

**U.S. Department of Energy  
Environmental Management Program**

# **Headquarters Outlook on LLW/MLLW Disposition**

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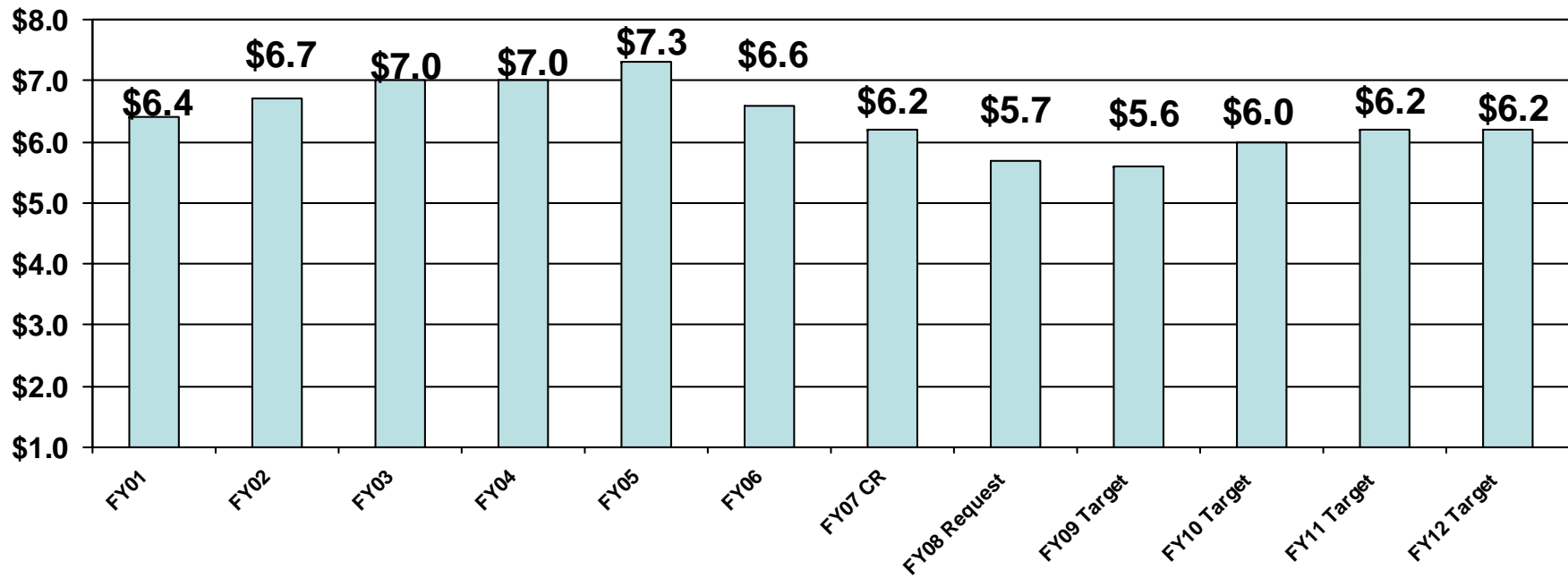
**NTS Generators Workshop  
April 2008**

*Christine Gelles  
Office of Disposal Operations  
Office of Environmental Management*



# EM Funding History & Projections

\$ in billions



FY09-12 subject to change

# Out year targets vs. current baseline requirements



\* FY 2006/2007 baseline data not available

# *EM strategies for bridging the gap*

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- “Near-term baselines”
  - Independently reviewed to support validation
  - Formal approvals by Assistant Secretary for Environmental Management (as the Acquisition Executive)
  - Provides basis for tracking future cost and schedule changes
    - Due to available resources and funding
    - Due to policy and priority changes
- Five Year Plans
  - Informed development of the FY09 budget request
- Out year planning initiative
  - Will inform FY10 budget formulation
  - Developing detailed analytical tools
  - Multiple “cases” under development

# *LLW/MLLW ~ Issues and Priorities*

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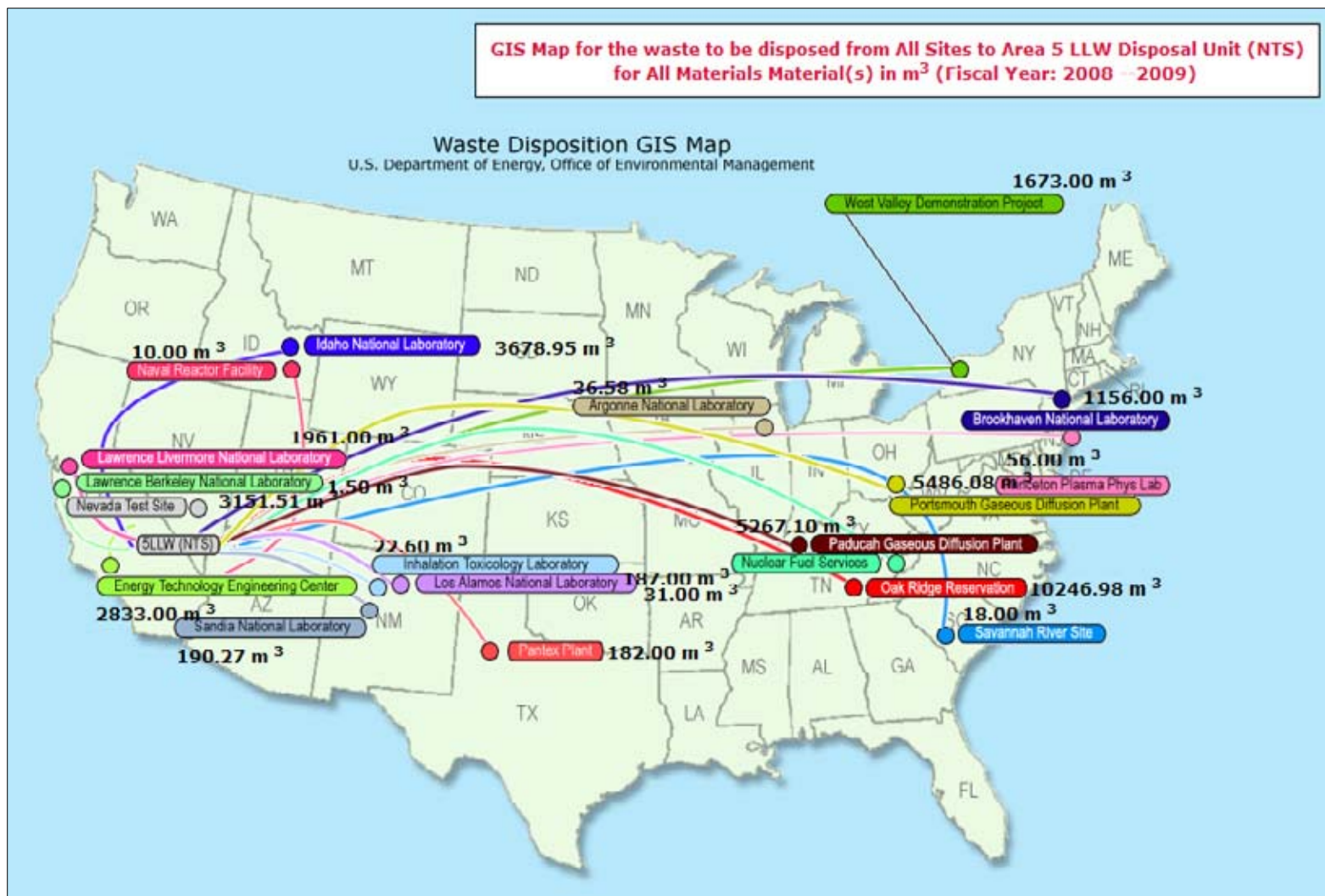
- Off-site waste shipments to Hanford remain suspended
  - Pending completion of the Hanford Tank Closure & Waste Management EIS and subsequent decisions
- DOE disposal capacity for MLLW (at NTS) ends in Nov 2010
  - Future alternatives are being evaluated, but remain uncertain
- Near term disposal plans will likely be constrained, and opportunities to optimize costs are critical to continued disposal progress
  - Increased emphasis of near term planning and cost-benefit analyses
  - Economies of scale are being sought
- Forecast volumes are somewhat uncertain
  - For example, some higher activity MLLW volumes “fall out” of TRU inventory

## *Complex-wide integration and improved disposition planning are critical*

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- Established DOE LLW Corporate Board
  - First meeting January 2008
  - Identified issues and topics for June 2008 meeting
  - Approved bylaws
- Corporate efforts target:
  - Optimized use of DOE and commercial facilities
  - Additional focus on and review of cost-benefit analyses
  - Complex-wide contracting
  - Deployment of integrated planning tools to increase support for solid waste disposition projects

Updated data: Projected LLW Shipments to NTS (and MLLW thru 2010)



## *Headquarters Perspectives on....*

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- NTS facilities
- The past year
- Funding for disposal at NTS
- Forecasting volumes for disposal at NTS
- Targeted programmatic improvements
  - Related to NTS
  - Complex-wide
- Future disposal needs
- Commercial developments
- Other programmatic factors





# *Additional Information*



***EM Environmental Management***

safety ❖ performance ❖ cleanup ❖ closure

# *LLW/MLLW Treatment Update*

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- Toxic Substances Control Act Incinerator (TSCAI) at Oak Ridge continues to operate as DOE-wide treatment solution
  - TSCAI burned over 1.44 million lbs of waste in FY07
  - To date, TSCAI operated only a few weeks in FY08, due to extended outage for maintenance and repairs
- Life-cycle burn plan under HQs configuration control
  - Reflected operations thru FY09
  - Under revision currently to reflect outage and replan wastes that must be treated prior to closure in late FY09
- Market research and early acquisition planning underway to solicit commercial treatment services
  - Highlights need for thermal treatment – to “replace” TSCAI
  - Includes any treatment process needed to address remaining legacy and forecast generation



# *Low-Level/Mixed Low-Level Waste Management*

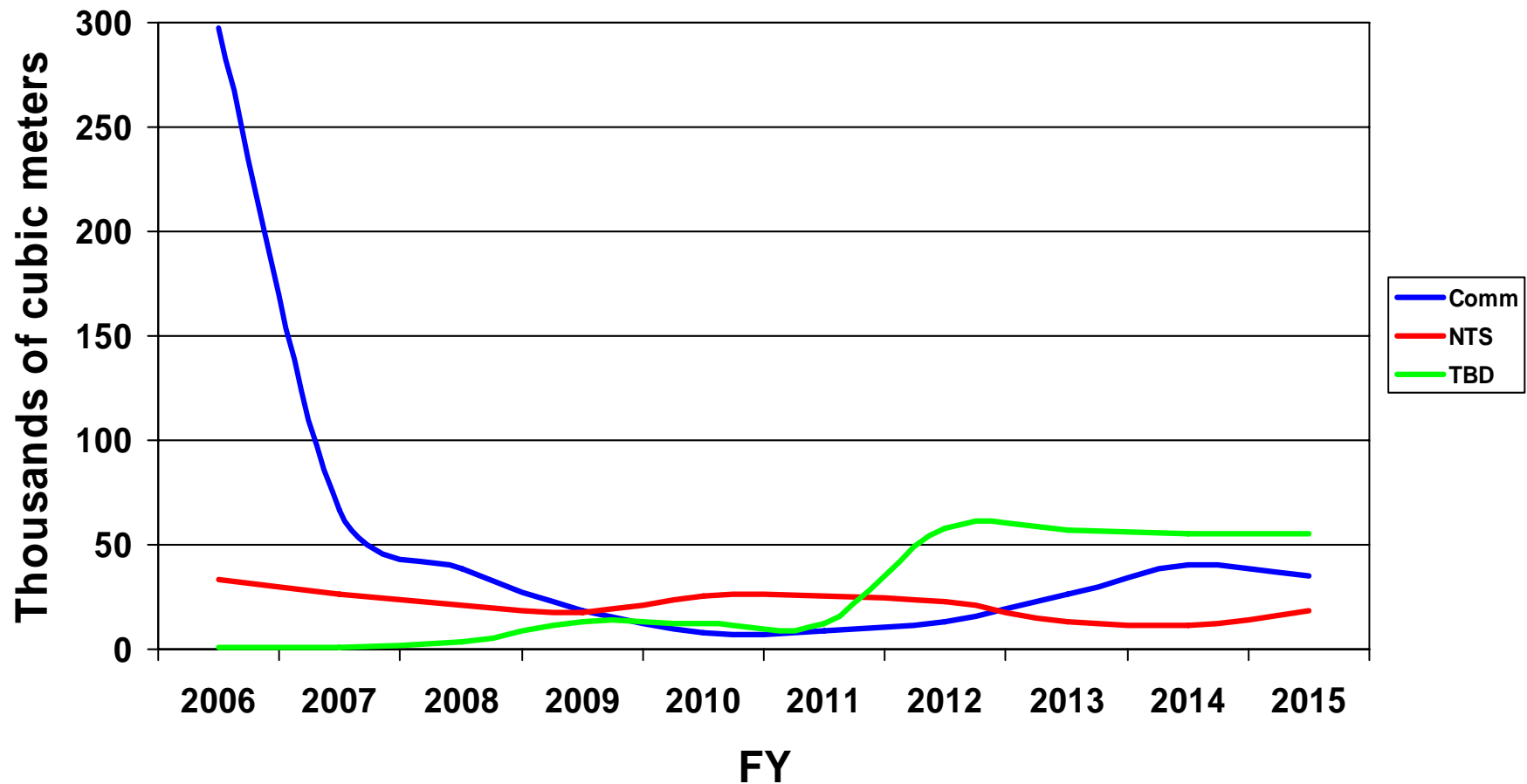
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- DOE-wide life-cycle waste forecasts reinstated
  - Waste Information Management System portrays data in disposition and geographic map formats – <http://wims.arc.fiu.edu/WIMS>
  - 3<sup>rd</sup> annual life-cycle update for LLW/MLLW in WIMS; TRU to be added soon.
- Development of disposition planning tools continues
  - “Mileage charts”
  - Complex-wide shipping schedules
  - Problematic waste streams and risk mitigation plans
  - Waste management summaries – “8,000 ft waste story”
  - Issue matrix
  - Revised guidance on cost-benefit analysis
  - Oak Ridge projects are being used to pilot new detailed tools
- National LLW/MLLW Disposition Strategy developed
  - Rev. 0 in 2006; Rev 1 under review
- EM working to optimize use of DOE waste management assets
  - Nevada Test Site disposal facilities and TSCA Incinerator
- EM pursuing reliable and cost-effective commercial services, as well
  - Planning for complex-wide contracts for commercial treatment and disposal

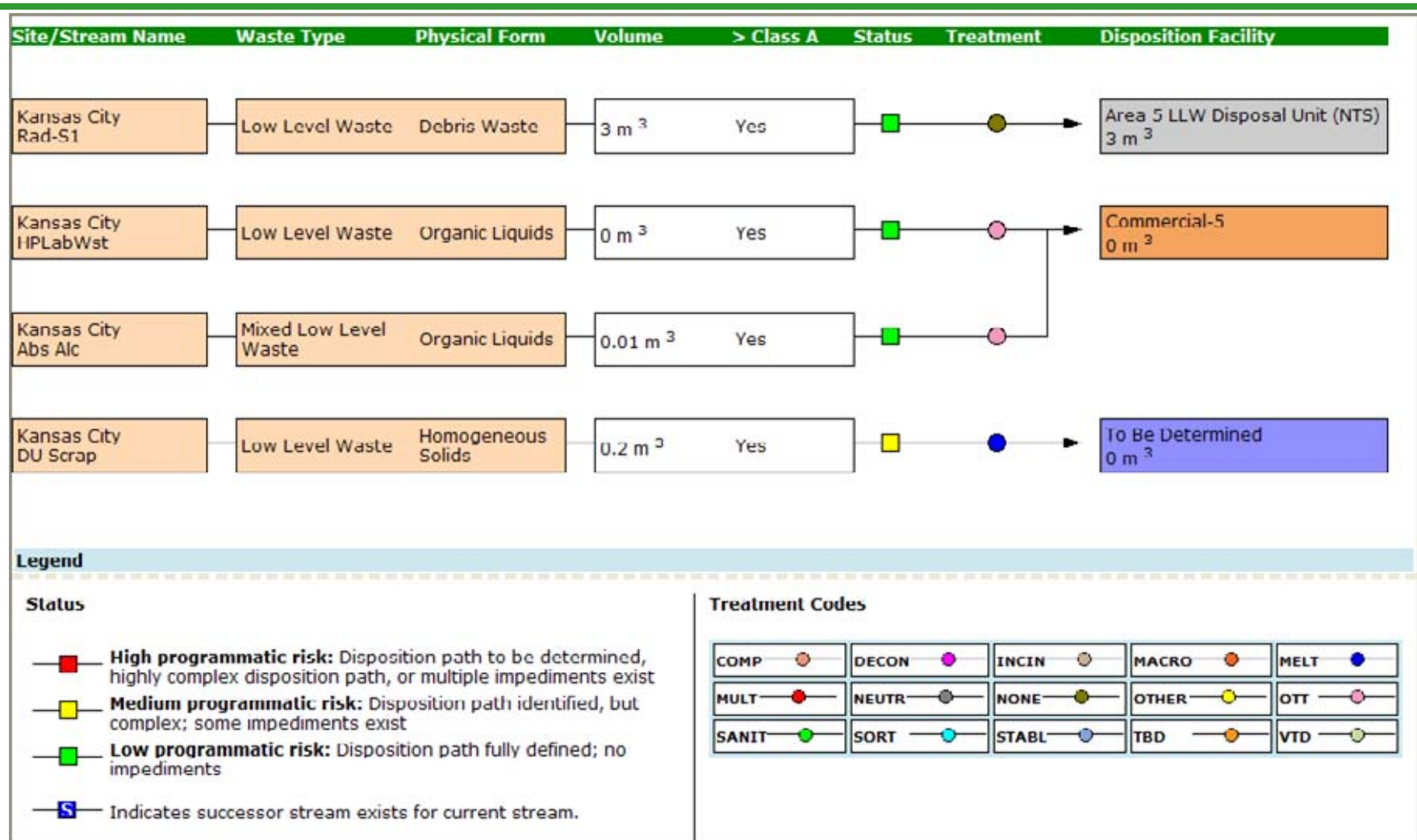


# *Volume of LLW/MLLW Disposed Offsite has Declined*

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# Our planning tools identify “problematic” wastes



# Presentation of Waste Forecast Data in WIMS: Shipments from Idaho National Laboratory



# WIMS now includes transportation planning information

Shipping information for the Waste forecast to be disposed from All Sites to Area 5 LLW Disposal Unit (NTS)  
for All Materials Material(s) (Fiscal Year: 2008 --2038 To 2050)

Row No	Reporting Site	Disposition Facility Name	Waste Stream Name	Field Stream ID	Waste Type	Rail 2008	Truck 2008	Intermodal 2008	Rail 2009	Truck 2009	Intermodal 2009	Row No
73	Portsmouth	Area 5 LLW Disposal Unit (NTS)	PORTS LLW.RD-102_C	LLW03	Low Level Waste	0	0	288	0	0	0	73
74	Portsmouth	Area 5 LLW Disposal Unit (NTS)	PORTS LLW Small Cylinders	LLW SmallC	Low Level Waste	0	10	4	0	0	0	74
75	Portsmouth	Area 5 LLW Disposal Unit (NTS)	PORTS RCRA LLW X-770 Pad	PORTS RCRA	Low Level Waste	0	0	5	0	0	0	75
76	Portsmouth	Area 5 LLW Disposal Unit (NTS)	PORTS RCRA LLW Process Equipment (DMSA 11&12)	RCRA	Low Level Waste	0	0	0	0	28	0	76
77	Portsmouth	Area 5 LLW Disposal Unit (NTS)	PORTS LLW Depleted Uranium Metal	PORTS LLW	Low Level Waste	0	52	0	0	0	0	77

Reporting Sites	AIL	ALOP	BAPL	BCL	ETEC	FEMP	HANF-RL	HANF-RP	NAPL	LLJL	LAHL	MEMP	NTS	ORR	PGOP	PORT	RFET	SILA
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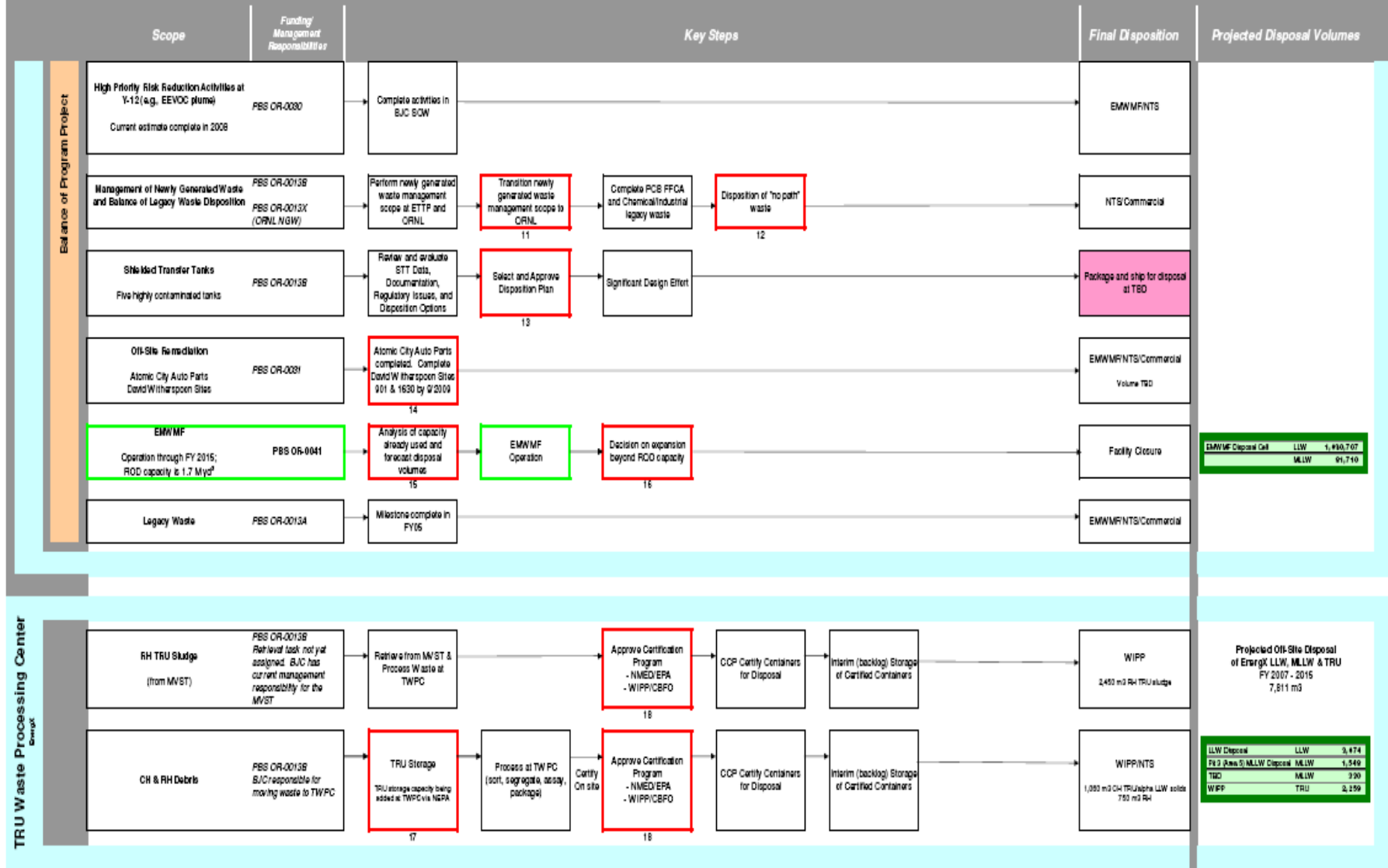
**NEW!**



**EM Environmental Management**

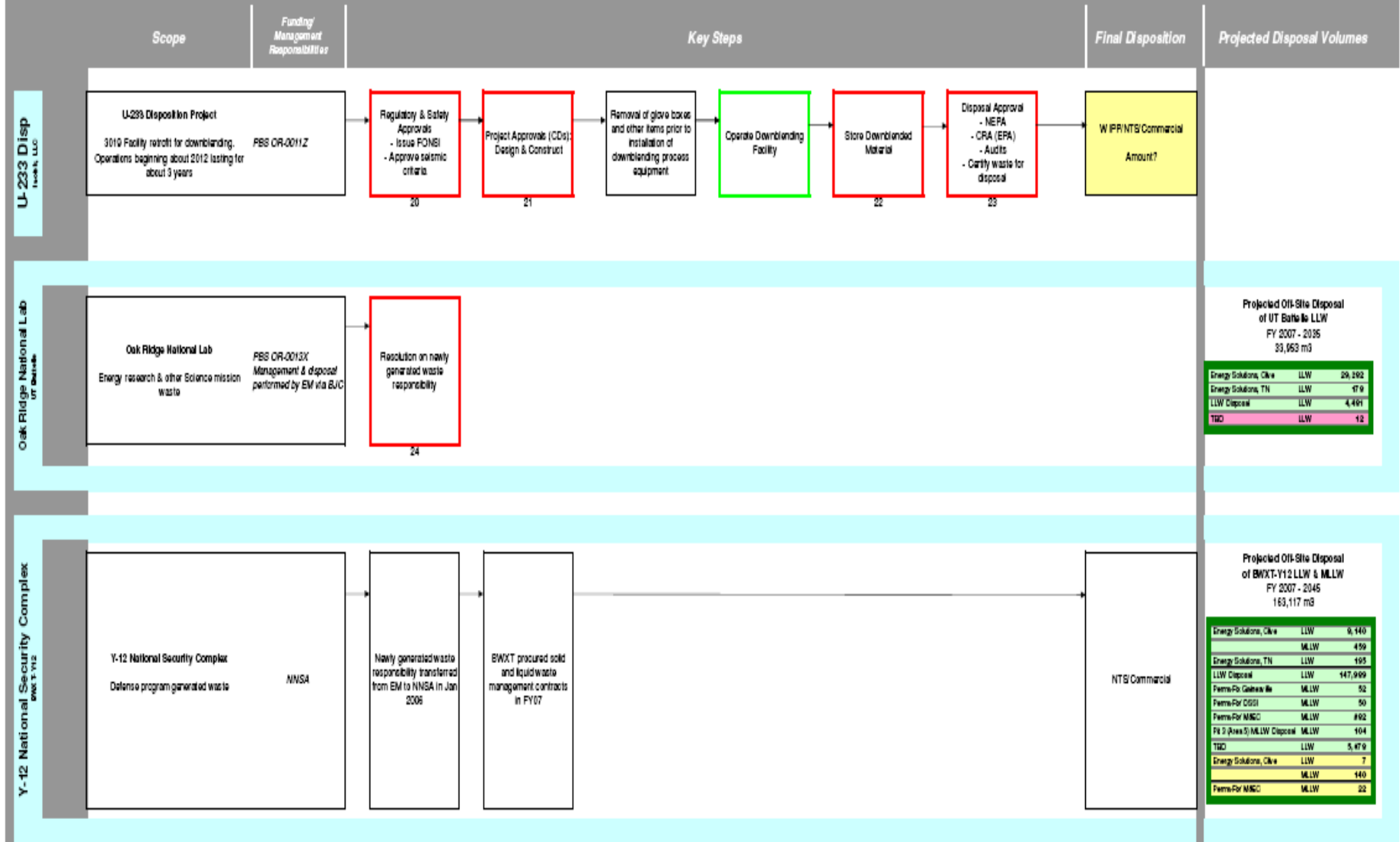
safety ❖ performance ❖ cleanup ❖ closure

# Oak Ridge Waste Story -- The 8,000 Foot View

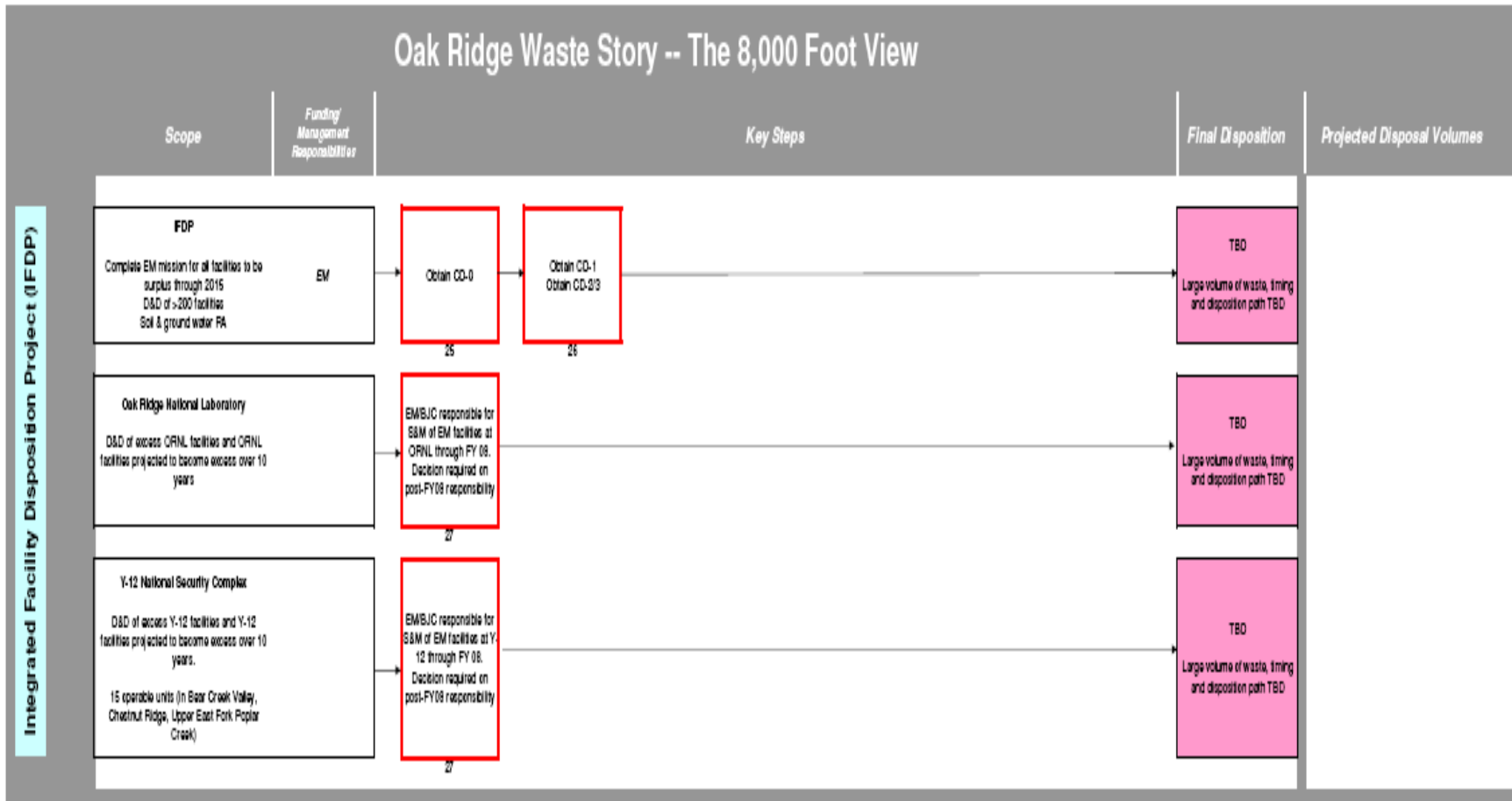




# Oak Ridge Waste Story -- The 8,000 Foot View



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Disposition Asset

Key Federal Action Required

