EBC Evening Program

Colonel Barron, U.S. Army Corps of Engineers

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New England District, U.S. Army Corps of Engineers

Environmental Business Council of New England
Energy Environment Economy
US Army Corps of Engineers
New England District

NE Environmental Business Council
24 MAY 17
COL Chris Barron
Agenda

- Why the Army… and Why the Corps?
- USACE / New England District
- The Corps and the Environment
- Upcoming Opportunities
- Final Thoughts
Why is the Corps in the Army?

... tied to this?
1802  West Point established as first U.S. engineering school; President Jefferson: engineers for both military and “civil” work

1824  Rivers & Harbors Act authorized Army Corps of Engineers to clear obstacles on Ohio, Mississippi Rivers and ports

1824  General Survey Act: authorized Corps to survey road and canal routes of national military or commercial significance

1850  Congress authorizes Corps study of potential river flooding

1879  Mississippi River Commission established

1899  Rivers & Harbors Act gives Corps regulatory authority over construction in navigable waterways (Section 10)

1928  Flood Control Act establishes Mississippi River & Tributaries Flood Control project

1930  Beach Erosion Board

1936  Flood Control Act → nationwide flood protection mission
1938  Flood Control Act authorizes hydropower projects
1944  Flood Control Act authorizes recreation areas
1955  PL 84-99 authorizes flood-fighting & repair of flood control works
1970  NEPA requires environmental analysis of proposed Corps activities
1972  Clean Water Act adds regulation of dredging and filling in all Waters of the US
1986  Water Resources Development Act (WRDA) requires cost sharing for most projects
1988  Stafford Act gives FEMA responsibility to coordinate gov’t-wide emergency response efforts. Corps lead = Public Works & Engineering
1990  WRDA authorizes projects for primarily environmental preservation / restoration
2007  WRDA allows equal consideration of environmental and social benefits with economic ones in project planning
USACE Programs – FY 16

Military

$17.8 B

- Military Construction
- Contingency Ops
- Installation Support
- International & Interagency Support
- Real Estate

IIES

$~3.5 B

EPA, DHS, VA, DoE, F&WS, NOAA, FEMA, HUD, INS, Coast Guard, National Park Service, Commonwealth of Massachusetts and others

~ “Whole of USACE” Capabilities

Civil Works

$6.0 B

- Nav & Hydropower
- Flood Risk Management
- Shore Protection
- Ecosystem Restoration
- Emergency Management
- Water Supply
- Regulatory
- Recreation

HQ

Industry & Business

43+ Districts (Project Funded)

Fed / State / Local Gov

9 Divisions (Direct Funded)
The Tale of the Tape

- 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
- 168 Federal harbors
- 5 Military Bases

- ~ 480 Employees
- 31 Dams; 5 Basin Offices
- 4 Resident Engr, 2 Regulatory Offices
- 3 Hurricane Barriers
- Cape Cod Canal

Legend

<table>
<thead>
<tr>
<th>USACE Offices</th>
<th>NAE Projects</th>
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<tbody>
<tr>
<td>District HQ</td>
<td>Dam</td>
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<tr>
<td>Lab</td>
<td>Hurricane Barrier</td>
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<tr>
<td>Construction</td>
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<td>Operations</td>
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<td>Regulatory</td>
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NAE = EPA = FEMA boundaries
• Remediation of ~ 18,000 acres split into 2 x Operable Units (OU). OU1 is ~ 1000 acres with some sediments containing PCBs >>10,000 ppm.

• Majority of waste transported to Michigan for disposal. > 300K CY of contaminated sediment have been removed to date; remediation includes hydraulic and mechanical dredging, and shoreline / intertidal excavation.
New England Regulatory Program

- Authorities stem from Rivers and Harbors Act of 1899; Clean Water Act of 1972; Marine Protection, Research and Sanctuaries Act of 1978

- Dedicated state teams; work closely with state govts, EPA, NMFS, et al.

- Technical support, e.g. wetland delineations and jurisdictional determinations.

- ~ 2500 General & Individual permits per year

- Hot issues: Offshore wind; South Coast Rail; LNG trans; moorings…
Disposal Area Monitoring System (DAMOS) Program was initiated in 1977 and now draws on nearly 40 years of monitoring NE waters.

**Why DAMOS?**
- Meet permit conditions
- Manage existing sites
- Identify new sites
- Support beneficial use
- Evaluate new techniques
- Document lessons learned
- Maintain relationships with EPA and states
Former Cape Poge Little Neck Bomb Target Site Munitions Project

Subsurface clearance of munitions (MK23’s) and long term monitoring of 62 acres on land and 172 acres in the inland water of Cape Poge Bay

To date, ~2800 munitions found
Muddy River

• PH 1: Flood Risk Management Project (major damage in late 90s); installation of two 10’ x 24’ culverts, day lighting of 600’ of Muddy River. Cost is $31M. Ribbon cutting APR 2017.

• PH 2: Involves dredging conveyance channel downstream of PH 1 area, selective dredging of 5 areas in upstream area. Estimated cost is approximately $15 million. Contract award… TBD. Awaiting funding.

• Challenges: Dense, historic urban area with high amount of institutional, commercial and residential abutters; contaminated soils; heavy phragmite growth.
Ecosystem Restoration

- Salt marsh / salt pond restoration
- Estuary restoration
- Freshwater wetland restoration
- Island restoration
- River restoration
- Pond restoration
- Anadromous fish passage
Boston Harbor Deepening

- Deepen the Outer Channel from 40’ → 50’, deepen the Main Channel into the Conley Terminal from 40’ → 47’. Project involves the removal of 11M CY of material.

- Challenges include utilizing all of the dredged material in a beneficial manner, developing a sequence plan to allow dredging 24/7 for four years, and receiving federal authorization / funding.
Work We Always Need…

• Major vertical construction – schools, military barracks, offices, medical clinics, laboratories
• Bridge renovations & repairs
• Dredging – mechanical and hydraulic; harbors large and small
• Building roof repair, façade repair, HVAC upgrades and interior renovations
• Jetty and breakwater rebuild and repair
• Environmental remediation / HTRW support
• A/E Design
• Dam and gate repair and renovations
• Professional services and supplies
• Munitions investigations and removal
• Road repair and drainage
• Sustainable or renewable energy supplies
### Upcoming Environmental Opportunities

<table>
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<tr>
<th>Service Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Environmental Services (various NE locations)</td>
<td>$5 M</td>
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<tr>
<td>Elizabeth Mines (Stratford, VT)</td>
<td>$25 M</td>
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<tr>
<td>Callahan Mine (Brooksville, ME)</td>
<td>$40 M</td>
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<tr>
<td>Water Distr. System (Durham Meadows, CT)</td>
<td>$15-20 M</td>
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<tr>
<td>Raymark OU#4 (Stratford, CT)</td>
<td>$1-5 M</td>
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<tr>
<td>Raymark OU#3,4,6 SATOC IDIQ</td>
<td>$100M</td>
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The Corps is involved – on a daily basis – in virtually every aspect of environmental work… and we are always looking for partners, whether thru small business or unrestricted contracts.

The New England District has local, regional and national obligations & interests… “where you stand depends on where you sit”

How to be successful with the Corps in just three easy steps:
1) Communication before, during and after
2) Read the fine print
3) Be honest about your capabilities