

U.S. ARMY CORPS OF ENGINEERS NEW ENGLAND DISTRICT OVERVIEW

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**US Army Corps
of Engineers.**



WHO ARE WE?

- Nation's Engineers (Civil Works Program)
 - Responsible for Navigation, Flood Control, Disaster Response, Shore Protection, Hydropower, Water Supply, Regulatory, Recreation, Environmental Restoration
- Army's Engineers (Military Programs)
 - Capable of design and construction of any infrastructure in support of the Army or Air Force
- Support to others (International and Interagency Support)
 - Support to any other federal agency to include Environmental Protection Agency, Veterans Affairs, Homeland Security, Food and Drug Administration, National Guard Bureau



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USACE DIVISIONS AND DISTRICTS



32,000 civilian and 700 military personnel serving in 43 Districts within 9 Divisions

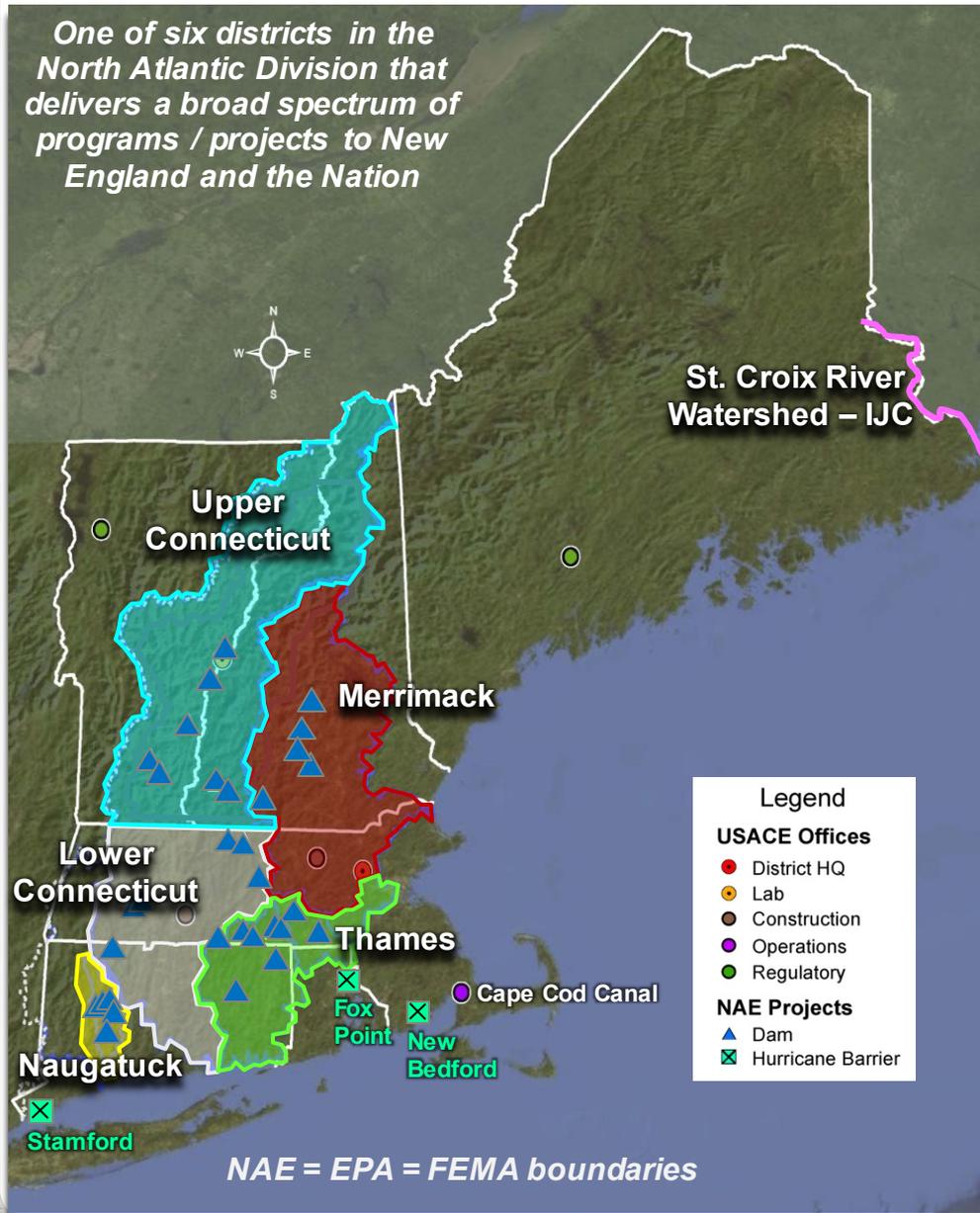


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NEW ENGLAND DISTRICT OVERVIEW

One of six districts in the North Atlantic Division that delivers a broad spectrum of programs / projects to New England and the Nation



- 6 Governors
- 12 Senators
- 21 Congressional Districts
- 13 million people
- 66,000 square miles
- 6,100 miles of coastline
- 11 deep draft commercial waterways
- 13 major river basins
- 171 Federal harbors
- 5 Military Bases
- 490 Employees
- 31 Dams; 5 Basin Offices
- 3 Hurricane Barriers
- Cape Cod Canal
- 2 Area Engineers
- 5 Resident Engineers
- 2 Regulatory Offices
- ~ 6,000 Permits issued annually

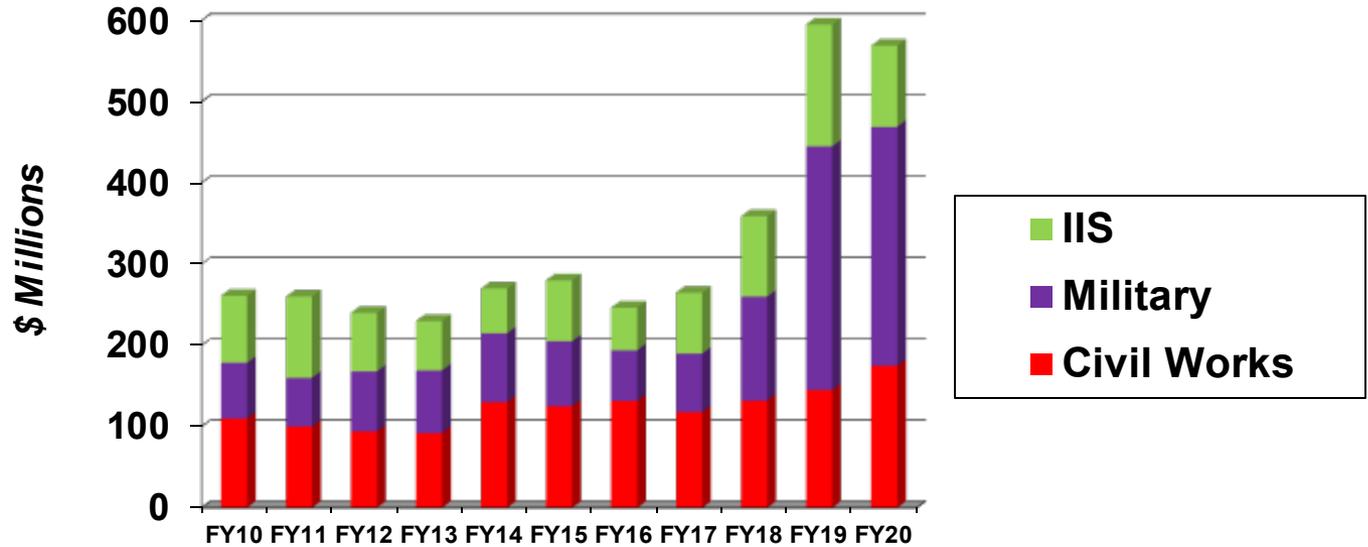


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NEW ENGLAND DISTRICT PROGRAM TRENDS

FY09 – FY20

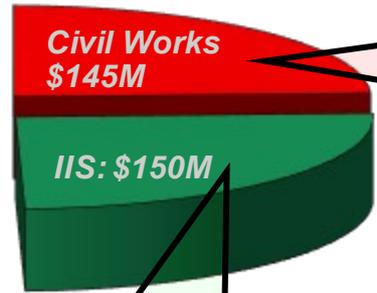


FY 19

MIT/Lincoln Lab
Hanscom AFB
Natick Labs
Devens
Joint Base Cape Cod
Westover ARB
CRREL
FUDS
Support to National Guard
National Army Museum



EPA – New Bedford Harbor;
Durham Meadows; Elizabeth Mine;
Raymark; Veterans Administration;
FDA – Winchester Engineering Lab



Boston and Portsmouth Harbors,
Numerous Continuing Authorities,
OM program for 31 reservoirs,
Hurricane Barriers and CCC,
Multiple Navigation OM projects



USACE MISSION AREAS

MILITARY MISSIONS



Military Construction

COCOM Support,
Overseas Contingency
Operations (OCO)

Installation Support,
Environmental,
Energy and Sustainability

Navigation,
Flood Control,
Disaster Response,
Shore Protection,
Hydropower,
Water Supply,
Regulatory, Recreation,
Environmental
Restoration



CIVIL WORKS

CONTINGENCY OPERATIONS



“Whole of Government”
Disaster Response and
Recovery

Life-Cycle Flood Risk
Management

Critical Infrastructure

Federal / State / Local

“Whole of USACE”
Capabilities

Capacity Development



**INTERNATIONAL and
INTERAGENCY**

REAL ESTATE — Acquire, Manage and Dispose / DoD Recruiting Facilities / Contingency Operations

USACE Has a Diverse Mission Set Driven by Diverse Customers



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The background of the slide is a close-up of the American flag, showing the stars and stripes. A cutout of a golden castle with two towers and a central archway is positioned on the right side of the slide. The castle is set against the white stripes of the flag.

Civil Works

***ENGINEERS ON POINT
FOR THE ARMY AND THE NATION!***

CIVIL WORKS



Navigation



Flood Risk Management / Recreation



Cape Cod Canal



Environmental Restoration

CIVIL WORKS

1/4 of Nation's Hydropower
\$500 M + in power sales



299 Deep Draft Harbors



11,000 miles of Commercial Inland Waterways:
1/2 the cost of rail - 1/10 the cost of trucks

Recreation Areas

376M Visitors Annually
\$15 B in economic activity
500,000 jobs

8,500 Miles of Levees



627 Shallow Draft Harbors

Emergency Operations



Environmental Restoration



Stewardship of 11,700,000 Acres of Public Lands

Regulatory Responsibility

- US Ports & Waterways convey > 2B Tons Commerce
- Foreign Trade alone creates > \$160 B Tax Revenues

FLOOD RISK MANAGEMENT PROJECTS



Hodges Village, MA



North Hartland, VT



Colebrook, CT



**Hurricane Barrier
New Bedford, MA**

OPERATIONS AND MAINTENANCE

Cape Cod Canal



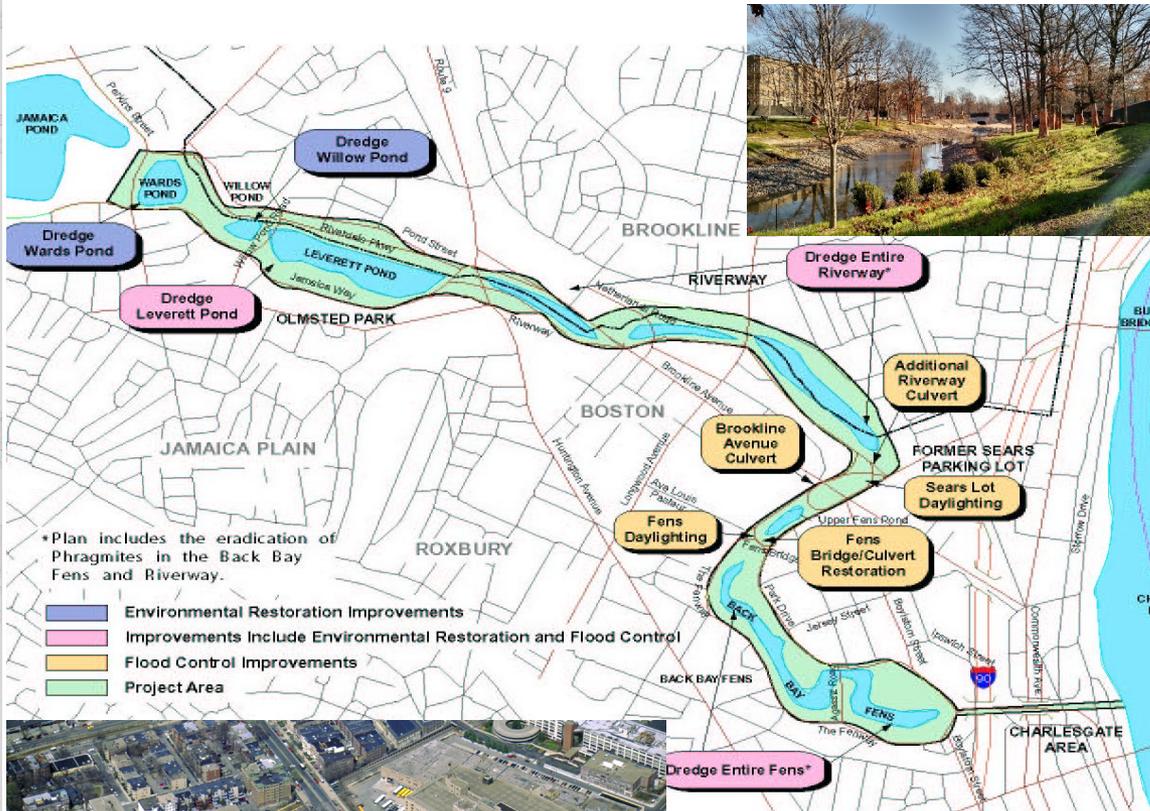
- Cape Cod Canal is the widest sea-level canal in the world
- 17.5 miles long, with 7.5-mile-long land cut
- Using the canal saves 65 to 150 miles, depending on the point of origin
- Constructed by private interests and opened in 1914
- Commandeered by the U.S. during WWI
- Purchased in 1928
- Three bridges (two highway, one railroad)



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FLOOD RISK MANAGEMENT MUDDY RIVER, BOSTON, MA



Construction
\$64 Million

▪ Flood Damage Reduction

- Protects against recurrence of the Oct. 1996 Flood (20-Year Event)
- Significantly reduces flood stages for all events including tributaries

▪ Environmental Restoration

- Restores over 40 acres of scarce urban aquatic habitat
- Restores anadromous fish spawning habitat (Federal Significant Resource)
- Enhances diversity and productivity of benthic and warm water fish communities
- Enhances biodiversity by eradicating extensive stands of Phragmites



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CULVERT INSTALLATION



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STREAMBANK RESTORATION



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COASTAL STORM DAMAGE REDUCTION



Revere Beach, MA



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BREAKWATER RECONSTRUCTION



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ECOSYSTEM RESTORATION

*Broad Meadows Salt Marsh Restoration
Section 1135 Project in Quincy, MA*



**Dam Removal and Marsh
Restoration, Stamford, CT**



**Eelgrass Restoration
Charlestown, RI**



**Town Pond Salt Marsh Restoration
Portsmouth, RI**



NAVIGATION

Deep Draft Harbors



Shallow Draft Harbors



Navigation Improvement Dredging



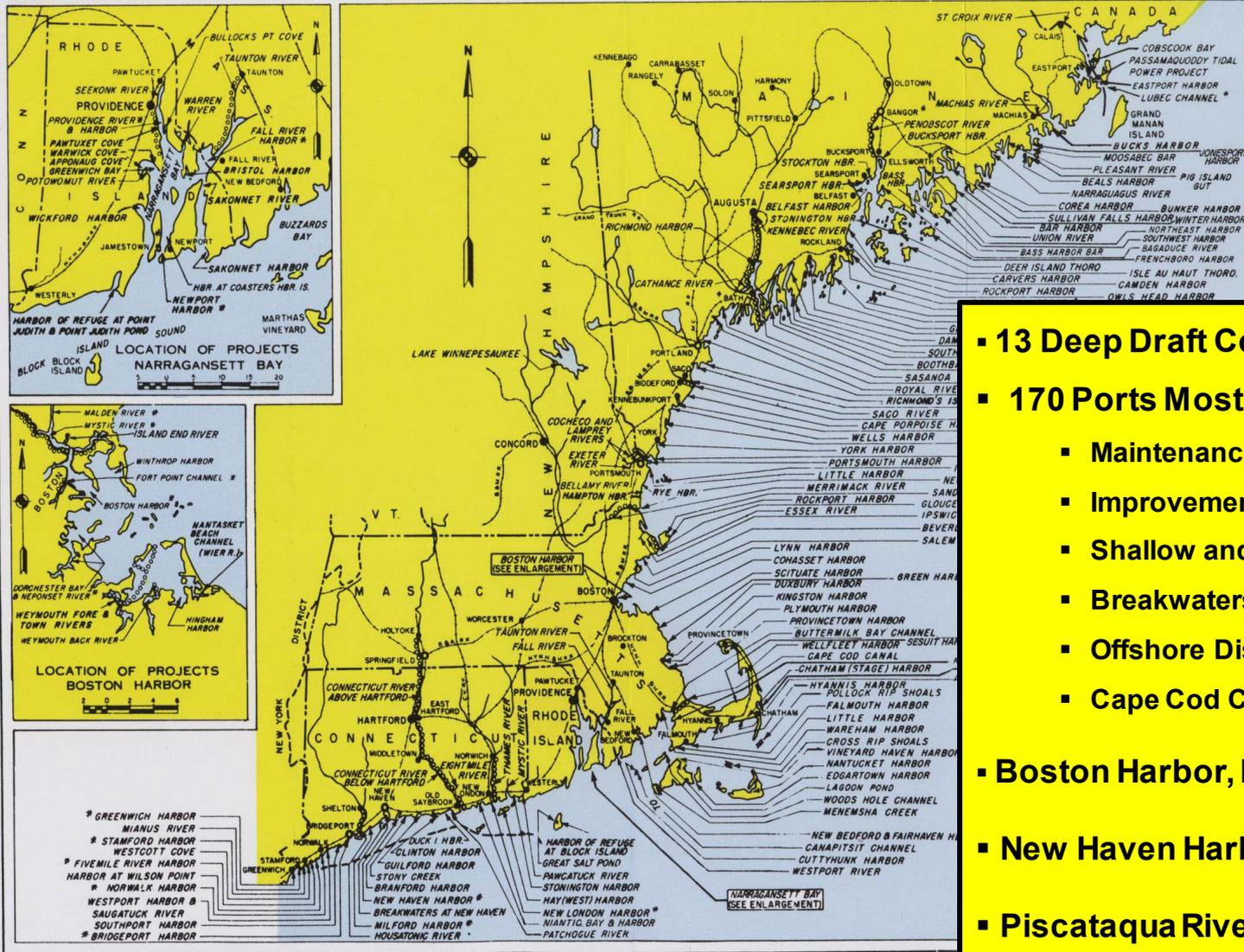
Cape Cod Canal



NEW ENGLAND NAVIGATION

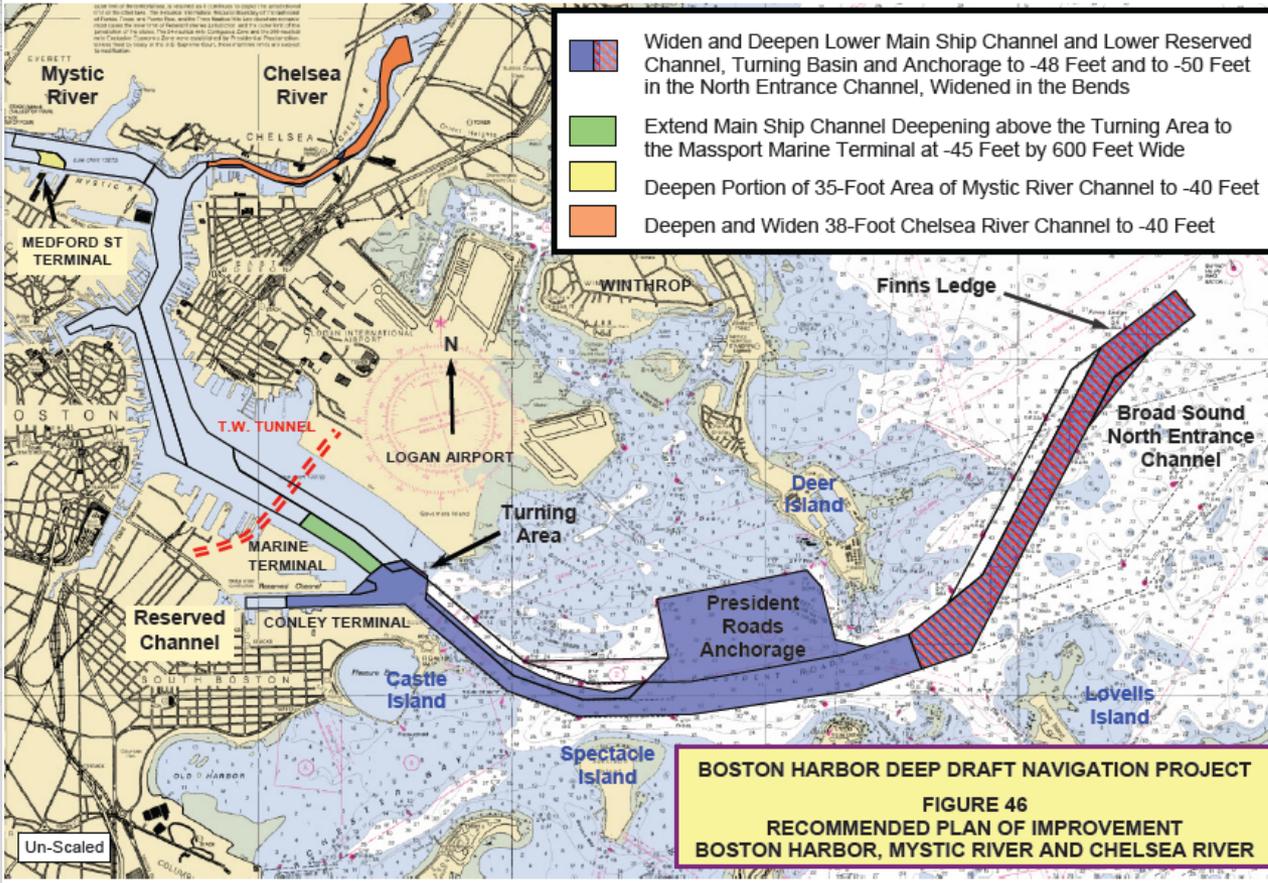
CORPS OF ENGINEERS

U. S. ARMY



- 13 Deep Draft Commercial Waterways
- 170 Ports Mostly Recreational
 - Maintenance Dredging
 - Improvement Dredging
 - Shallow and Deep Draft
 - Breakwaters and Jetties
 - Offshore Disposal Sites
 - Cape Cod Canal
- Boston Harbor, MA
- New Haven Harbor, CT
- Piscataqua River, NH

BOSTON HARBOR DEEPENING

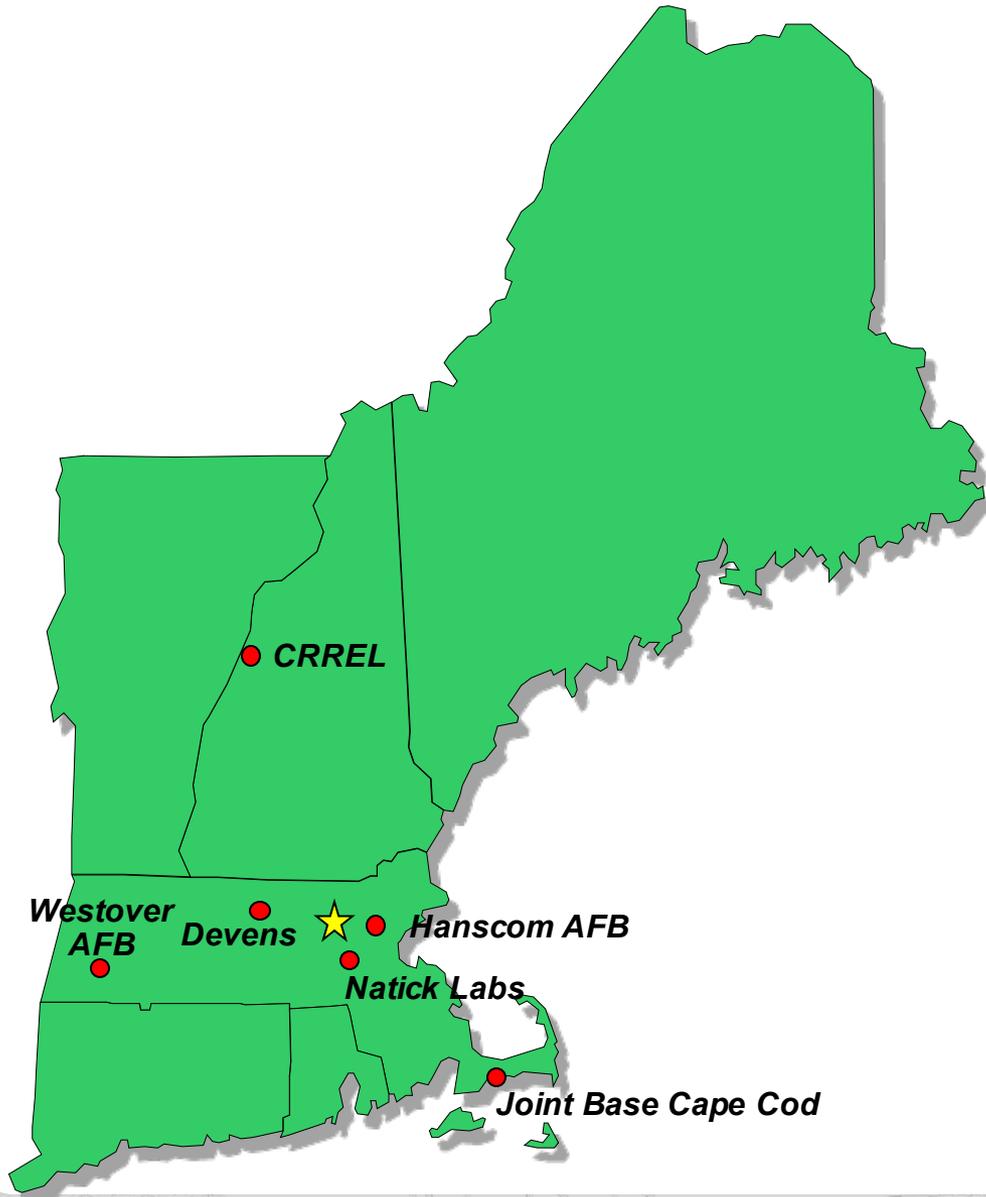


The background of the slide is a close-up of the American flag, showing the stars and stripes. In the lower right quadrant, there is a small, golden, illuminated castle or fortress structure. The text is overlaid on the flag.

Military Support

***ENGINEERS ON POINT
FOR THE ARMY AND THE NATION!***

OUR MILITARY CUSTOMERS



2 Active Duty Bases:

- Hanscom Air Force Base
- Natick Soldier Systems Center

Support to other military:

- Westover Air Reserve Base
- Joint Base Cape Cod
- Devens RFTA
- CRREL



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MILITARY CONSTRUCTION (MILCON)

Medical Clinic, Hanscom Air Force Base, MA



Middle School, Hanscom Air Force Base, MA



Fort Devens, MA



MIT/Lincoln Lab, Hanscom Air Force Base, MA



ARMED FORCES RESERVE CENTERS



Rutland, VT



White River Junction, VT



Rutland, VT

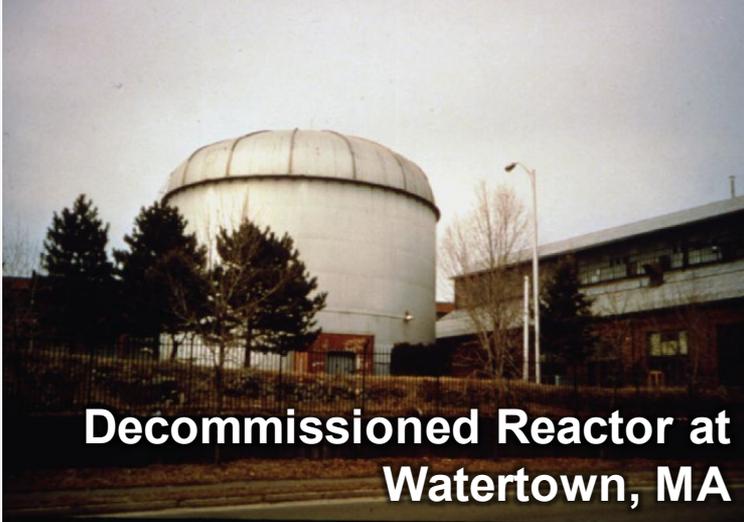
- Multi-Service Consolidated Facilities
- Cutting-edge Training and OCO Prep
- Integrated Vehicle Maintenance



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MILITARY ENVIRONMENTAL HAZARDOUS TOXIC & RADIOLOGICAL WASTE



Decommissioned Reactor at Watertown, MA



Underground Storage Tank Removal at Devens RFTA



Unexploded Ordnance (UXO)

- Operation and Maintenance (Environmental)
- Defense Environmental Restoration Program (DERP)
- Formerly Used Defense Sites (FUDS)
- Underground Storage Tank (UST) Removal
- Soil and Groundwater Remediation
- Emergency Response
- Weapons Range Clean-Up



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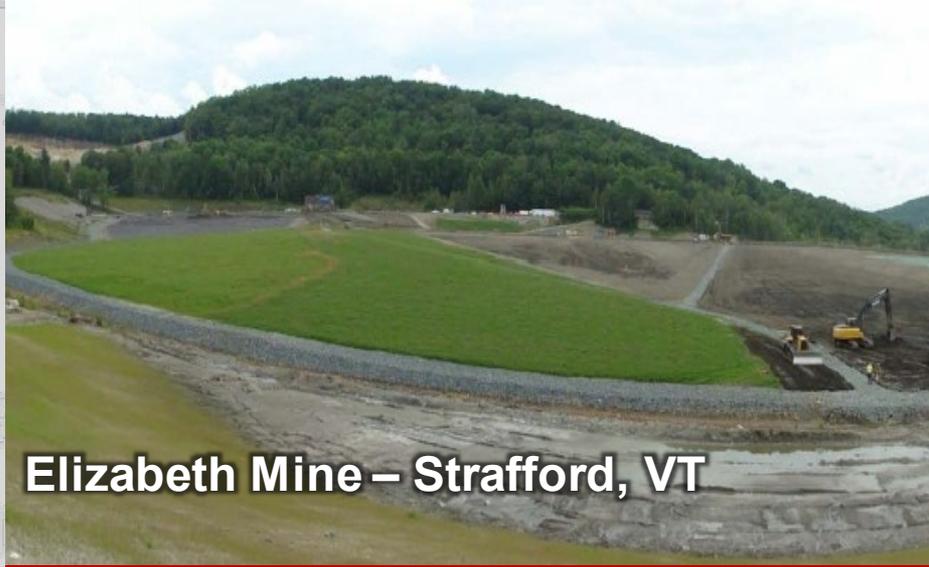


The background of the slide is a close-up, slightly blurred image of the United States flag, showing the stars and stripes. In the lower right quadrant, there is a small, golden, stylized graphic of a castle or fortress with two prominent towers and a central archway.

**Interagency,
International,
and Environmental
Support**

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INTERAGENCY, INTERNATIONAL, AND ENVIRONMENTAL SUPPORT



Elizabeth Mine – Strafford, VT



VA Hospital - Providence, RI



Nacala Dam - Mozambique, Africa



Border Patrol Station - Swanton, VT

ELIZABETH MINE SUPERFUND SITE



- One of the largest, most intact historic mining sites in New England
- GPS-controlled heavy machinery with uploaded CAD design
- Over 10M gallons of water treated with lime amendment Rotating Cylinder Treatment System (RCTS)
- Complied with the National Historic Preservation Act
- Overcame Tropical Storm Irene



NEW BEDFORD HARBOR SUPERFUND SITE



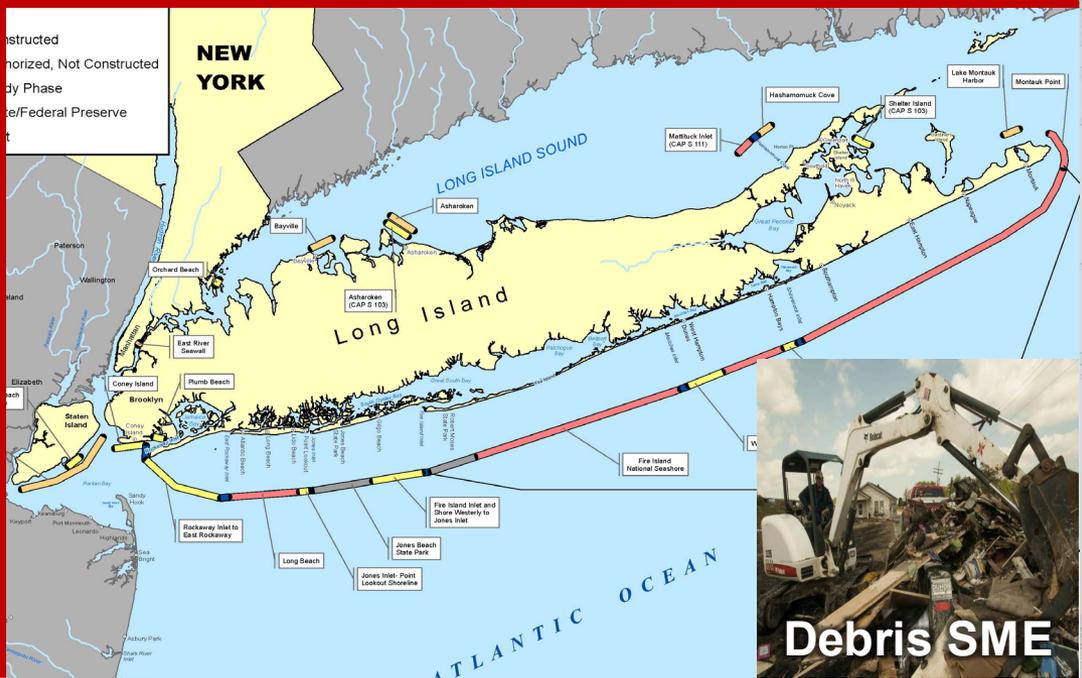
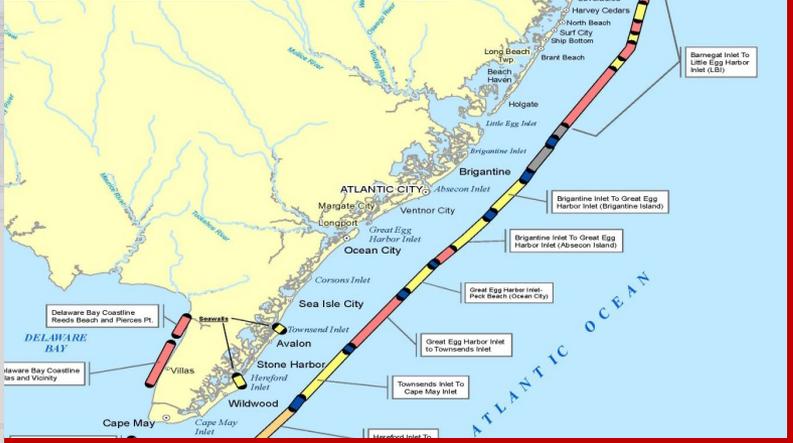
- > \$250 million to date
- > \$300 million remaining
- PCBs in sediments



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DISASTER / EMERGENCY RESPONSE AND RECOVERY



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Regulatory Program

***ENGINEERS ON POINT
FOR THE ARMY AND THE NATION!***

REGULATORY PROGRAM

Regulatory Authorities

- Rivers and Harbors Act of 1899.
- Clean Water Act of 1972
- Marine Protection, Research and Sanctuaries Act of 1978
- Dedicated State Teams
- Technical support - wetland delineations and jurisdictional determinations.



Regulatory Actions

- 6,000 +/- Final Actions per Year
 - 5,700 General Permits
 - 100 Individual Permits
 - 100 Enforcement Actions
 - 100 Compliance Actions
- 25 +/- “Hot” Projects:
 - Highways
 - Interstate Pipelines and Cables
 - Wind Farm
 - Golf Courses
 - Subdivisions
 - Large Marinas
 - South Coast Rail...



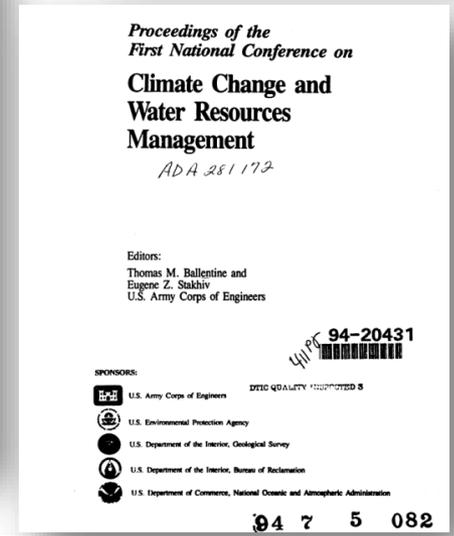
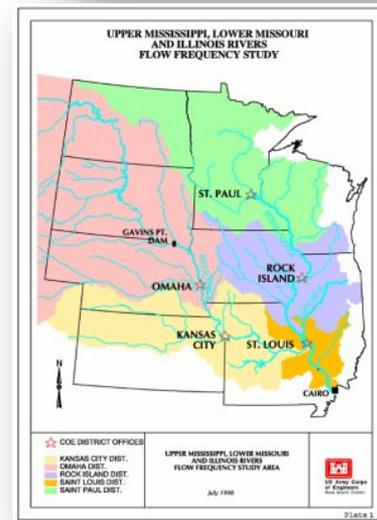
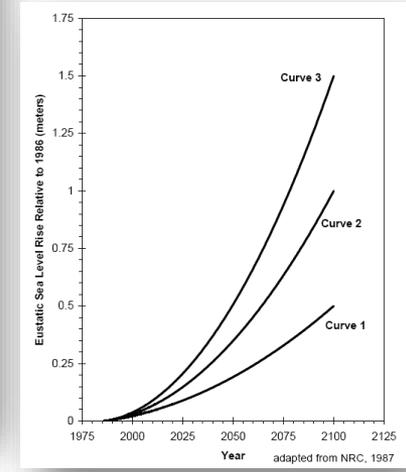
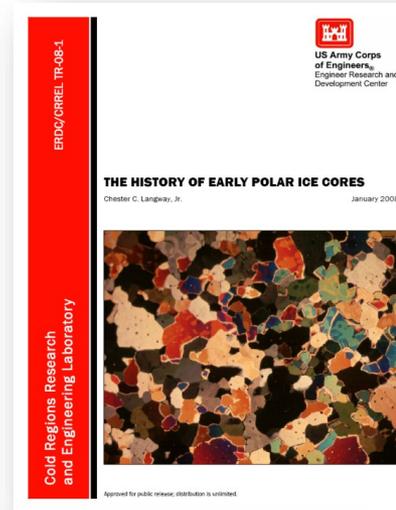
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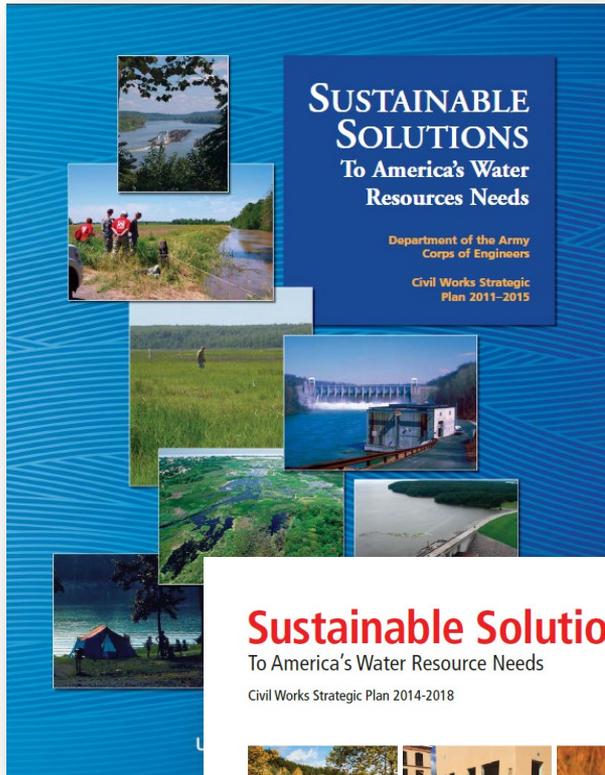
BACKGROUND: USACE CLIMATE CHANGE EXPERIENCE

USACE has a long history in climate change:

- 1950s – present ice core drilling Greenland and Antarctica
- 1970s led White House drought commission
- 1980s addressed changing sea level
- 1990s economics of climate change
- 2000s effects on water resources, updated policy/guidance
- 2010s planning and implementing climate resilience measures



MAKE SUSTAINABILITY & RESILIENCE FACTOR IN RISK-INFORMED DECISIONS





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