

USACE Civil Works Program Outlook and Engineering Opportunities

ACEC Annual Conference

James C. Dalton, P.E., SES

Chief, Engineering & Construction

HQUSACE

April 1, 2011



US Army Corps of Engineers

BUILDING STRONG®



Trends to Watch

- Growing National debt is #1 political concern
- Spending will be controlled until debt is resolved
- Budgets and Appropriations of discretionary, non-defense related agencies are an early target
- FY12 budget is a decrease of 15% below FY 10 appropriations; calls for frozen spending levels for 5 years
- Inflation likely to average 3%
- Cost of USACE work likely to rise faster than overall inflation
- Likelihood of constrained USACE budgets is very high
- Largest accounts (Construction, Operation & Maintenance, Miss. R. & Tributaries) and business programs (Navigation, Flood Risk Management, Aquatic Ecosystem Restoration) are being and will be reduced

U.S. Army Civil Works Program

FY12 Budget Request

Deliver enduring, comprehensive, sustainable, and integrated solutions to the Nation's water resources and related challenges through collaboration with our stakeholders (Regions, States, Localities, Tribes, Other Federal Agencies)



Lock and Dam 15 (Mississippi River)



Flood Wall (Williamson, KY)



Everglades



Dredge ESSAYONS (Coos Bay, OR)



Lake Seminole (Mobile District)



Bonneville II Powerhouse (Washington)

(\$1.575 B) Navigation (34%)

**(\$1.447 B) Flood Risk (31%)
Management**

**(\$742 M) Ecosystem (16%)
Restoration & Infrastructure**

(\$182 M) Hydropower (4%)

**(\$259 M) Recreation & Natural (6%)
Resource Management**

**(\$196 M) Regulatory Program: (4%)
Wetlands & Waterways**

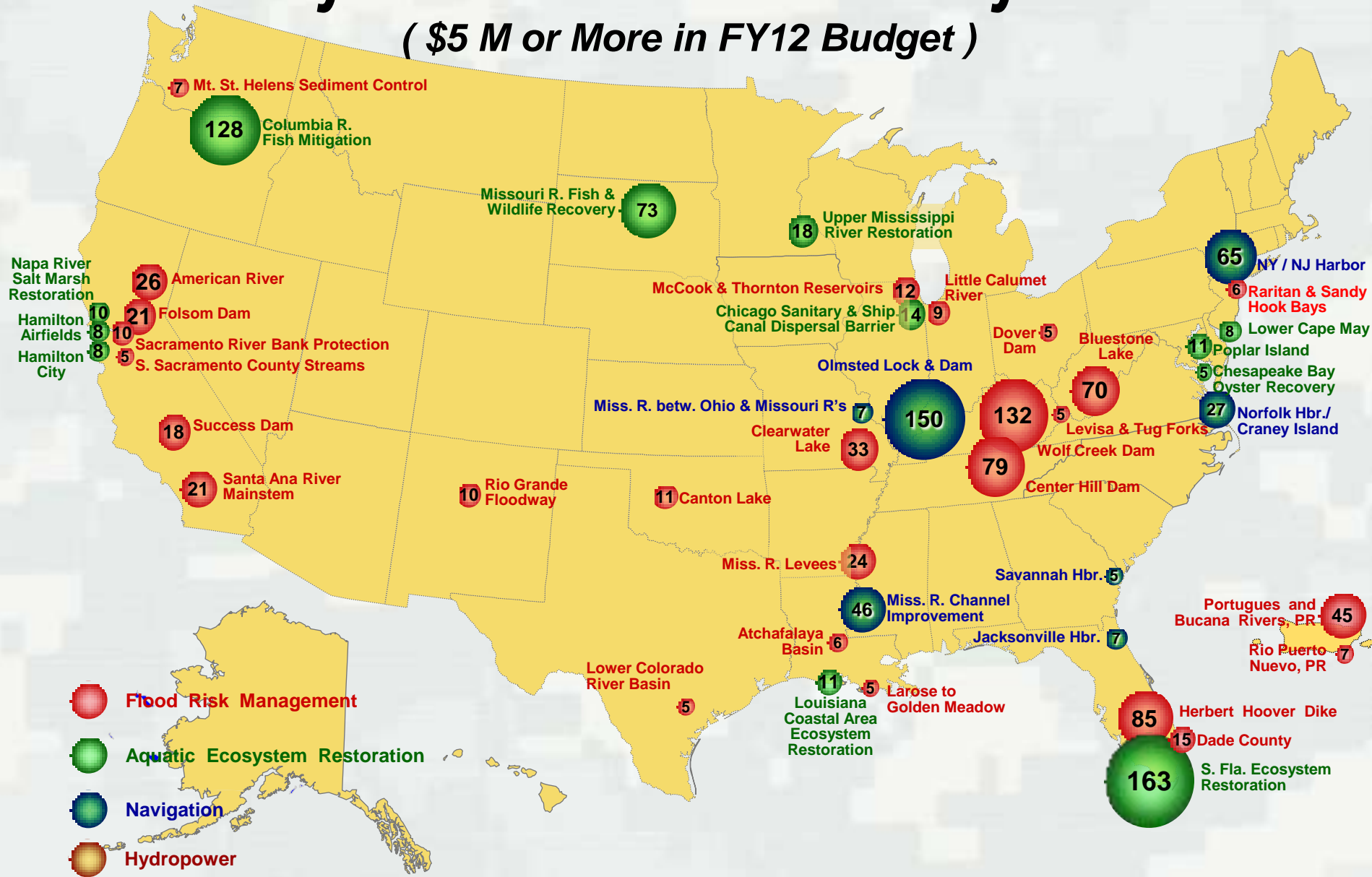
**(\$34 M) Disaster Preparedness (0.7%)
& Response**

(\$6 M) Water Supply (0.1%)

(\$185 M) Expenses (3%)

Major Construction Projects

(\$5 M or More in FY12 Budget)



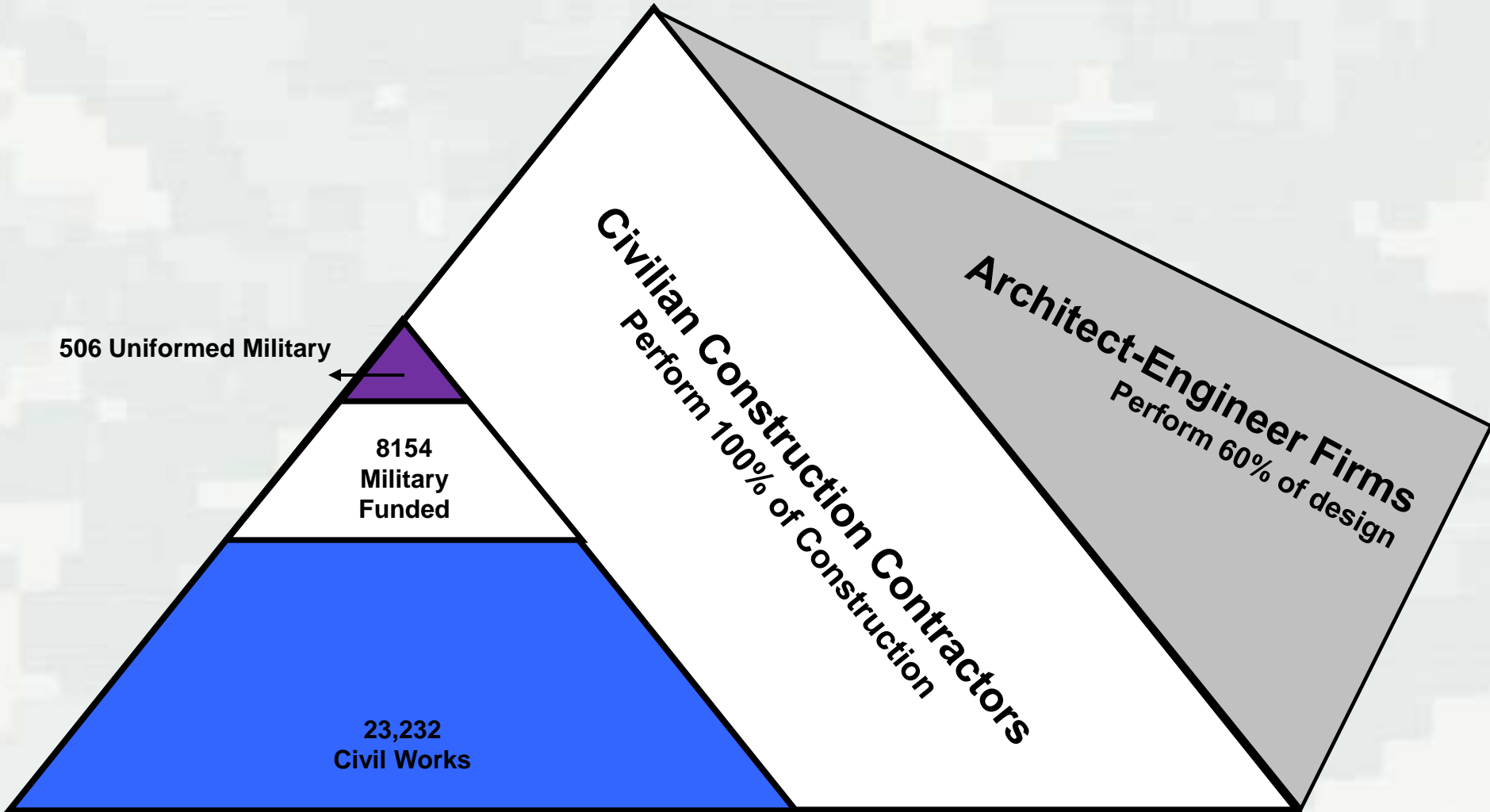
Flood Risk Management

Aquatic Ecosystem Restoration

Navigation

Hydropower

U.S. Army Corps of Engineers ... Casting a Large Shadow



FY11

Engineering and Construction

Current focus areas and look to the future

Dam Safety

- \$26B Long-term Investment Plan requirement for Dam Modifications
- Current investment rate (\$500M/year) or greater is justified
- Risk Management Center staffed and operational with offices in Denver and Pittsburgh
- Dominant deficiency remains internal erosion defects (seepage and piping in embankment dams)
- Primary construction modifications are foundation improvements

Engineering and Construction

Current focus areas and look to the future

Levee Safety

- Current focus on initial portfolio data gathering
 - Inventory, inspection, screening levee risk assessments
- Industry is key provider for initial data gathering
- Conducting stakeholder feedback webinars and workshops on new comprehensive policy on levee safety
 - Good industry participation!

Engineering and Construction

Current focus areas and look to the future

Levee Safety (continued)

- Plan to develop long term investment plan
 - 2,000 levee systems in Corps authorities by 2014
- Dominant risk drivers:
 - Internal erosion
 - Culverts
 - Animal burrows
 - Encroachments

Engineering and Construction

Current focus areas and look to the future

Structural Engineering

- Investigation and rehabilitation of pipes through levees and floodwalls
- Analysis, design and repair of Hydraulic Steel Structures
- Cost effective structural monitoring and non-destructive testing techniques

Engineering and Construction

Current focus areas and look to the future

Hydraulics & Hydrology

- Performing water yield / availability assessments
- Updating hydrologic / hydraulic analyses for Dam Safety and Levee Safety Projects
- Study of coastal ecosystems in light of sea level rise projections

Engineering and Construction

Current focus areas and look to the future

Asset Management

A persistent catalyst for holistically integrating and enhancing the sustainment, restoration, modernization and disposition of USACE water resources to continually serve the Nation.

“Portfolio Based Decision Making” to evenly distribute risk and work in both time and space.

Engineering and Construction

Current focus areas and look to the future

Technical Competence

Skill sets

Training

Focus on core competencies

Lessons learned

Quality

Sharing knowledge

Utilize vertical teaming

Better risk informed informed decisions

Deliver what you say – when you say

Wrap Up

- The Corps is ready to support the Nation's needs at home and abroad
- The Civil Works program is adjusting to meet the Nation's needs
- We need to optimize available funding
- The A/E and construction industries are key to Corps success
 - Need innovative solutions and responsiveness

Discussion