety through environmental cleanup.

In the heart of Times Square in midtown Manhattan, a 12-foot-tall American flag blazes from an electronic display screen anchored to a standalone military recruiting office. This patriotic display is just one of many iconic projects that New York District engineers have helped design and build.

The Times Square project, and many others, are part of the district's military construction mission, which provides design, construction, and real estate support to the Army, Air Force, and other federal agencies. This includes work on six military installations spread across New York, New Jersey, and Greenland.

The district's military construction mission includes several programs that address environmental contamination caused by the Department of Defense. The Formerly Used Defense Sites (FUDS) program cleans up munitions and toxic waste from properties where soldiers trained and tested weapons, while the Formerly Utilized Sites Remedial Action Program (FUSRAP) cleans up radioactive waste leftover from the development of the atomic bomb in the 1940s-50s.

Left to right: Briana Bloomer and Michelle O'Donoghue, members of the Cyber and Engineering Academic Center construction project team, on site at the U.S. Military Academy at West Point, New York. "Our nation's military cadets and soldiers live, work, and learn in the facilities we build," says O'Donoghue. "I help ensure that our military construction projects are completed with the quality our military members deserve."



#### EMERGENCY OPERATIONS

### Helping communities recover from natural disasters and emergencies

Volunteers deploy in the aftermath of natural and man-made disasters to save lives and protect property.

In the aftermath of hurricanes, earthquakes, and floods, USACE volunteers help remove debris, install temporary roofing on damaged homes, assess damage to hospitals and schools, provide temporary emergency power and housing, and evaluate collapsed buildings to help plan urban search and rescue missions.

Disaster response and recovery is a team effort. Emergency response starts with the local government and escalates to the state and federal government as resources are exhausted. When a state requests help from the federal government, the Federal Emergency Management Agency (FEMA) coordinates and assigns USACE tasks.

Over the years, New York District volunteers have deployed to U.S. states and territories as far-flung as Louisiana, Florida, Puerto Rico, and the Mariana Islands. Some district employees have even volunteered for deployments to Europe, Iraq, and Afghanistan as part of the Forward Engineer Support Team-Advanced (FEST-A). This rapidresponse team helps the U.S. Army solve technical engineering problems, including work on school, hospital, and road construction projects.

Sean O'Donnell, New York District Emergency Operations Chief (center left behind uniformed Army official), accompanies district leadership to inspect a 60-bed, high-tech field tent hospital in Joplin, Missouri after a tornado. "I coordinate with local, state, and federal partners to plan, train for, and assess hazards," says O'Donnell. "This preparation helps save lives, property, and infrastructure during a disaster."

STAFF WATER HERE ONLY



