



# Office of Environmental Management

Rodney Lehman

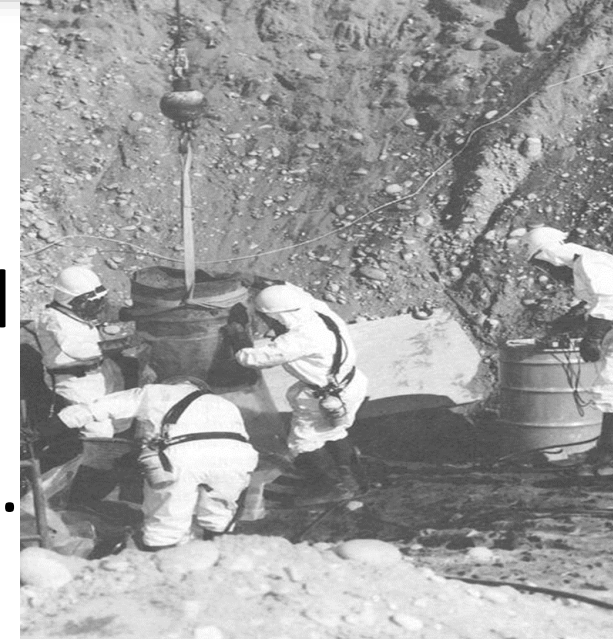
Director, Office of Project Management (EM)

EM-5.22



# History of EM: 35 Years of Progress

- **May 1989:** Hanford Tri-Party Agreement Signed, ushered in the era of cleanup.
- **Oct 1989:** DOE created the Office of Environmental Restoration and Waste Management, later renamed the Office of Environmental Management.



The EM mission is to complete the safe cleanup of nuclear waste, materials, and facilities left over from five decades of nuclear weapons development and government-sponsored nuclear energy research.



# Site Restoration Achievements



**Completed cleanup of 92 of 107 sites, including:**

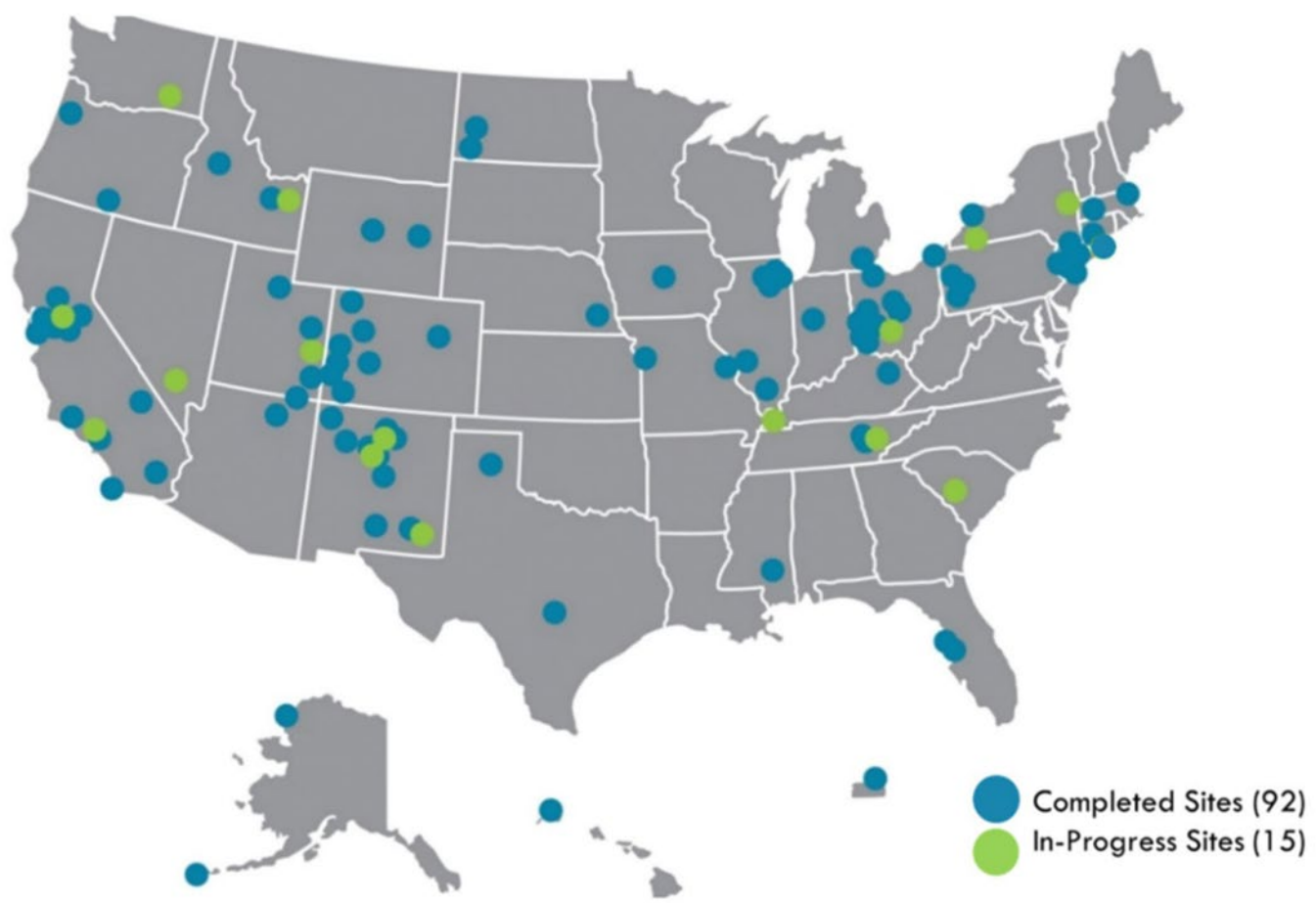
- Rocky Flats, now a wildlife preserve
- Weldon Spring, now a trailhead
- Mound, now a business park
- Fernald, now a nature preserve
- Brookhaven National Laboratory
- East Tennessee Technology Park Gaseous Diffusion Plant







# Completed Sites



✓ Commercial Properties/ Laboratories	10
✓ DOE Laboratories	14
✓ Former Reactor Sites	3
✓ Former Utilized Sites Remedial Action Program (FUSRAP)	26
✓ Test Sites	5
✓ Uranium Mill Tailing Remedial Action (UMTRA)/Mill Tailings	26
✓ Uranium Processing Sites	2
✓ Weapons Manufacturing Sites	6
<b>Total Completed Sites:</b>	<b>92</b>



# Major Mission Areas

Tank Waste

Spent Nuclear Fuel (SNF)

Nuclear Materials (NM)

TRU Waste

Depleted Uranium (DU)

Low-Level Waste (LLW)/Mixed Low-Level Waste (MLLW)

Soils & Groundwater (S&GW)

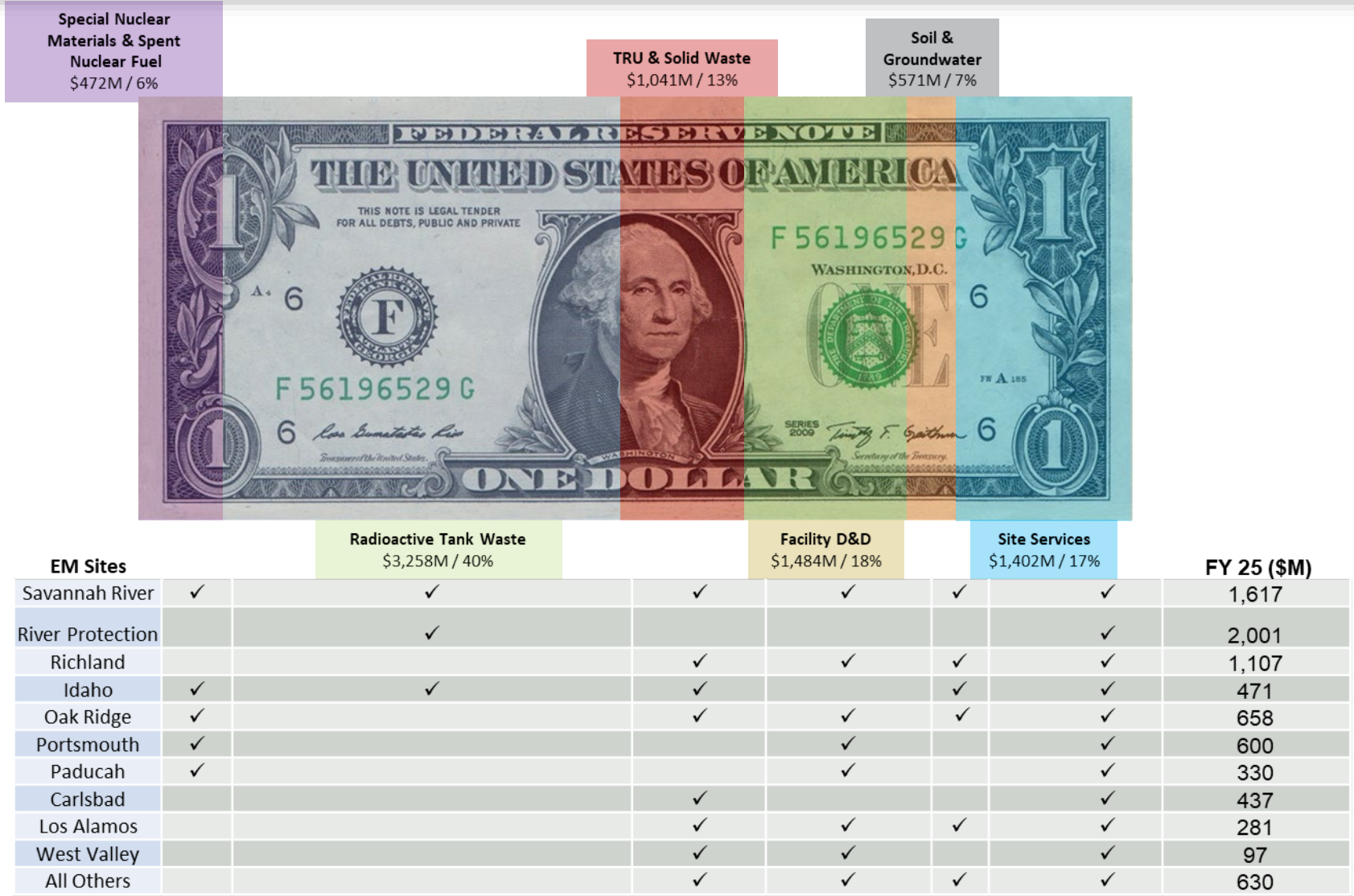
Excess Facilities D&D







# Six Primary Mission Areas







# 35 Years of Impact, Excellence and Success



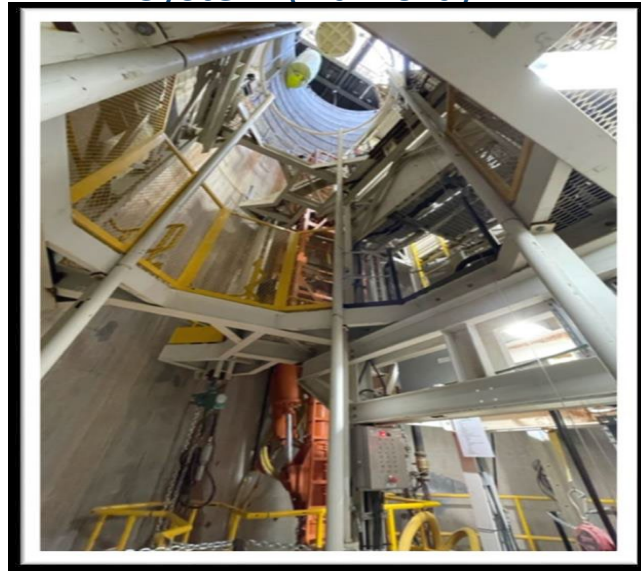
Tank-Side Cesium Removal System (Hanford)



WTP (Hanford)



Salt Disposal Units (SRS)



Utility Shaft - WIPP

Moab



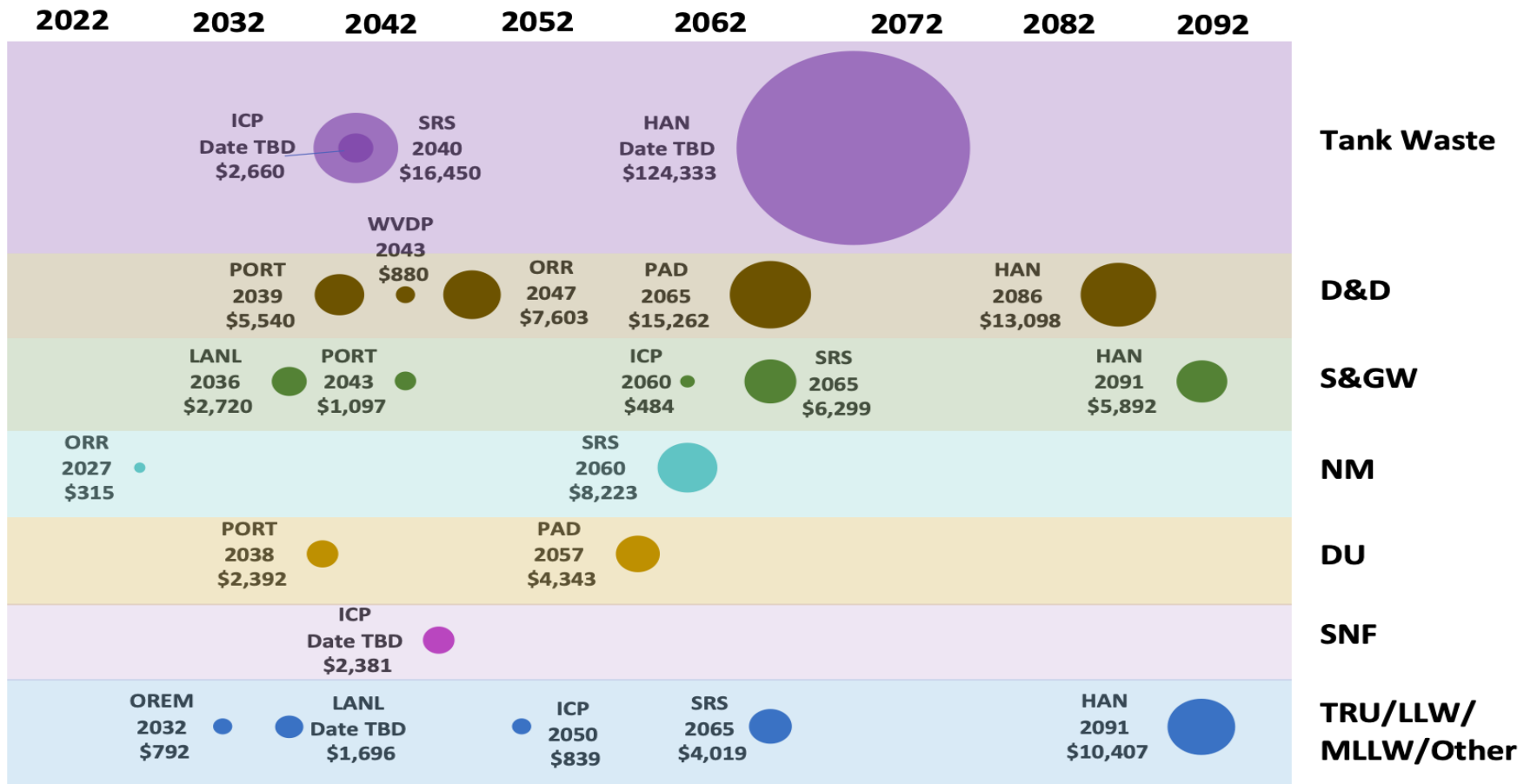
X-326 (Portsmouth)





# Timeline

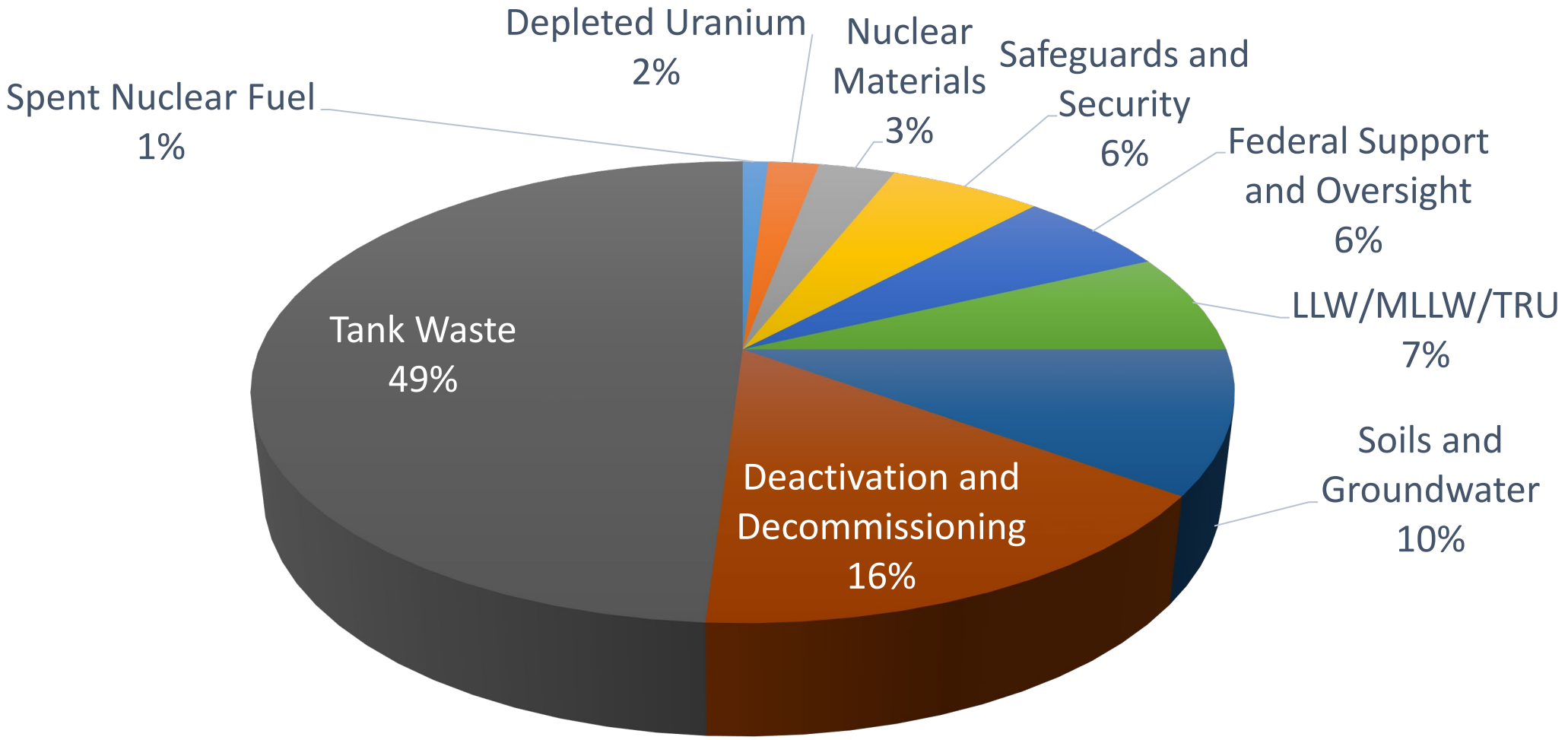
## Timeline and Remaining Cost for the Largest Sites within Each Mission Area (\$M Constant 2022 Dollars/Un-escalated Dollars)







# Remaining Cleanup by Mission Area





# Key Activities Planned for the Coming Decade

- Treating and stabilizing radioactive tank waste in glass at Hanford through the DFLAW System, Ramping up the site's high-level tank waste treatment capabilities, completing significant risk reduction activities such as transferring cesium and strontium capsules to dry storage and placing the last of the former production reactors, K West Reactor, in interim safe storage
- Emptying and closing up to 19 of 51 underground waste tanks and completing disposal of remaining legacy TRU waste at SRS
- Completing the new Safety Significant Confinement Ventilation System, the new Utility Shaft Project, and other key infrastructure upgrades at WIPP
- Completing disposal of uranium-233 at Oak Ridge, along with completing construction of the site's new Mercury Treatment Facility
- Completing the treatment of remaining liquid sodium-bearing waste at INL



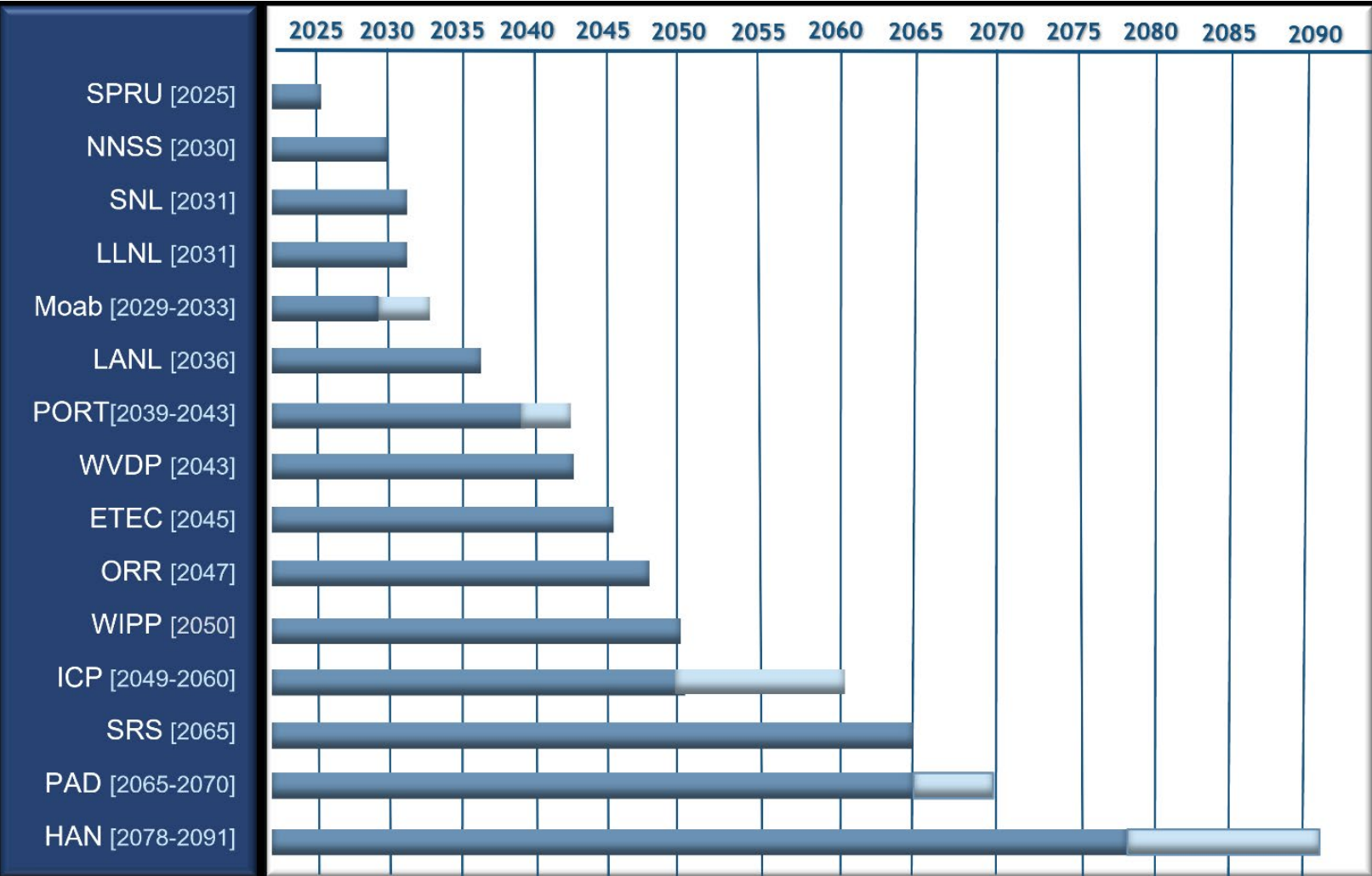


# Key Activities Planned for the Coming Decade

- Finalizing and implementing long-term treatment approaches for contaminated groundwater at LANL
- Completing the demolition of former uranium enrichment process buildings at Portsmouth
- Completing deactivation activities at the C-333 former uranium enrichment process building and beginning fieldwork for the C-400 remedial action at Paducah
- Completing Phase 1 demolition activities at WVDP
- Initiating soil remediation and final groundwater treatment approaches at ETEC
- Completing legacy cleanup activities at Moab
- Completing legacy cleanup activities at the NNSS



# Summary of EM Program Site Completion Dates







# Coming in 2024

- **2024 EM Program Plan**

- Remaining cleanup work & strategies for completion
- Key opportunities to accelerate completion/reduce risk
- Framework for path forward to complete the mission

<https://www.energy.gov/em/em-program-plan>

- **2024 EM Strategic Vision**

- Recent accomplishments
- Integrated planning
- High-level summary of cleanup over the coming decade

<https://www.energy.gov/em/articles/em-strategic-vision>



# Questions