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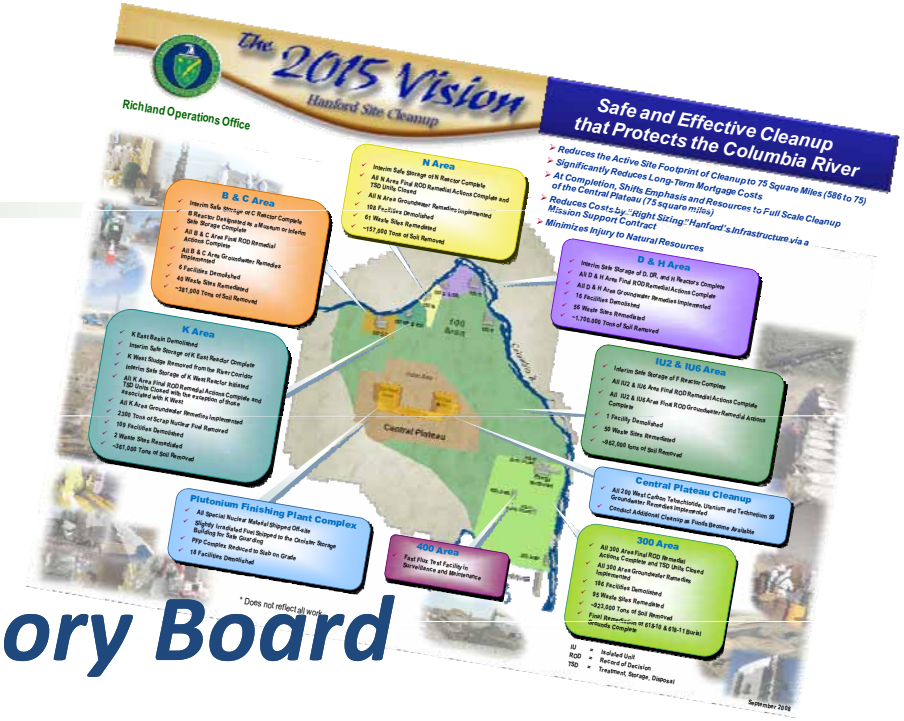


Hanford Advisory Board

DOE-RL Update

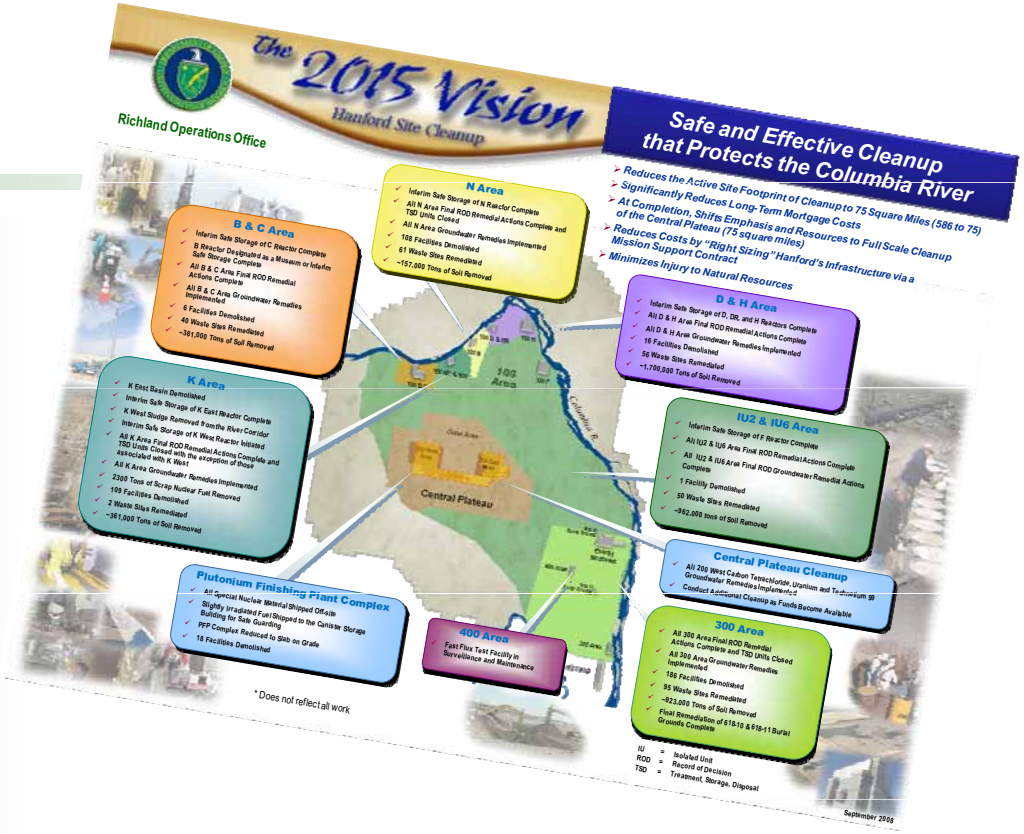
November 3, 2011

J.D. Dowell, Assistant Manager
Central Plateau

2015 Vision

Key Components

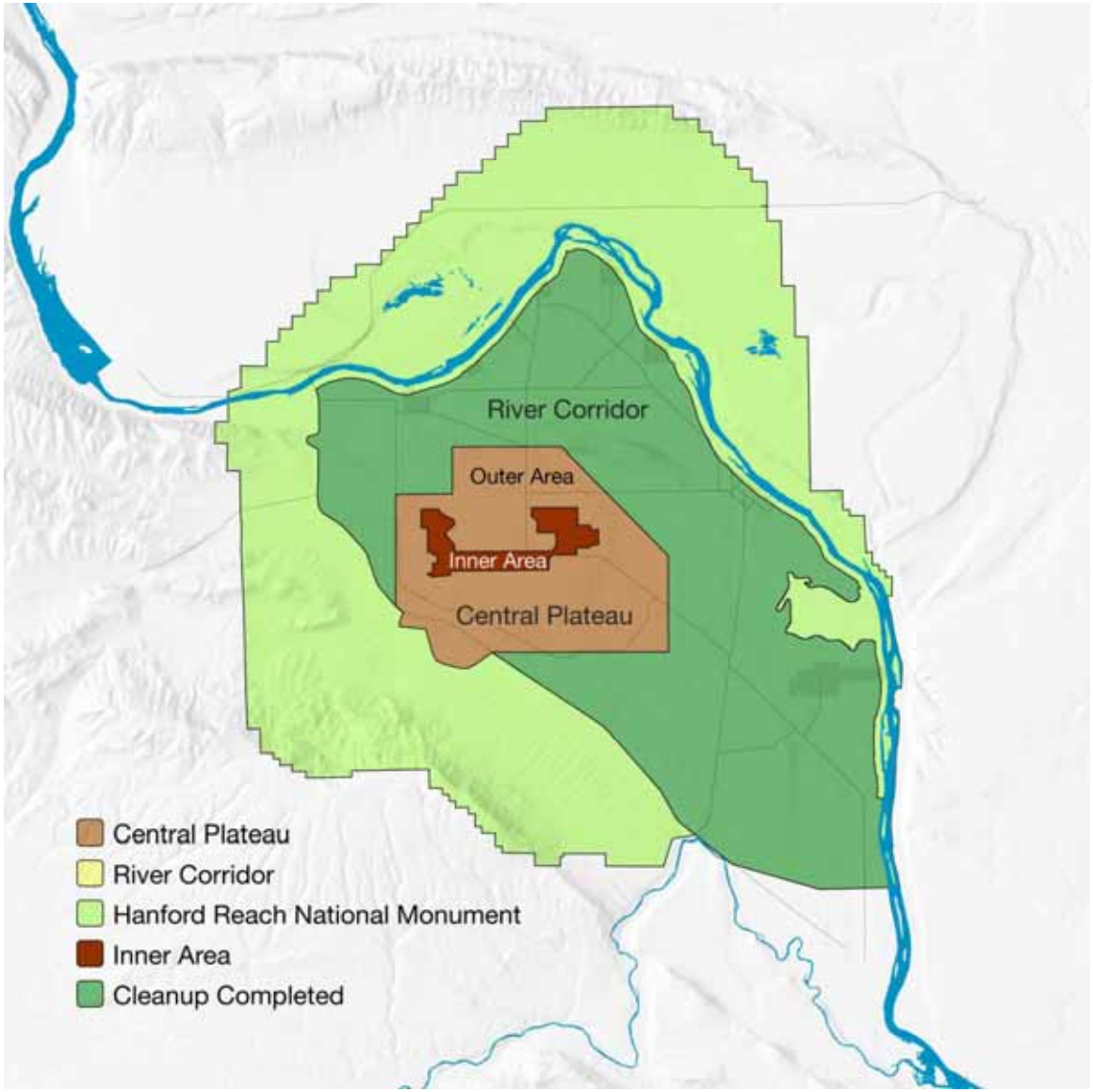
- Complete River Corridor cleanup (220 sq. mi.)
- Demolish high-hazard Plutonium Finishing Plant
- Implement groundwater cleanup
  - Stop key contaminants from getting to the Columbia River
  - Contain and remediate key groundwater contaminants on Central Plateau



Key Benefits

1. Reduces active cleanup footprint to less than75 square miles by 2015
2. Reduces costs by "right-sizing" Hanford infrastructure
3. At completion, shifts emphasis and resources to full-scale cleanup of Central Plateau

Stages of Hanford Cleanup

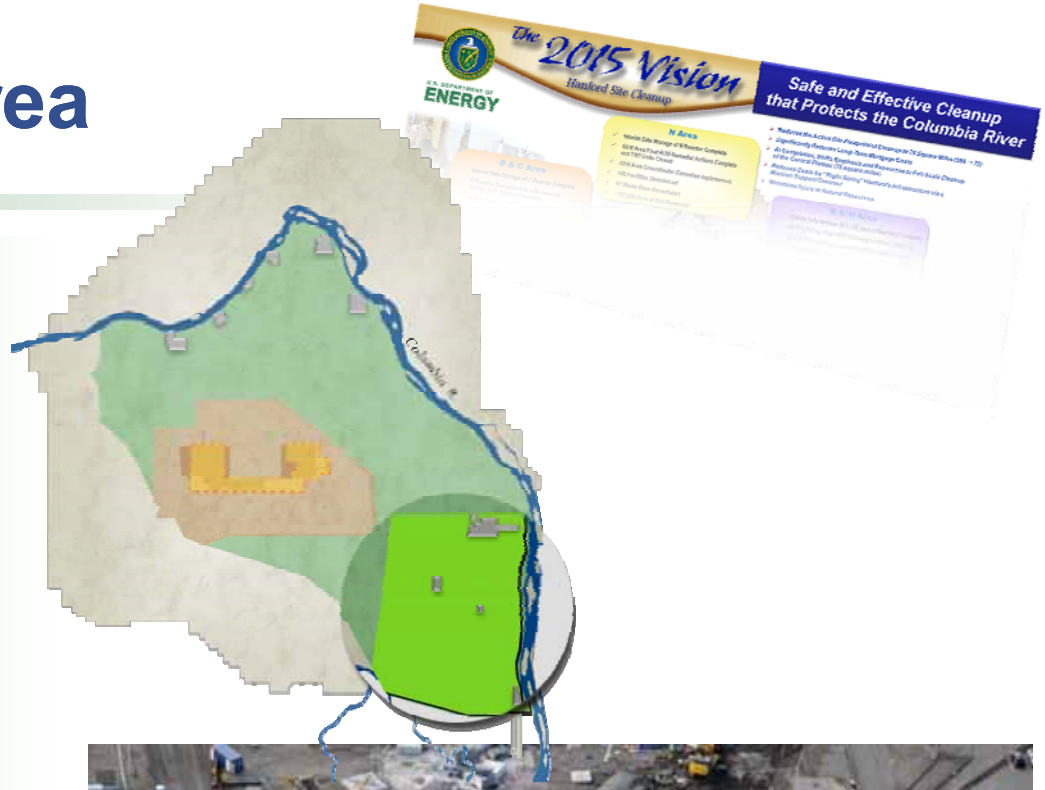


Hanford Reach National Monument

- Completed North Slope debris cleanup
- Prepared closure documentation
- Completed 290 sq. mi. footprint reduction

River Corridor 300 Area

- The 309 Test Reactor Complex above grade demolition is at 80% complete
- 320 Building above grade demo is complete
- Preparing for demolition and removal of two test reactors (308 & 309) and removing a below grade hazardous waste tank vault



River Corridor 618-10

618-10

- Trench remediation continues at the 618-10 Burial Ground.
- More than 70 drums, many containing radioactively contaminated shavings and oil, and miscellaneous debris
- Others are concrete-lined drums
- Expecting to find at least 2,000 drums during trench excavation activities
- Hundreds of bottles containing liquids also have been found

FY11 Progress – River Corridor F Area

- 100-F Area waste sites are scheduled to be tested and verified as clean-up compliant this winter
- Back-fill and re-vegetation activities will start as early as this month

River Corridor D & H Area

SOIL & GROUNDWATER REMEDIATION

- Remediated 78 waste sites (49 ARRA and 29 Base)
- Disposed of more than 344,877 tons of soil in FY11

100-DX Groundwater Treatment Facility

- Processed about 1.975 million gallons of water to date

100-HX Groundwater Treatment Facility

- Became operational in October, three months ahead of schedule


Bats at 183-D Headhouse

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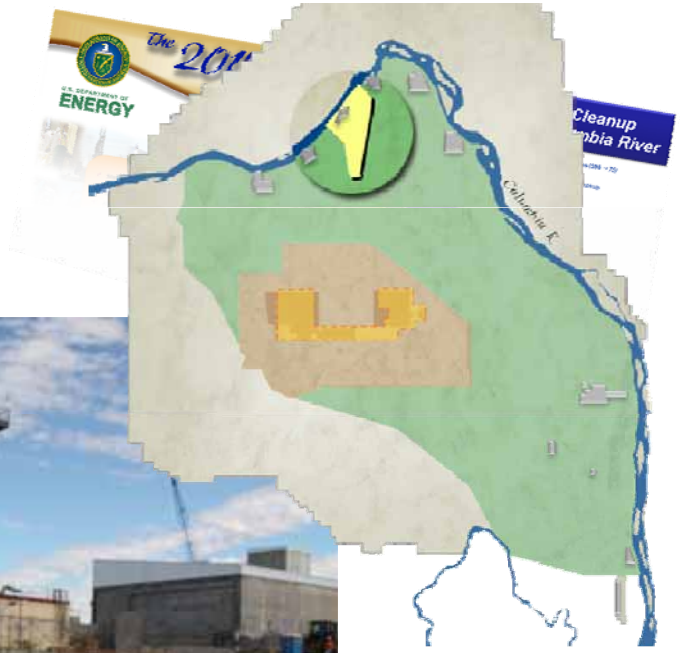
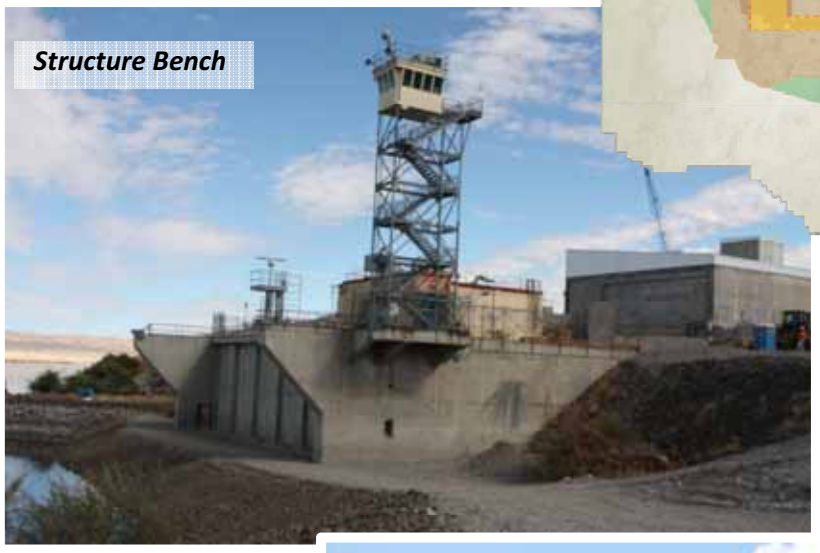
River Corridor N Area



River Structures

- River water intake structures bench in place
- Sediment removed and backfilled with sand, demo to begin in December


Structure Bench

Cocooning

- Cocooning or interim safe storage of N Reactor is 94% complete


Cocooning the Reactor

Challenges Ahead

- Demolishing river intake structures
- Demolishing , removing hazards from N Reactor's Fuel Storage Basin and Fission Product Trap

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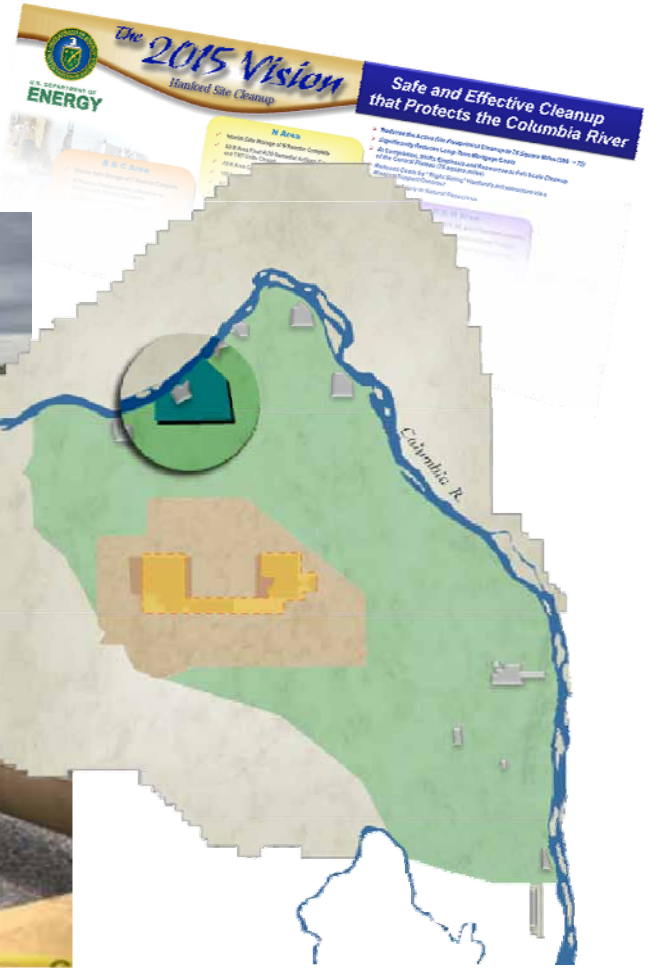
River Corridor K Area

- Demolished 56 buildings (26 ARRA and 30 Base)
- Demolished pump house structures
- Completed cleanup of six waste silos containing highly radioactive debris at the 118-K-1 Burial Ground
- Demolished in FY 12:
  - Main pump house
  - K East and K West Clearwells
  - K East Filter Basins
  - K West River Pump House
  - K East River Pump House



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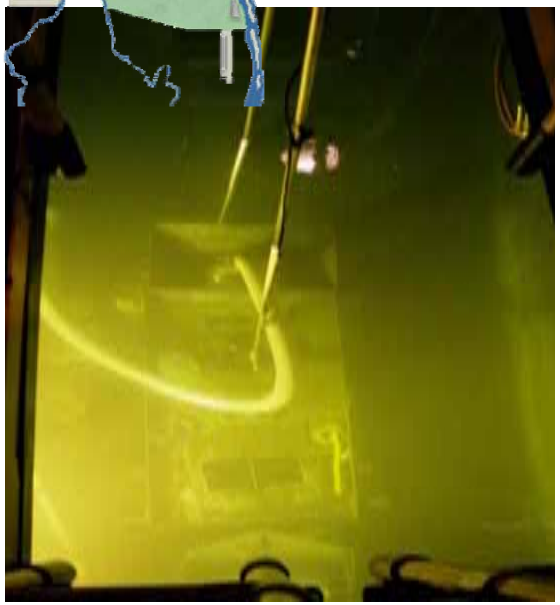
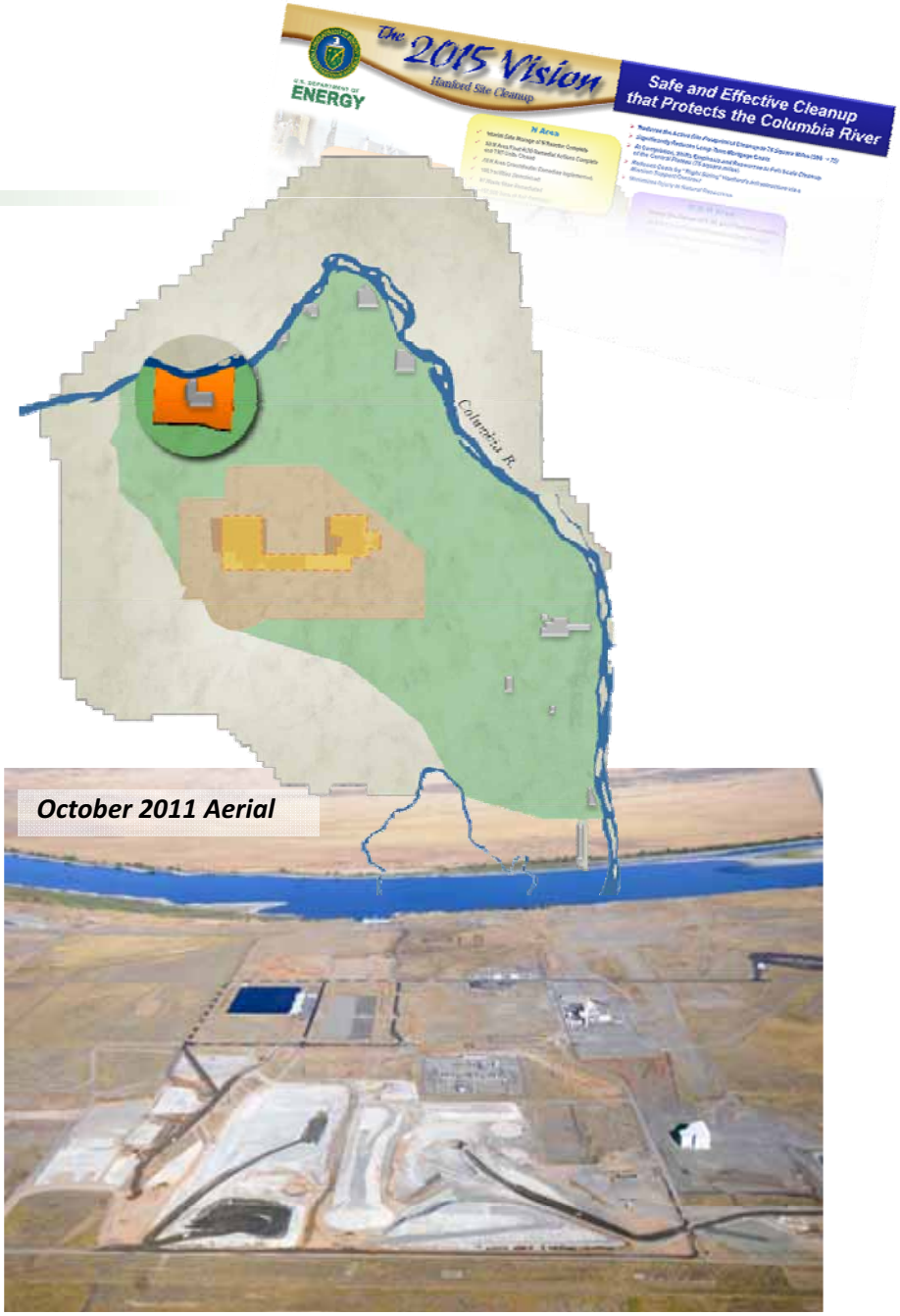
River Corridor K Area

Sludge Treatment Project

- Completed pretreatment of material from “knock-out pot” configurations



River Corridor C Area



100-C-7

- Continuing massive excavation of chromium contaminated soil at B/C Area

FY11 Progress – Central Plateau Outer Area

Outer Zone Soil Remediation

- Shipped stockpiled material from B/C Control Area
- Remediated more than 380 acres of contaminated soil from 44 (41 funded through ARRA) Outer Area waste sites in B/C Control Area

Central Plateau
Inner Area: Plutonium Finishing Plant

- Removed 158 glove boxes to date, 130 removed with Recovery Act funding
- Achieved “cold and dark” status for the vault complex
- Removed 1,800+ cumulative feet of highly contaminated process vacuum system piping and process transfer line for disposal as transuranic waste to date
- Prepared 31 ancillary structures for demolition or relocation to date
  - Demolished 26 structures to date

Central Plateau
Inner Area: U Canyon

- Completed grouting U Canyon using more than 25,000 cubic yards of grout

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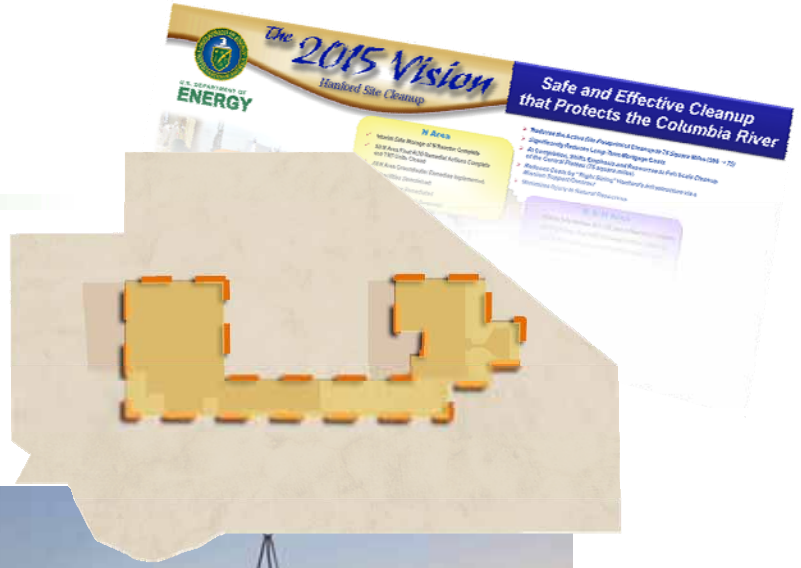
Central Plateau Inner Area

Waste & Fuels Management

Progress to date:

- Retrieved 2,607 m^3 suspect TRU waste
- Shipped 2,121 m^3 MLLW/LLW for treatment and disposal
- Repackaged 1,226 m^3 TRU waste
- Dispositioned 2,525 m^3 contact-handled and suspect TRU waste
- Completed 217 TRUPACT-II shipments since shipments resumed in March 2010
- Completed all ARRA Key Performance Parameters in 2011:
  - Shipped 1,800 cubic meters mixed low-level and low-level waste
  - Retrieved suspect TRU waste
  - Retrieved 50 cubic meters of remote-handled TRU waste
  - Repackaged 850 cubic meters of TRU waste
  - Dispositioned 2,000 m^3contact-handled TRU and suspect TRU waste



Trench 7 Drum Retrieval

Drum Removal

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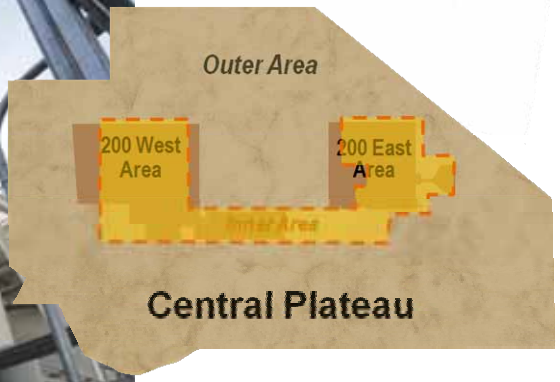
Central Plateau Groundwater

200 West Groundwater Treatment Facility

- Completed Recovery Act construction of 200 West Treatment Facility and 29 construction acceptance tests
- Completed construction of the S/SX Transfer Building


200 West Groundwater Treatment Facility



Central Plateau Inner Area: ERDF

Environmental Restoration Disposal Facility (ERDF)

- Disposed of a record 2.25 million tons of waste material in FY2011
- Previous record was 1.6 million tons set last year

Treating chromium-contaminated waste @ ERDF

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Central Plateau
Inner Area: Deep Vadose Zone

- DOE, CHPRC and Pacific Northwest National Laboratory continue integrated effort to test technologies for treating contaminants in the deep vadose zone
- B-Farm Perch Water/Pore Water Extraction Project now operational
- Continue to leverage expertise of other sites, National Laboratories and Universities through Deep Vadose Zone Applied Field Research Initiative

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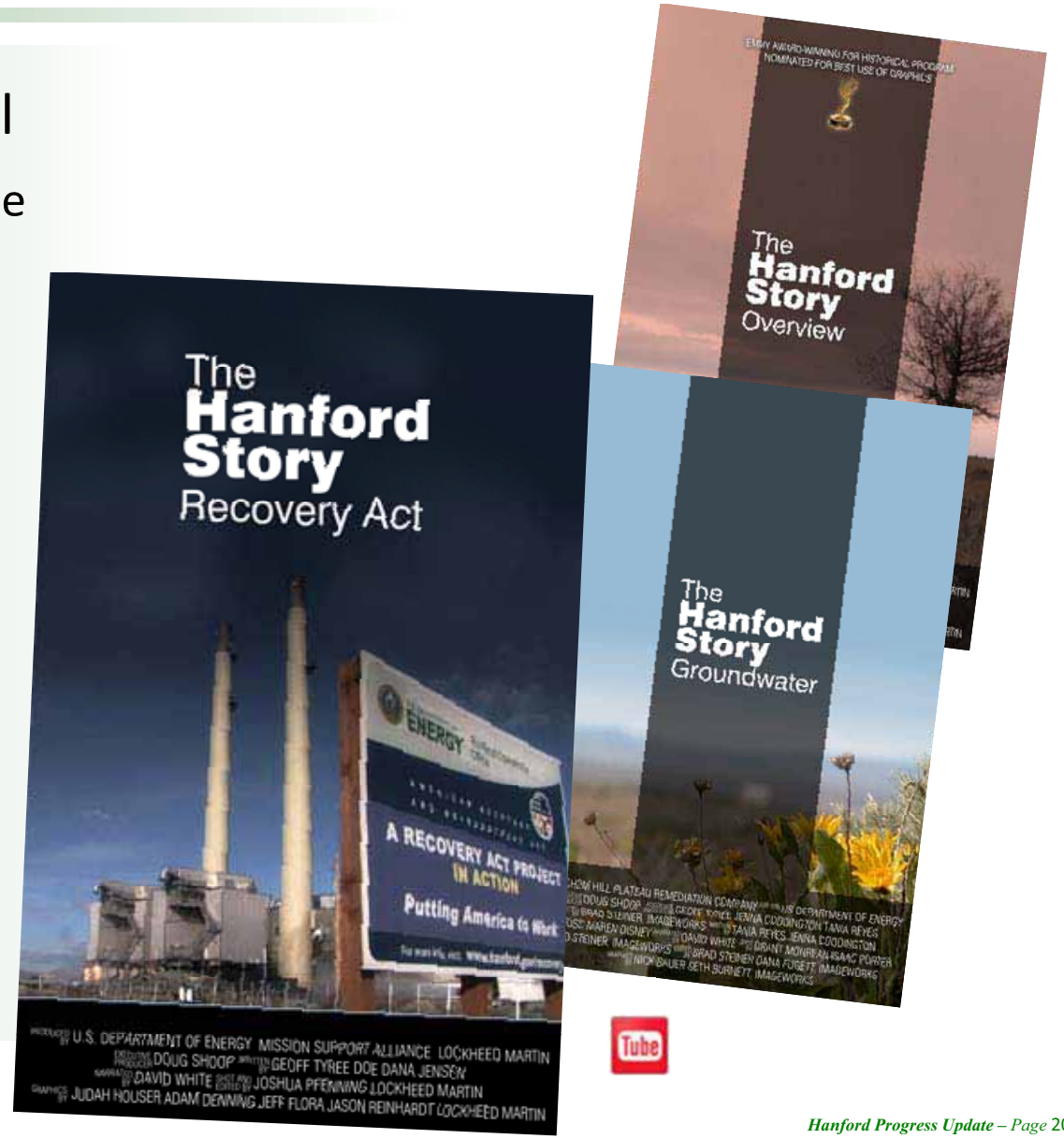
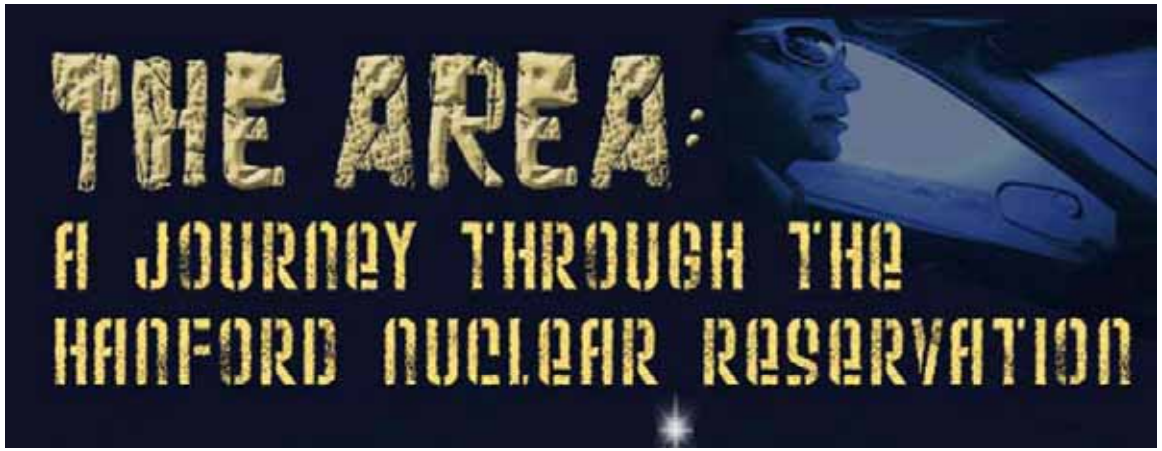
Getting the Word Out - *The Hanford Story*

- Overview chapter - April
  - ~10,600 views on YouTube
  - Nearly 3 million cable subscribers have viewing access
- Groundwater chapter – August
- ARRA chapter- October
- Chapters in progress
  - Future Uses
  - Tank Farms



Getting the Word Out - *The Area*



- Released October 17
  - Almost 2,000 YouTube views within the first week
  - Features interview with HAB Chair Susan Leckband
  - www.youtube.com/hanfordsite

Outreach - *Hanford Speakers Bureau*

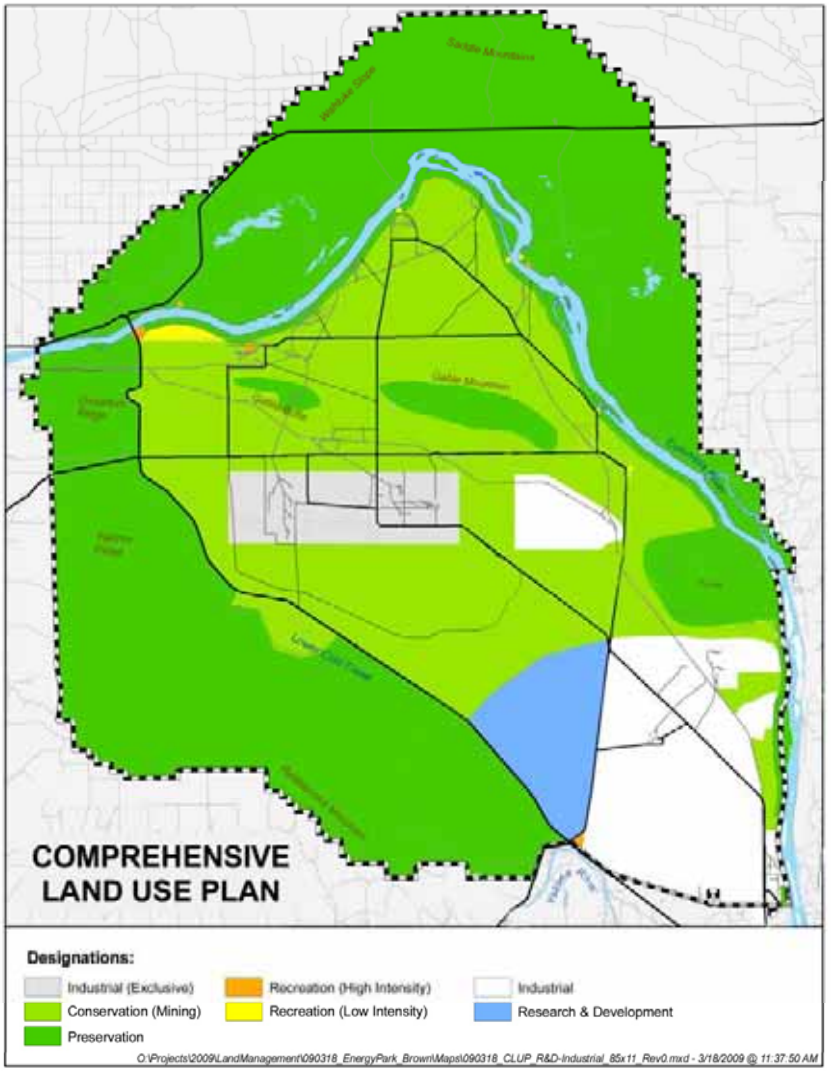
Deputy Federal Project, Bryan Foley at Walla Walla Rotary Club

- 2,248 People in FY11
- 53 Presentations in FY11
- To Date
  - 160 People in FY12
  - 4 Presentations in FY12
  - Now using Skype
    - Reach broader audience
    - Free, new technology

Post-Cleanup Hanford

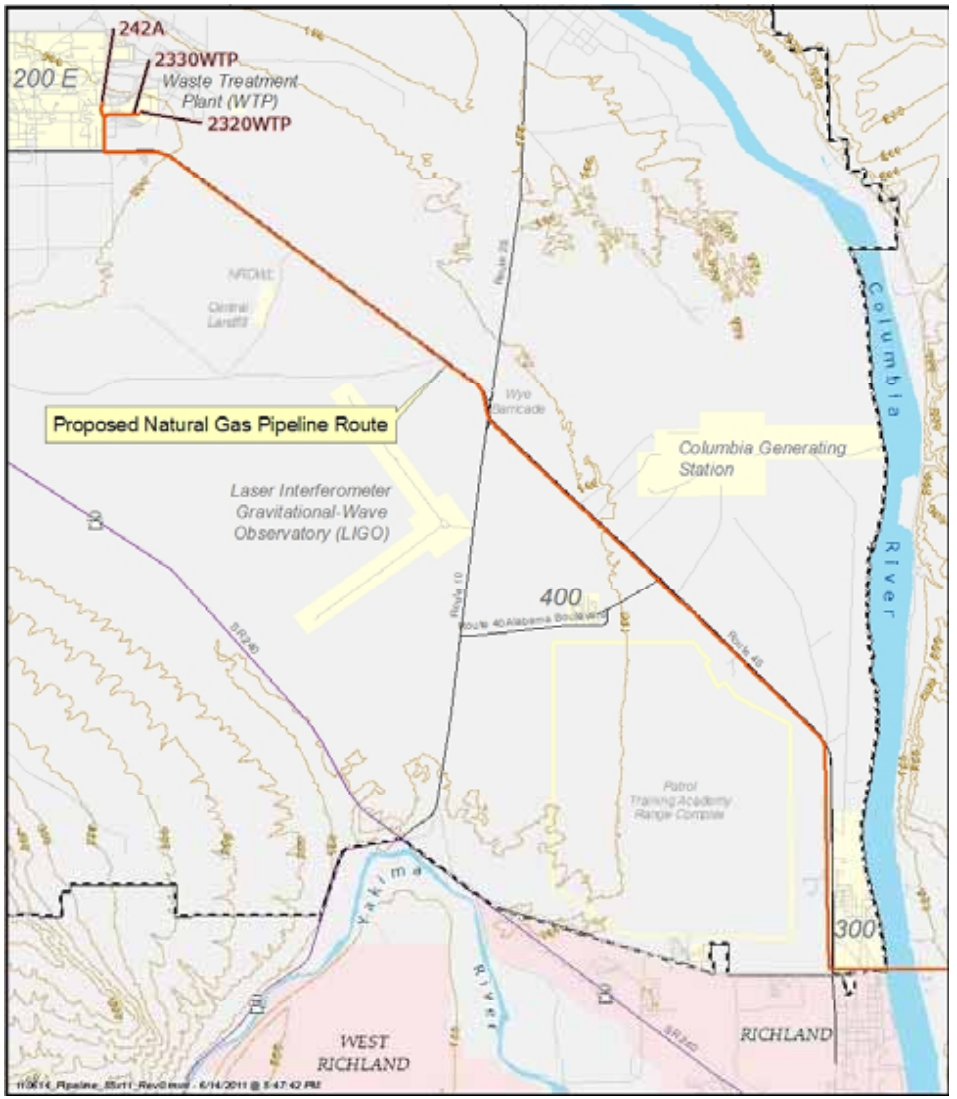
Land Transfer considerations:

- Tri-City Industrial Development Council (TRIDEC) requested transfer of land for economic reuse
- Continuing ongoing discussions with Tribal Nations
- Determining appropriate National Environmental Policy Act path forward for land transfer



Natural Gas Pipeline Proposal

- RL proposing natural gas pipeline
- Pipeline length would be about 30 miles
- Recently awarded small business contract to assist with preparation of National Environmental Policy Act Environmental Impact Statement (EIS)
- Currently negotiating task order with Cascade Natural Gas for support of EIS and pipeline construction
- EIS process anticipated to start following completion of negotiations



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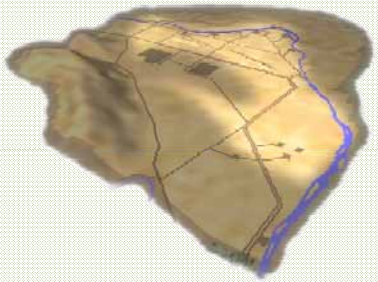
Waste Treatment Plant Interface

- RL working closely with ORP on a draft interface management plan for the Waste Treatment Plant (WTP)
- Plan will determine roles and responsibilities between RL and ORP
- Joint federal/contractor teams working to define infrastructure requirements for WTP operations
- Infrastructure projects will be developed based upon needs identified (e.g. electrical substation, water tower, etc.)

Key Cleanup Challenges for 2012 and Beyond

- Sustaining Funding to Maintain Cleanup Momentum
- Workforce Restructuring
- River Corridor
  - K West Basin Sludge
  - 324 Building
  - 618-10/11 Burial Grounds
  - Hexavalent Chromium at D, H and K Areas
  - Strontium-90 Plume at 100-N Area
  - Uranium Plume at 300 Area
  - Final Disposition of Surplus Production Reactors



- Central Plateau
  - Sustaining Momentum for Plutonium Finishing Plant
  - Number, Variety, Complexity of Cleanup Actions
  - Deep Vadose Zone Contamination
  - Tank Farms
  - Tank Area Closure