



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# Overview of the Office of Environmental Management

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Presented to the  
Secretary Energy Advisory Board Task Force on  
Technology Development for Environmental Management

July 15, 2014

# Mission of Office of Environmental Management



**Safe cleanup of the  
environmental legacy  
from five decades of  
nuclear weapons  
production and  
Federal Government-  
sponsored nuclear  
energy research**



**EM is a federal program with a wide range of operations across the country**

**PACKAGE**



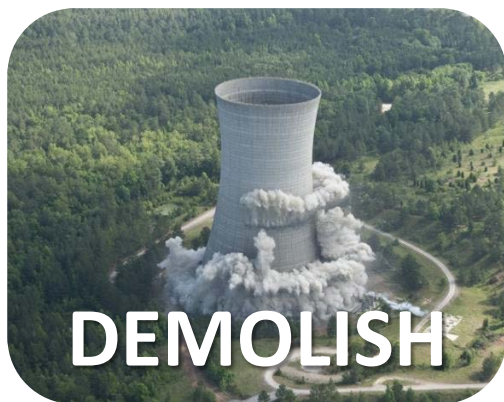
**EXCAVATE**



**TREAT**



**DEMOLISH**

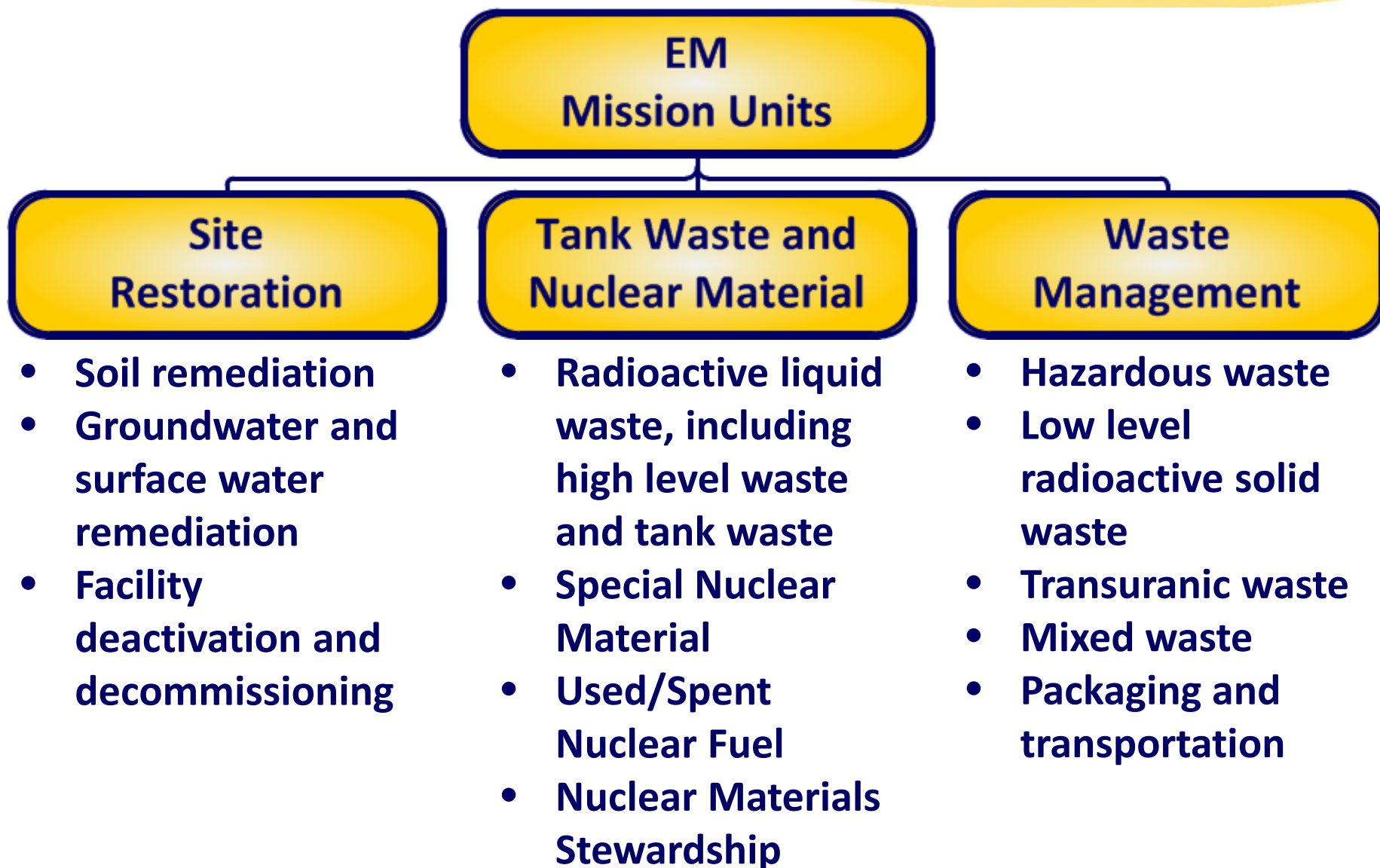


**TRANSPORT**



**SAFEGUARD**

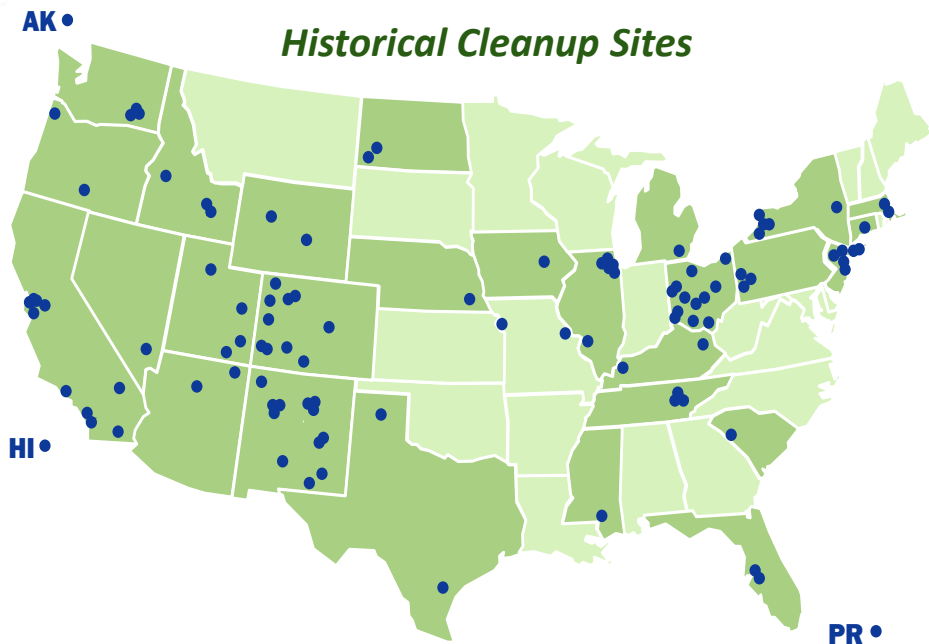






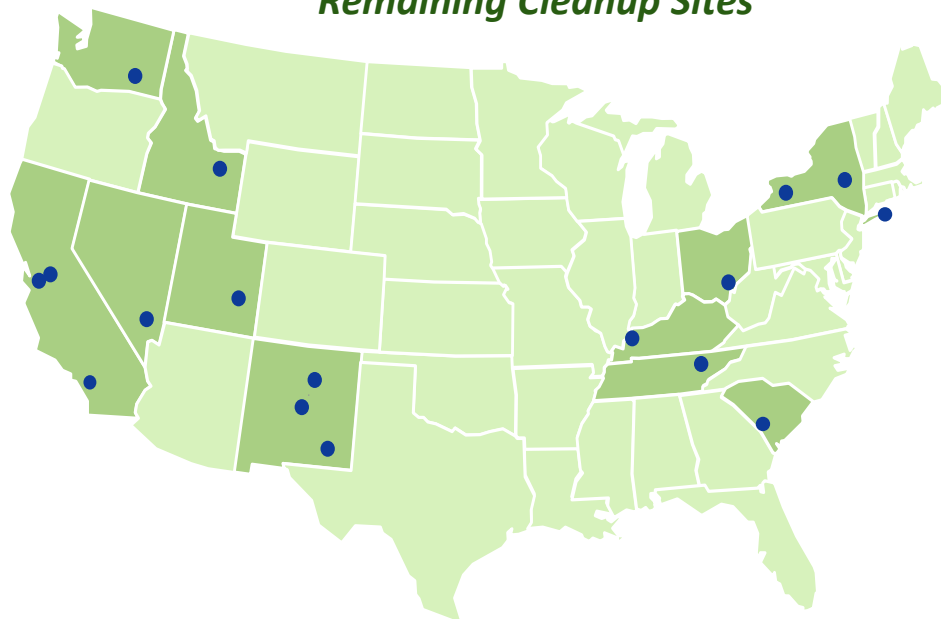
# Addressing the Nuclear Legacy

*Historical Cleanup Sites*



Since 1989, EM has completed its cleanup mission at 91 of the 107 major nuclear weapons and research sites.

*Remaining Cleanup Sites*



## ❖ Safety-first operations

- EM worker injury rates continue to be significantly lower than comparable industries

## ❖ Organizational safety culture

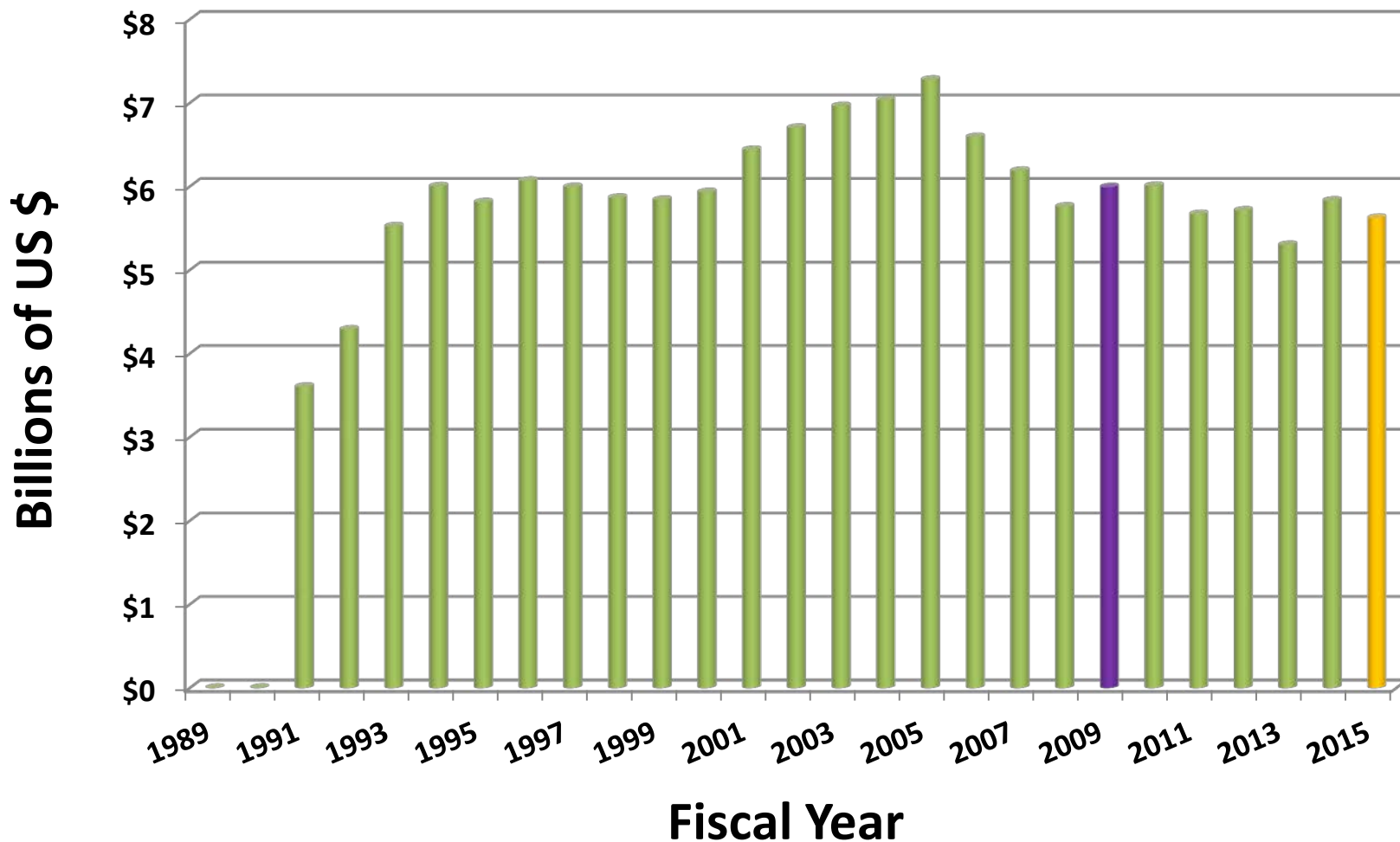
- Safety conscious workforce

## ❖ Facility safety

- Site infrastructure, aging facilities, deferred maintenance



# Historical Funding: Nearly \$154 Billion



■ Does not include \$6B in ARRA funds

■ FY 2015 Budget Request



# FY 2015 Budget Request

## Radioactive Tank Waste

\$ 2,042M / 36%

## Special Nuclear Materials and Used Nuclear Fuel\*\*

\$ 971M / 17%

## Soil and Groundwater

\$ 466M / 8%

**EM's FY 2015 Budget Request: \$5.622 Billion Total**

\*Includes Program Direction, Program Support, Technology Development & Deployment, Post Closure Administration and Community and Regulatory Support

\*\*Includes Safeguards and Security

## Facility D&D

\$ 992M / 18%

## Transuranic & Solid Waste

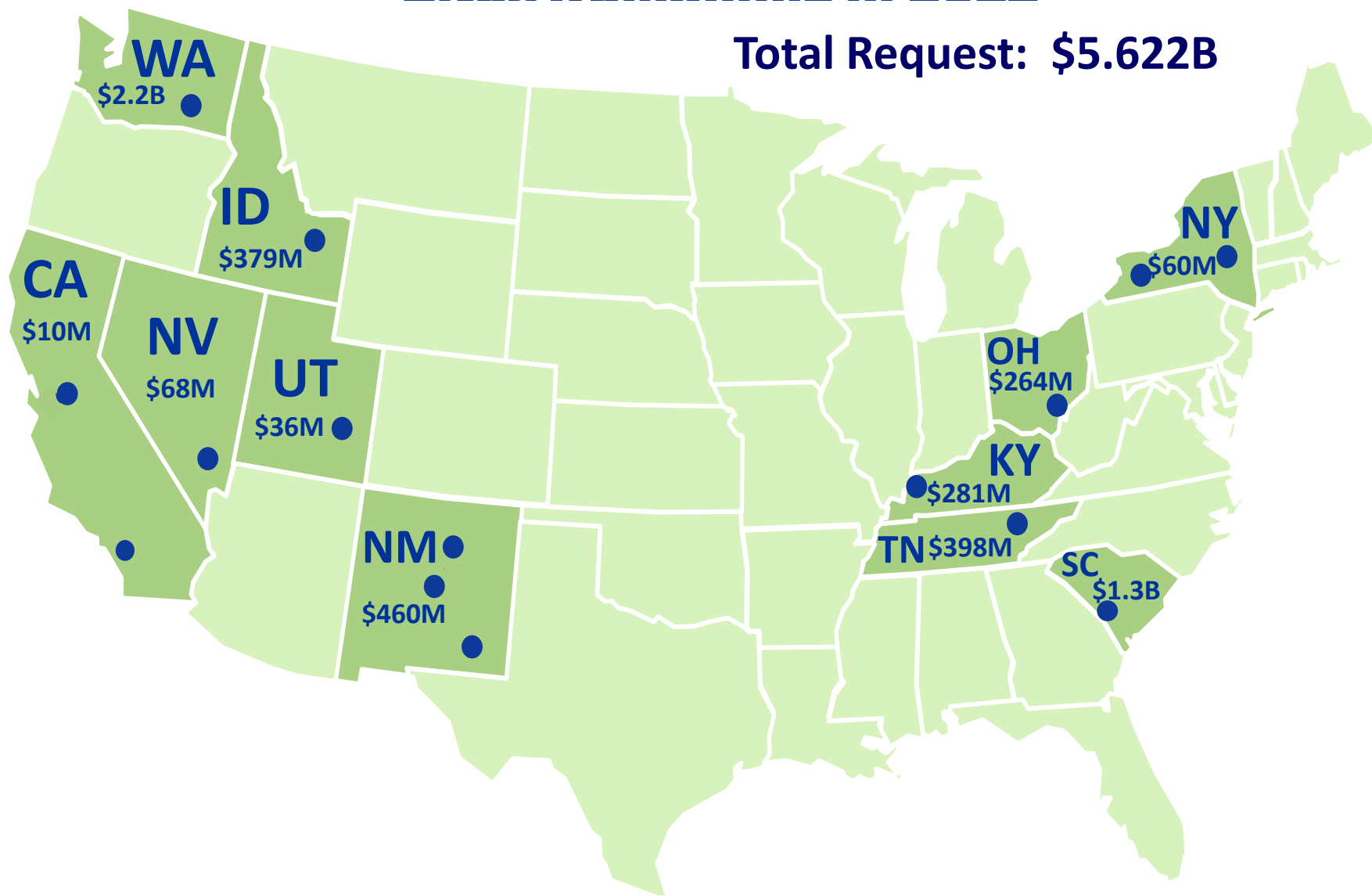
\$ 758M / 13%

## Site Services\*

\$ 392M / 7%



# FY 2015 Budget Request by State

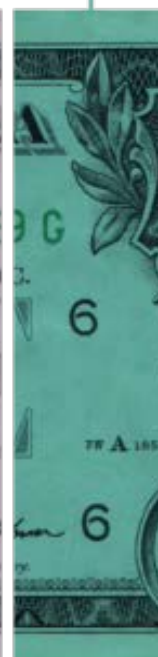


# To-Go (2013 to 2060) Estimate: \$205 Billion

Tank Waste  
\$78B / 38%

Waste  
Management  
\$25B / 12%

Soil &  
Groundwater  
\$20.5B / 10%

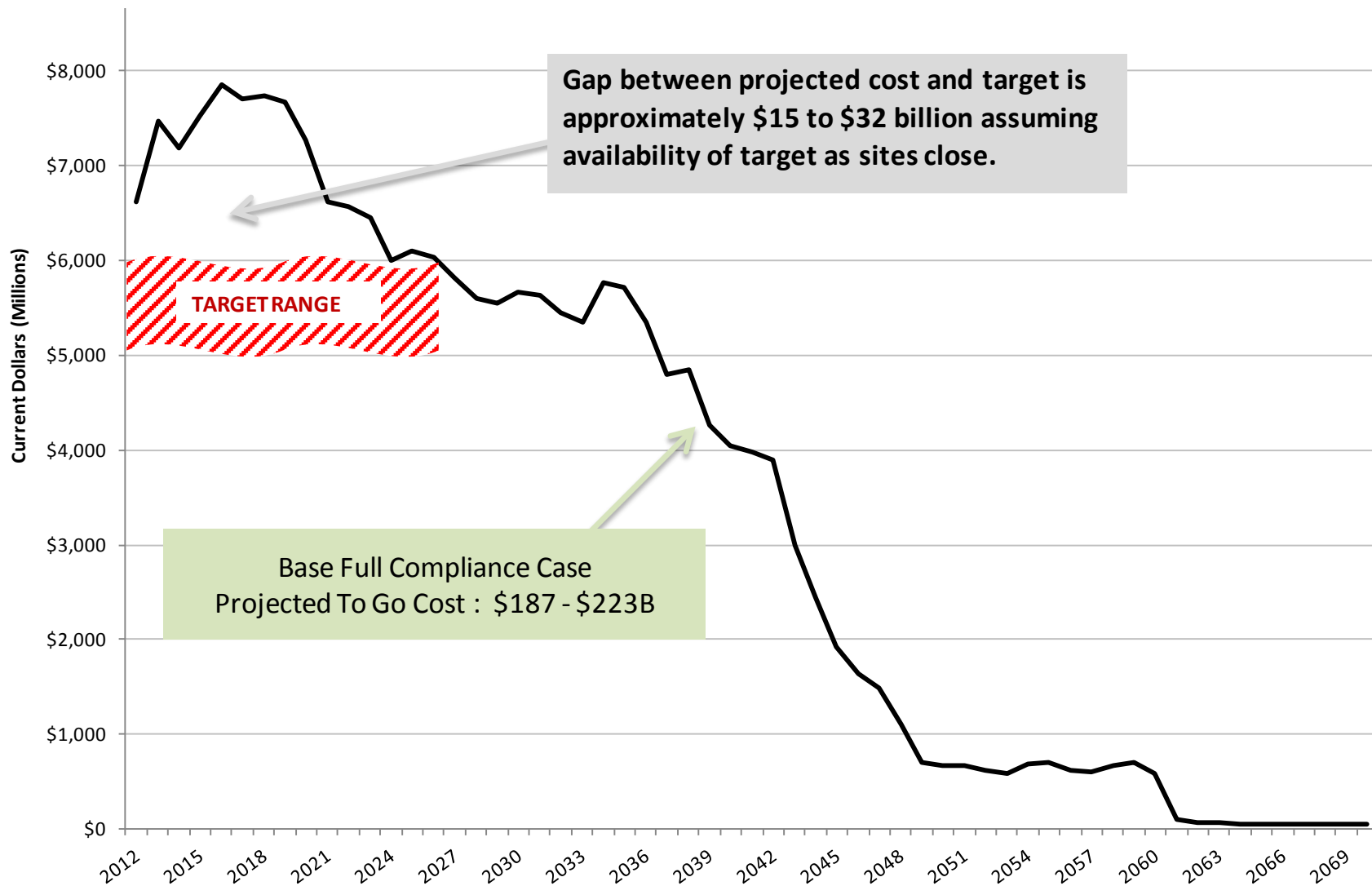


D&D  
\$43B / 21%

Spent Nuclear  
Fuel / Special  
Nuclear Materials  
\$18B / 9%

Infrastructure  
\$20.5B / 10%

# Funding “Compliance Gap”





# Cleanup in a Different National Setting

## Key Challenges

- ❖ EM faces financial challenges as does other federal programs
- ❖ Major technical challenges
  - Problematic waste streams
  - Large construction projects
- ❖ Deferral of work has significantly increased the lifecycle cost of the EM mission
  - Increased diligence to ensure public and worker safety

## Path Forward

- ❖ Work closely with our regulators, the Tribal nations, and our stakeholders to align cleanup priorities and commitments
- ❖ Strive to optimize existing waste disposal processes and systems
- ❖ Improve project and contract management
- ❖ Invest in targeted and applied technology development to reduce the risk and cost of cleanup