Key Points

• RL is committed to significant accomplishment in cleaning up the site and meeting our compliance commitments

• This briefing reflects the proposed milestones in the TPA tentative agreement dated February 2009

• This briefing presents work scope accomplishments to be performed in FY 2011 as part of the base budget request
RL Funding

(Dollars in Millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Appropriations</th>
<th>President’s Budget</th>
<th>5-Year Funding Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007</td>
<td>$948</td>
<td></td>
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<tr>
<td>FY 2008</td>
<td>$983</td>
<td></td>
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<tr>
<td>FY 2009</td>
<td>$1,057</td>
<td></td>
<td></td>
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<tr>
<td>FY 2010</td>
<td>$994</td>
<td></td>
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</tr>
<tr>
<td>FY 2011</td>
<td>$1,095</td>
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</tr>
</tbody>
</table>

Note: These numbers exclude Program Direction funding
## Funding Profile

### FY 2011 Public Briefing

### July 2009

#### RL-0011 NM Stabilization and Disposition - PFP
- FY09 Omnibus: $113,483
- FY 2010 President's Budget: $118,087
- FY 2011 Budget Request: $77,067

#### RL-0012 SNF Stabilization and Disposition
- FY09 Omnibus: $122,171
- FY 2010 President's Budget: $55,325
- FY 2011 Budget Request: $94,016

#### RL-0041 Nuclear Facility D&D - River Corridor Closure Project
- FY09 Omnibus: $240,837
- FY 2010 President's Budget: $327,955
- FY 2011 Budget Request: $368,060

#### Subtotal 2012
- 2012 Accelerated Completion
  - FY09 Omnibus: $476,491
  - FY 2010 President's Budget: $501,367
  - FY 2011 Budget Request: $539,143

#### RL-0013 Solid Waste Stabilization and Disposition - 200 Area
- FY09 Omnibus: $189,930
- FY 2010 President's Budget: $132,757
- FY 2011 Budget Request: $135,026

#### RL-0030 Soil and Water Remediation - Groundwater/Vadose Zone
- FY09 Omnibus: $185,010
- FY 2010 President's Budget: $176,766
- FY 2011 Budget Request: $212,531

#### RL-0040 Nuclear Facility D&D - Remainder of Hanford
- FY09 Omnibus: $95,925
- FY 2010 President's Budget: $70,250
- FY 2011 Budget Request: $99,641

#### RL-0100 Richland Community and Regulatory Support
- FY09 Omnibus: $19,620
- FY 2010 President's Budget: $21,940
- FY 2011 Budget Request: $27,588

#### Subtotal 2035
- 2035 Accelerated Completion
  - FY09 Omnibus: $490,485
  - FY 2010 President's Budget: $401,713
  - FY 2011 Budget Request: $474,786

#### RL-0020 Safeguards and Security
- FY09 Omnibus: $79,765
- FY 2010 President's Budget: $82,771
- FY 2011 Budget Request: $77,412

#### RL-0042 Nuclear Facility D&D - Fast Flux Test Facility Project
- FY09 Omnibus: $10,755
- FY 2010 President's Budget: $7,652
- FY 2011 Budget Request: $3,659

#### Total - RL
- Office Base Funding Total
  - FY09 Omnibus: $1,057,496
  - FY 2010 President's Budget: $993,503
  - FY 2011 Budget Request: $1,095,000

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U.S. DEPARTMENT OF ENERGY

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4
## Projected ARRA Funding

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>WORKSCOPE</th>
<th>FY09-FY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plutonium Finishing Plant</td>
<td>• Plutonium Finishing Plant (remove glove boxes, hoods, and process equipment; Plutonium Finishing Plant 234-5Z Process Areas and ancillary facilities ready for demolition)</td>
<td>$317M</td>
</tr>
<tr>
<td>River Corridor Closure Project - Soil Remediation</td>
<td>• Characterize, remediate 618-10 Burial Ground trenches</td>
<td>$78M</td>
</tr>
<tr>
<td>River Corridor Closure Project – D&amp;D</td>
<td>• Reduce River Corridor footprint</td>
<td>$442M</td>
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<td></td>
<td>• Environmental Restoration Disposal Facility: construct super-cells 9 &amp; 10, expand operations</td>
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<tr>
<td></td>
<td>• K Area: demolish facilities, remediate waste sites</td>
<td></td>
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<tr>
<td></td>
<td>• Disposition K East Reactor</td>
<td></td>
</tr>
<tr>
<td>Central Plateau D&amp;D and Soil Remediation</td>
<td>• Central Plateau Outer Zone footprint reduction (200 North and other waste sites)</td>
<td>$423M</td>
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<tr>
<td></td>
<td>• Remediation of the U Plant Zone canyon and structures</td>
<td></td>
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<tr>
<td></td>
<td>• D&amp;D 15 surplus facilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• D&amp;D Semi Works Zone structure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• D&amp;D excess Arid Lands Ecology Reserve structures</td>
<td></td>
</tr>
<tr>
<td>Soil and Water Remediation - Groundwater</td>
<td>• Construct groundwater remedies in River Corridor (100 Areas)</td>
<td>$146M</td>
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<tr>
<td></td>
<td>• Accelerate construction of groundwater treatment system for both 200 West Operable Units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Accelerate remedial investigations, treatability tests, cleanup decisions, and well decommissioning in the Central Plateau Area</td>
<td></td>
</tr>
<tr>
<td>Solid Waste Stabilization and Disposition</td>
<td>• Retrieve 10,800 drums-worth of contact-handled transuranic TRU) waste</td>
<td>$229M</td>
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<tr>
<td></td>
<td>• Repackage 4,100 drums-worth of contact-handled TRU waste inventory</td>
<td></td>
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<td></td>
<td>• Eliminate backlog of current legacy waste</td>
<td></td>
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</tbody>
</table>
Shrinking the Footprint of Active Site Cleanup

The 2015 Vision
Hanford Site Cleanup

Richland Operations Office

FY 2011 Public Briefing

Safe and Effective Cleanup that Protects the Columbia River

- Reduces the Active Site Footprint of Cleanup to 75 Square Miles (580 → 75)
- Significantly Reduces Long-Term Mortgage Costs
- At Completion, Shifts Emphasis and Resources to Full Scale Cleanup of the Central Plateau (75 square miles)
- Reduces Costs by “Right Sizing” Hanford’s Infrastructure via a Mission Support Contract
- Minimizes Injury to Natural Resources

B & C Area
- Interim Safe Storage of C Reactor Complete
- B Reactor Designated as a Museum or Interim Safe Storage Complete
- All B & C Area Final ROD Remedial Actions Complete
- All B & C Area Groundwater Remedies Implemented
- 5 Facilities Demolished
- 46 Waste Sites Remediated
- ~301,000 Ton of Soil Removed

N Area
- Interim Safe Storage of N Reactor Complete
- All N Area Final ROD Remedial Actions Complete and TSD Units Closed
- All N Area Groundwater Remedies Implemented
- 18 Facilities Demolished
- 84 Waste Sites Remediated
- ~137,900 Ton of Soil Removed

D & H Area
- Interim Safe Storage of D, DR, and H Reactors Complete
- All D & H Area Final ROD Remedial Actions Complete
- All D & H Area Groundwater Remedies Implemented
- 10 Facilities Demolished
- 56 Waste Sites Remediated
- ~170,000 Ton of Soil Removed

K Area
- K East Basin Demolished
- Interim Safe Storage of K East Reactor Complete
- K West Storage Removed from the River Corridor
- Interim Safe Storage of K West Reactor Initiated
- All K Area Final ROD Remedial Actions Complete and TSD Units Closed with the exception of those associated with K West
- All K Area Groundwater Remedies Implemented
- 2300 Ton of Scrap Nuclear Fuel Removed
- 100 Facilities Demolished
- 2 Waste Sites Remediated
- ~301,000 Ton of Soil Removed

IU2 & IU6 Area
- Interim Safe Storage of F Reactor Complete
- All IU2 & IU6 Area Final ROD Remedial Actions Complete
- All IU2 & IU6 Area Groundwater Remedies Implemented
- 26 Facilities Demolished
- 52 Waste Sites Remediated
- ~900,000 Ton of Soil Removed

Central Plateau Cleanup
- All 200 West Carbon Tetachloride, Uranium and Technetium 99 Groundwater Remedies Implemented
- Conduct Additional Cleanup as Funds Become Available

300 Area
- All 300 Area Final ROD Remedial Actions Complete and TSD Units Closed
- All 300 Area Groundwater Remedies Implemented
- 196 Facilities Demolished
- 95 Waste Sites Remediated
- ~422,000 Ton of Soil Removed
- Final Remediation of 818-10 & 818-11 Burial Grounds Complete

Plutonium Finishing Plant Complex
- All Special Nuclear Material Shipped Off site
- Slightly Irradiated Fuel Shipped to the Cranberry Storage Building for Safe Guarding
- PFP Complex Reduced to Slab on Grade
- 16 Facilities Demolished

400 Area
- Fast Flux Test Facility in Surveillance and Maintenance

* Does not reflect all work
River Corridor Cleanup Strategy

FY 2011 Public Briefing

July 2009

Status

<table>
<thead>
<tr>
<th>Work Activities as of March 2009</th>
<th>Projected Total</th>
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</thead>
<tbody>
<tr>
<td>Facilities Demolished</td>
<td>181</td>
</tr>
<tr>
<td>Waste Sites Remediated</td>
<td>442</td>
</tr>
<tr>
<td>Reactors Cocooned</td>
<td>5</td>
</tr>
<tr>
<td>Waste Sent to ERDF</td>
<td>8.1M Tons</td>
</tr>
</tbody>
</table>

NOTES:
- Evaluating path forward for 618-10 and 618-11 using ARRA funding to accelerate completion to 2015
- Evaluating experimental in-situ remediation to accelerate C-7 completion to 2015.
- *Will increase projected ERDF waste up to 12.5M tons in new baseline
- Using ARRA funding to accelerate implementation of Groundwater remedial action capacity
Central Plateau Cleanup Strategy: Inner Area Principles and Objectives

- Minimize the size of the area requiring long-term management (the final footprint)
- Configure waste and residual contamination to be protective of human health and the environment
- Monitor inner area to ensure cleanup remedies are protective (defense in depth)
- Make consistent cleanup decisions at the largest scale possible
- Implement cleanup decisions using a geographical approach
Central Plateau Cleanup Strategy: Outer Area Principles and Objectives

- Clean up waste sites (about 180) comparable to the River Corridor with some exceptions
- D & D excess facilities
- Start cleanup with interim decisions using ARRA funds
- Make final cleanup decisions with one Record of Decision
Richland Cleanup Priorities

- Maintain Safe & Compliant Facilities and Provide Essential Services
  - Safeguards and Security
- Execute RL 2015 Vision and Achieve Regulatory/TPA Compliance
  - Columbia River Corridor cleanup/demolition of facilities, waste sites, and groundwater
  - Sludge Treatment
  - PFP D&D
  - Central Plateau Groundwater Remediation
  - Central Plateau - Waste site remediation (with Outer Area Priority)
  - Repack TRU waste for certification and shipment
  - Retrieve suspect TRU waste from underground storage
  - Continue Remedial Investigation/Feasibility Study Process for Central Plateau
  - Central Plateau D&D Activities (other than PFP)
  - MLLW Treatment
- Community & Regulatory Requirements
- Replace, renovate, and restructure essential infrastructure to support Hanford cleanup
Shrinking the Footprint of Active Site Cleanup

Work in four areas

- River Corridor (~210 sq. miles)
- Central Plateau, Outer Zone (~65 sq. miles)
- Central Plateau, Inner Zone (~10 sq. miles)
- Hanford Reach National Monument (~300 sq. miles) (including Arid Lands Ecology Reserve)
River Corridor (~210 sq. mi.)

SNF Stabilization/Disposition (RL-0012)

100 K Area

- Operate and maintain K-West Basin and associated structures in a safe and compliant manner
- Support the continuation of sludge treatment design with procurement of Multiple Canister Overpacks (Knock-Out Pot Disposition), Sludge Treatment Storage Containers and a Phase I storage pad
River Corridor (~210 sq. mi.)

Nuclear Facility D&D – River Corridor Closure Project (RL-0041)

- Complete: excavation of a total of 3 of 5 100-H burial grounds (M-016-51-T02); 22 interim remedial actions at the 100 B/C Area (M-16-94); disposition of 8 facilities

- Continue remedial investigation and feasibility studies

- Continue D4 of 324 Building (Chemical Engineering Laboratory) in the 300 Area consistent with the proposed revision to TPA milestone M-89-00

- Continue interim safe storage of the 105-N Reactor

- Support continued field remediation of ancillary facilities and waste sites in the 100 K-Area

- Operate Environmental Restoration Disposal Facility to support field remediation and demolition activities

- Field remediation (FR), D4, and ISS will continue in other Areas along the Columbia River Corridor including maintaining critical functions in engineering, SH&Q, environmental compliance, and project controls
River Corridor (~210 sq. mi.)

Groundwater Protection (RL-0030)

- Operate and maintain existing and expanded groundwater remediation systems
- Continue groundwater monitoring
- Achieve progress on completing the CERCLA Process (Remedial Investigation / Feasibility Study and Proposed Plan) to obtain final Record of Decision for the 100 Area and the 300-FF-5 groundwater operable units
- Continue groundwater integration activities and environmental data management
River Corridor (~210 sq. mi.)

Nuclear Facility D&D FFTF (RL-0042)

- Maintain long-term safe and compliant Surveillance and Maintenance of FFTF and support facilities
- Maintain the Sodium Storage Facility and 260,000 gallons of sodium under an inert atmosphere
Central Plateau Inner Zone (~10 sq. mi.)

**Groundwater Protection (RL-0030)**

- Operate and maintain existing and expanded groundwater & soil remediation systems
- Continue groundwater monitoring
- Maintain strategic and technical integration between groundwater and vadose zone field activities
- Continue construction of new groundwater wells necessary to complete CERCLA process (Remedial Investigation / Feasibility Study and Proposed Plan)
- Achieve progress on completing the CERCLA Process decision documentation to obtain final Records of Decision for groundwater operable units
Central Plateau Inner Zone (~10 sq. mi.)

NM Stabilization/Disposition – PFP (RL-0011)

Plutonium Finishing Plant

- Maintain Plutonium Finishing Plant complex facilities
- Deactivation and decommissioning of the 236-Z (PRF), 242-Z, 2736-Z/ZB Complex facilities
Central Plateau Inner Zone (~10 sq. mi.)

Nuclear Facility D&D – Remainder of Hanford (RL-0040)

- Maintain Surveillance and Maintenance for Central Plateau waste sites and facilities awaiting final disposition
- Replace, renovate, and restructure essential infrastructure to support Hanford cleanup
- Support infrastructure activities such as steam, occupational medicine and service contracts
Central Plateau Inner Zone (~10 sq. mi.)

Solid Waste Stabilization/Disposition (RL-0013)

- Operate Treatment Facilities
  - 200 Effluent Treatment Facility
- Provide Base Operations
  - T plant
  - Waste Receiving and Processing Facility
  - Canister Storage Building and Interim Fuel Storage Area
  - Integrated Disposal Facility
  - Storage of cesium and strontium capsules at the Waste Encapsulation and Storage Facility
  - Low-Level Burial Grounds

Note: Map does not include 300 Area Facilities.
Central Plateau Inner Zone (~10 sq. mi.)

Safeguards and Security (RL-0020)

- Maintain protection of special nuclear materials
- Maintain site-wide security

Community and Regulatory Support (RL-0100)

- Funding for the Natural Resource Trustee Council operations
- Continuation of grants to Emergency Preparedness, Self Reliance Foundation, Ecology, Department of Health, and Oregon Department of Energy
- Continue funding Payment-in-Lieu of Taxes (PILT)
- Support to permits and fees including RCRA Mixed Waste and Air Emissions
- Hanford Advisory Board