“The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”
AGENDA

• USACE & District Disaster Preparedness Overview
• Nashville District Organization for Natural Disasters
• Nashville District’s Critical Infrastructure
• Examples of District Disaster Response
• FY17 Business Opportunities
HQ: Wash DC
37,000 employees
9 Divisions
43 Districts

34
Colonel (3-yr Command)

9
Lieutenant Colonel (2-yr)

HQ resources the State thru Districts

FEMA Boundaries = State Boundaries
USACE Boundaries = Watersheds
GREAT LAKES & OHIO RIVER DIVISION

- Commanding General (1-star)
- HQ in Cincinnati
- 7 Districts
- Regional command & control during flood events & natural disasters
- New Madrid Seismic Zone
• Boundaries based on Tennessee & Cumberland River watersheds (7 States, 59,000 square miles)
• Tennessee: 2 USACE Districts (Nashville & Memphis) & 2 USACE Divisions (MVD and LRD)
District Mission

Execute the federal civil works program for the region and the Nation by **mitigating risk from disasters**, delivering collaborative water resource engineering solutions, providing world-class public infrastructure management, and protecting the natural resources of the Cumberland-Tennessee River System.

Business Lines

- Flood Risk Management
- Navigation
- Hydropower
- Water Supply
- Environmental Stewardship
- Emergency Management
- Regulatory
- Recreation

“We protect people from water, water from people, and make water useful.”
NASHVILLE DISTRICT NATIONAL PLANNING & RESPONSE TEAMS (PRT)

- Teams in Nashville, St Louis, Omaha, Little Rock
- Employees from almost every discipline (mechanical, electrical, civil, etc.)

OTHER PLANNING RESPONSE TEAMS IN THE REGION (LRD)

- Power
- Debris
- Housing
- Infrastructure Assessment
COMMUNICATION CAPABILITIES

- Network Connectivity (LAN/WAN) For up to 25 computers
- Backup Computers (4)
- Multi-function Phones (11) VOIP – VSAT based
  Iridium – voice only
  Radio (ACU1000)
- VHF Handheld Radios (8)
- HF/UHF/VHF/800 MGH Radios
- Multi-function Printer
- Laser Printer
- Wireless AP/Bridge
- Onboard Generator
**USACE NASHVILLE CRITICAL INFRASTRUCTURE**

- **Locks**
  - 10 Dams all on Cumberland River system
  - 4 “Black Start” Hydropower Dams
  - 20+-year hydropower rehab program (~$1.2B)

- **Dams**
  - 4 on Cumberland River
  - 10 on Tennessee River
  - Uniformed Employees
  - Close relationship with TVA & USCG
A GIS-Based Approach for Dam Safety and Construction Data

2D and 3D GIS Models of Dam Safety Projects

Center Hill and Wolf Creek Dam Safety Projects
FLOOD RISK MANAGEMENT

District Water Management Center

Mobile Web-site

Updated Database and Web-site
www.lrn-wc.usace.army.mil

Corps Water Management System (CWMS)

US Army Corps of Engineers
# The History of Flooding in Nashville

<table>
<thead>
<tr>
<th>Nashville Stage</th>
<th>Occurrences</th>
<th>Recurrence Interval (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; 40 ft Stage</td>
<td>&gt; 50 ft Stage</td>
</tr>
<tr>
<td>Prior to Storage Projects (1826-1950)</td>
<td>73</td>
<td>12</td>
</tr>
<tr>
<td>With Storage Projects (1951-2015)</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>
## Water Stored During 2011 MR&T Flood

<table>
<thead>
<tr>
<th>Project</th>
<th>Pool Rise (feet)</th>
<th>Water Stored (acre-feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wolf Creek¹</td>
<td>44.84</td>
<td>1,992,000</td>
</tr>
<tr>
<td>Dale Hollow</td>
<td>16.41</td>
<td>459,000</td>
</tr>
<tr>
<td>Center Hill¹</td>
<td>32.45</td>
<td>576,000</td>
</tr>
<tr>
<td>J. Percy Priest</td>
<td>17.90</td>
<td>280,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>3,307,000²</strong></td>
</tr>
</tbody>
</table>

606 miles high

1.08 quadrillion \( \times 10^{15} \) Gallons

US Army Corps of Engineers
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Advertisement Date</th>
<th>Estimated Award Amount</th>
<th>Anticipated Contracting Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheeler and Pickwick Lock Bulkhead Painting</td>
<td>1st Qtr. / FY 17</td>
<td>Between $100K - $500K</td>
<td>SB Set-Aside (TBA)</td>
</tr>
<tr>
<td>Watts Bar Mooring Cells</td>
<td>1st Qtr. / FY 17</td>
<td>Between $1M - $5M</td>
<td>SB Set-Aside (TBA)</td>
</tr>
<tr>
<td>Old Hickory Dam Hydropower Generator #4 Repair/Rehab</td>
<td>1st Qtr. / FY 17</td>
<td>$10M or more</td>
<td>Full and Open Competition</td>
</tr>
<tr>
<td>Wolf Creek Dam Penstock and Water Passage Repairs</td>
<td>2nd Qtr. / FY 17</td>
<td>Between $1M - $5M</td>
<td>SB Set-Aside (TBA)</td>
</tr>
<tr>
<td>Hydropower Section 212 MATOC Power and Communication Line Related Structures Construction</td>
<td>2nd Qtr. / FY 17</td>
<td>$10M or more</td>
<td>Full and Open Competition</td>
</tr>
<tr>
<td>Diamond Island Mussel Survey</td>
<td>3rd Qtr. / FY 17</td>
<td>Between $100K - $500K</td>
<td>SB Set-Aside (TBA)</td>
</tr>
<tr>
<td>DOE Y-12 Emergency Operations Center Construction (Oak Ridge, TN)</td>
<td>2nd Qtr. / FY 17</td>
<td>$10M or more</td>
<td>Full and Open (award 3rd Qtr FY17)</td>
</tr>
<tr>
<td>DOE Y-12 Fire Station (Design Build) (Oak Ridge, TN)</td>
<td>3rd Qtr. / FY 17</td>
<td>$10M or more</td>
<td>Full and Open (award 4th Qtr FY17)</td>
</tr>
<tr>
<td>DOE UPF Warehouse Design Build (Louisville District Contracting Office) (Oak Ridge, TN)</td>
<td>3rd Qtr. / FY 17</td>
<td>$10M or more</td>
<td>Full and Open (award 4th Qtr FY17)</td>
</tr>
<tr>
<td>DOE UPF Mechanical Electrical Building Slab and Shell Construction (Oak Ridge, TN)</td>
<td>4th Qtr. / FY 17</td>
<td>Between $5M - $10M</td>
<td>Full and Open</td>
</tr>
</tbody>
</table>

Nashville FY17 Forecast W912P5

### Project Description

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<th>Anticipated Contracting Method</th>
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<tbody>
<tr>
<td>Chickamauga Lock Cofferdam Anchor Foundation Prep</td>
<td>2nd Qtr. / FY 17</td>
<td>Between $1M - $5M</td>
<td>SB Set-Aside (TBA)</td>
</tr>
<tr>
<td>Chickamauga Lock Chamber Construction</td>
<td>4th Qtr. / FY17</td>
<td>$10M or more</td>
<td>Full and Open Competition (FY 17 Award)</td>
</tr>
<tr>
<td>Kentucky Lock Excavation</td>
<td>4th Qtr. / FY17</td>
<td>$10M or more</td>
<td>Full and Open Competition (FY 17 Award)</td>
</tr>
<tr>
<td>Kentucky Lock Site Stabilization and Demolition</td>
<td>4th Qtr. / FY17</td>
<td>$10M or Less</td>
<td>SB Set-Aside (TBA)</td>
</tr>
<tr>
<td>Center Hill Lake Eisenhower Park Construction</td>
<td>4th Qtr. / FY17</td>
<td>Between $1M - $5M</td>
<td>SB Set-Aside (TBA)</td>
</tr>
<tr>
<td>Shepard Street Bridge Construction</td>
<td>4th Qtr. / FY17</td>
<td>Between $1M - $5M</td>
<td>SB Set-Aside (TBA)</td>
</tr>
</tbody>
</table>

**Nashville District Contracting Web Page:**

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Fax: (615) 736-7124
Email: roy.rossignol@usace.army.mil

Nashville District Small Business Industry Day
Theme: Service Disabled and Veteran Owned
Small Businesses (SDVOSB)

March 15, 2017 (Wednesday)
0800-1600
at TSU in Nashville, TN