



U.S. DEPARTMENT OF  
**ENERGY**

# *EM Program Budget Outlook: Plan for Accelerated Cleanup & Development of Business Cases*

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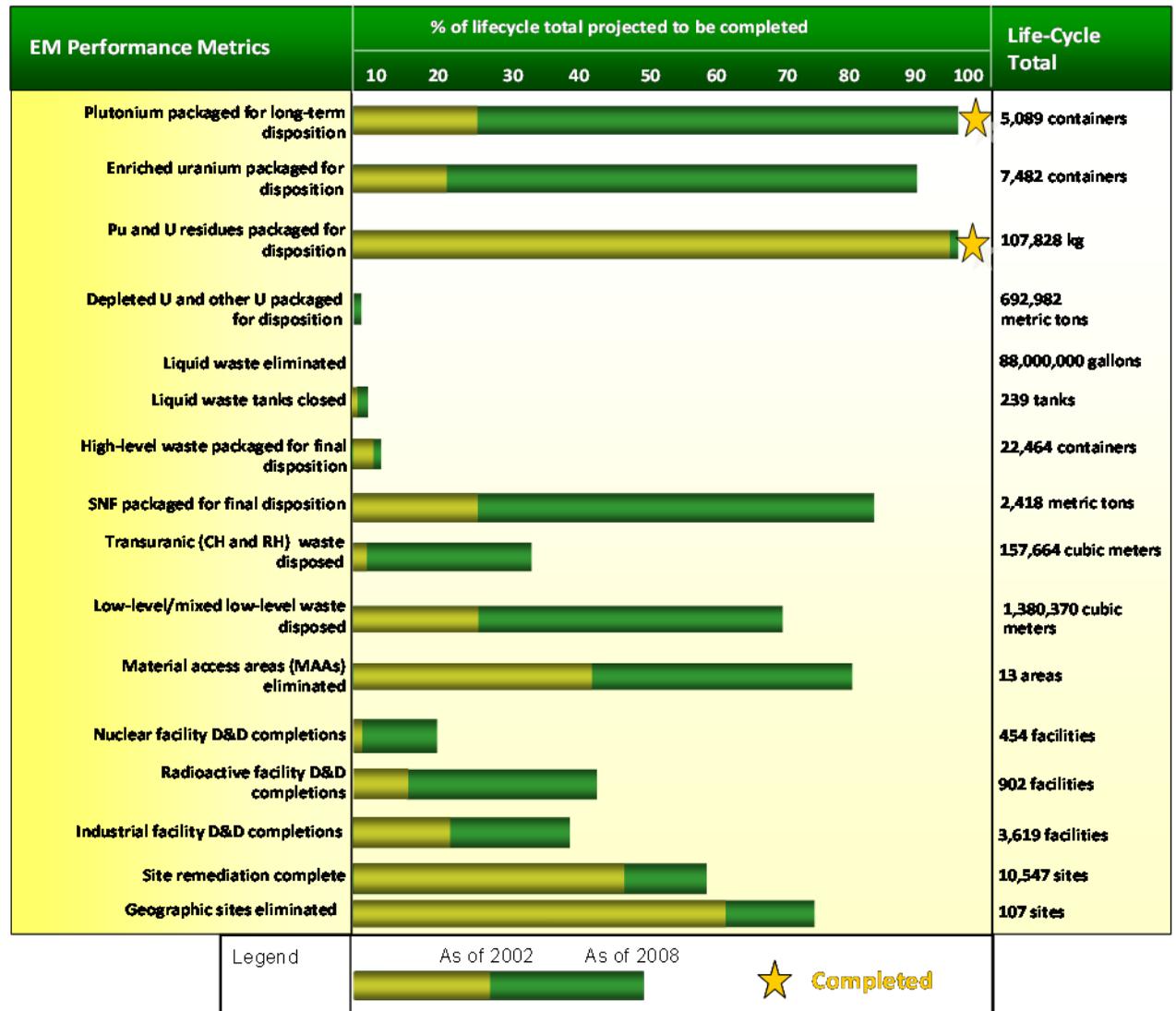
***EM Environmental Management***

***safety ❖ performance ❖ cleanup ❖ closure***

[www.em.doe.gov](http://www.em.doe.gov)

# EM Program Accomplishments

- By late 1990s, transition from characterization and stabilization program to active clean up and closure
- Major progress toward completion of program scope



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# *EM Priorities for Accelerated Cleanup*

- Reducing risk/EM footprint while complying with regulatory commitments
  - Ensure the safety and health of the public/workforce
  - Protect the environment
  - Continue meeting the 37 compliance agreements with state/federal regulatory agencies
- Complete capability to disposition tank waste and nuclear materials
  - Improve construction project performance
  - Develop alternate tank waste strategies
- **Consolidating and preparing for disposal of surplus plutonium and spent nuclear fuel**
- Continued shipment of remote-handled (RH) and contact-handled (CH) transuranic (TRU) waste to the Waste Isolation Pilot Plant
- Emerging scope and high-priority soil/groundwater remediation



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# *Business Case Initiative: Purpose & Analyses*

- Evaluate alternative EM cleanup priorities and strategies at each site and complex wide, under three funding scenarios.
- Develop EM cleanup strategy for post-Recovery Act timeframe (FY2013 to FY2020)
- Examine tradeoffs among business sectors to maximize achievement of EM's ***High Priority Performance Goals:***
  1. Footprint Reduction/Small Site Closure
  2. Tank Waste Initiatives
  3. **SNM/SNF Initiatives**
  4. Accelerated TRU Waste Disposition
  5. Emerging Scope—excess facilities and materials
  6. Additional Projects—nominated by sites for inclusion under an optimum funding profile



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# *Framework for Business Cases*

- **Analyses focus particularly on Mid-Term Horizon**
  - Near Term (through 2013)
  - Middle Horizon (2014–2020)
  - Out Years (2021–completion)
  
- **Three funding scenarios being evaluated**
  - \$5B flat funding case
  - \$6.2B flat funding case
  - Optimum Case (Unconstrained)



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# *Business Case Approach*

- Identify business cases to be evaluated
  - ✓ Document site and case-specific assumptions
  - ✓ Identify “off the top” activities that must be funded in all cases
  - ✓ Establish appropriate sequencing of work
  
- In parallel develop/update cost and other information to support analyses
  - ✓ Update Analytical Building Blocks--ABBs (sub-PBS)
  - ✓ Establish minimum-safe cost profile for each ABB/business case
  - ✓ Create case-specific ABBs, as needed, which reflect scope to be accomplished under a given business case
  
- Build business cases
  - ✓ Build each case by business sector (footprint reduction, tank waste disposition, SNM/SNF, etc.)
  - ✓ Evaluate compliance, life-cycle cost and other impacts for each case
  - ✓ Do iterative analyses to refine business cases



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# *Spent Nuclear Fuel Business Sector*

- Current spent fuel planning structure
  - ✓ Idaho
    - NRC Licensed SNF Storage
    - SNF Programs
    - ISFF Project
  
  - ✓ Richland
    - KBC Basin/Facility Operations & Maintenance
    - Capsule Storage & Disposition
    - Canister Storage Building
    - SNF Disposition
  
  - ✓ Savannah River
    - Heavy Water
    - L Area SNF transfer
    - L Area SNF exchange



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# *Spent Nuclear Fuel Business Sector*

- Business case assumptions impacting SNF
  - ✓ Fifty year on-site storage followed by disposition in Federal repository
  - ✓ All costs related to packaging and loading for transport to repository included in each case
  - ✓ Continued FRR and DRR receipts in all cases analyzed
  - ✓ Alternative FRR/DRR disposition site distribution may be evaluated
  - ✓ Adjustments to Savannah River-Idaho fuel swap may be evaluated



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# *Current Status of Business Cases*

- Working with sites to identify initial business cases
  - ✓ Completed workshop with senior site managers to define six integrated business cases for Hanford (Richland and River Protection)
  - ✓ Completed analogous Savannah River workshop—nine draft business cases developed
  - ✓ Initial discussions held with small sites to identify potential cases
  
- Updating information & tools to enable ABB-level analysis
  - ✓ Updated complex-wide HQ scope and cost data to reflect Recovery Act impact
  - ✓ Hanford data collected and being analyzed
  - ✓ SRS in process of collecting data to submit to HQ
  - ✓ Modifying and expanding analytical tools for business case construction and tradeoff evaluation
  
- Initiated development of specific business case
  - ✓ Draft integrated Hanford cases developed

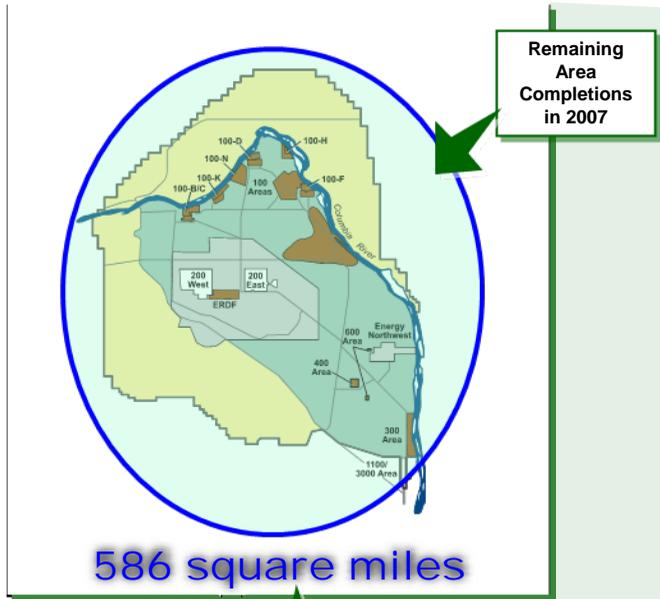


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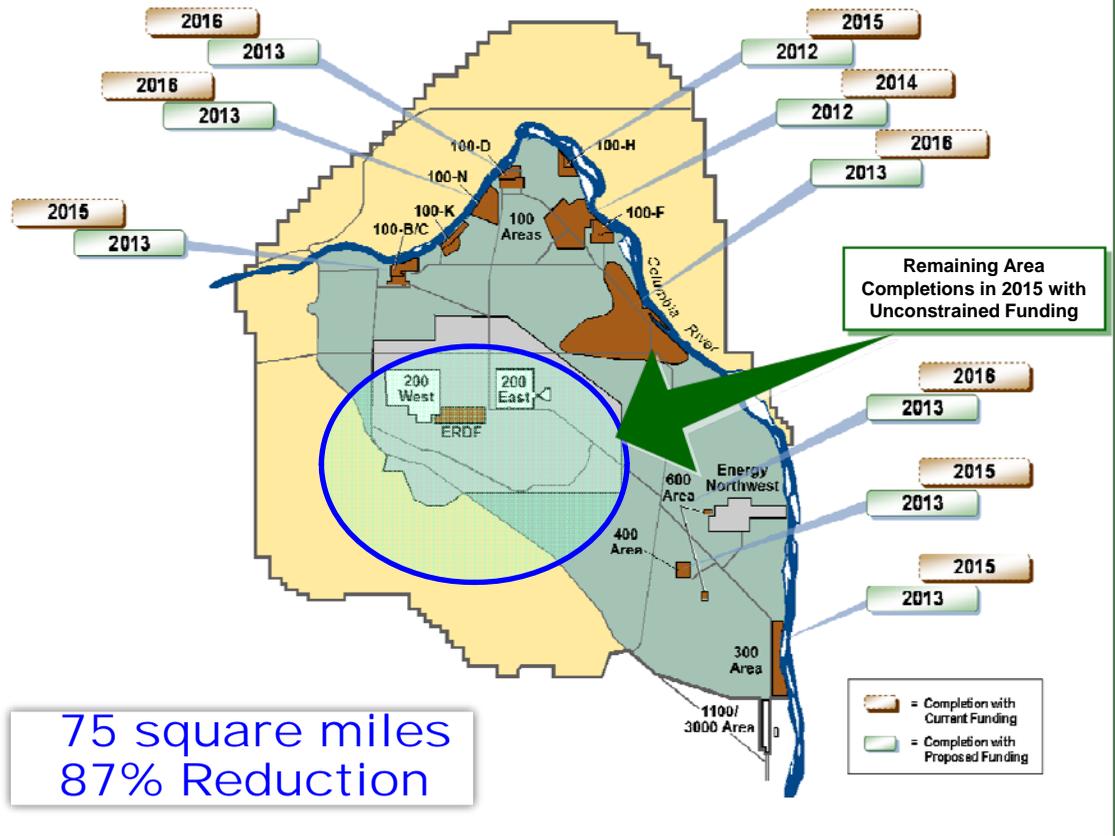
# Goal is Reduce EM Footprint 80 to 90% by FY 2015

## Hanford Today



## Hanford in 2015

### End State and Final Closure



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# *Next Steps & Schedule*

- Identify business cases for Idaho, Oak Ridge and small sites; collect/update data by late March (being performed now)
- Work with sites to complete initial business cases by end of March
- Evaluate and refine business cases throughout April
- Cases will support FY 2012 budget formulation in May/June timeframe.

***Establish EM strategy for next decade***

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