

# DONE IN A DECADE:

DOE-Richland's Plan for  
Completing Key Pieces of the  
Hanford Cleanup by 2010

transition the

# CENTRAL PLATEAU

DRAFT

~~6/28/00~~  
8/17/00

*Outcome Two:*

# Transition the Central Plateau to Long-Term Waste Management and Stewardship

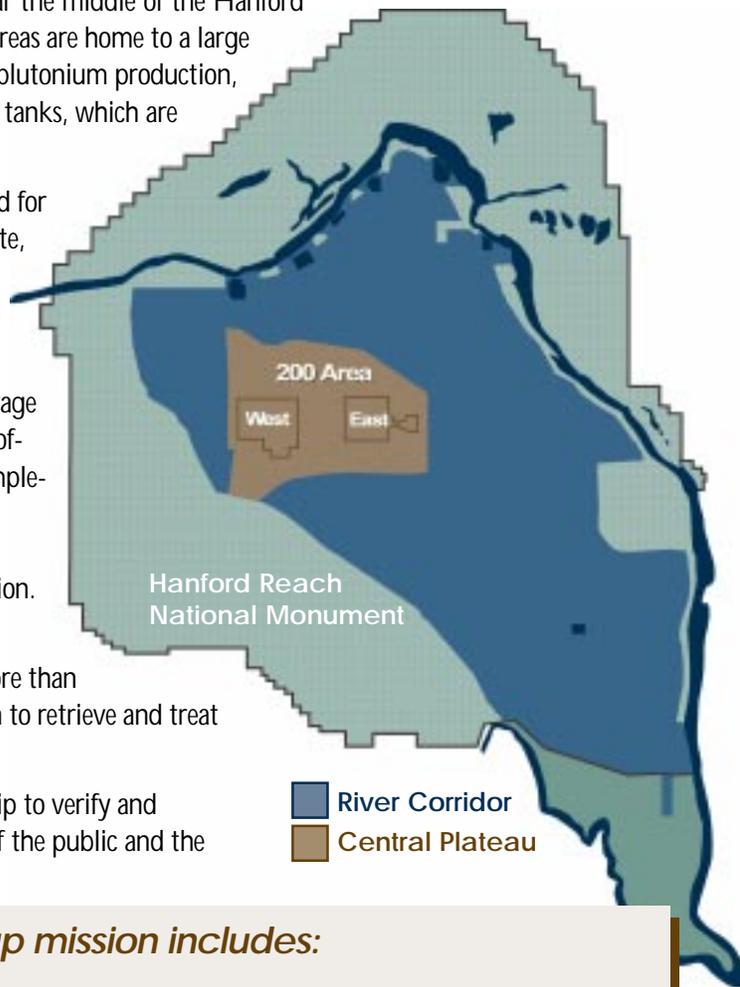
The "Central Plateau" is approximately 50 square miles located near the middle of the Hanford Site, composed mostly of the 200 East and 200 West Areas. The 200 Areas are home to a large number of facilities formerly used for spent nuclear fuel processing and plutonium production, and to Hanford's 177 underground high-level radioactive waste storage tanks, which are managed by the congressionally created Office of River Protection

Most of these facilities are now inactive, although some are being used for cleanup — stabilizing nuclear materials, storing waste, disposing of waste, or treating waste prior to disposal. DOE also expects to construct several new facilities required to complete the Hanford Site cleanup mission (i.e., for high-level waste treatment and immobilization).

DOE is transitioning the Central Plateau from primarily inactive storage to active waste treatment, storage, and disposal operations. New, state-of-the-art, environmentally compliant facilities will be used to support completion of the Hanford Site cleanup. Some of these facilities, including the Canister Storage Building, Waste Receiving and Processing Facility, and Environmental Restoration Disposal Facility, have already begun operation.

Although a great deal of progress will be made in the next 10 years, cleanup activities in the Central Plateau are expected to continue for more than 40 years — due mostly to the time needed for Office of River Protection to retrieve and treat tank waste and then close the tank farms.

During this period, areas will be transitioned to long-term stewardship to verify and monitor the effectiveness of our cleanup actions in assuring protection of the public and the environment over the long term.



■ River Corridor  
■ Central Plateau

**The DOE Richland Operations Office cleanup mission includes:**

- ◆ Stabilizing and safely storing Hanford's remaining plutonium prior to its shipment offsite
- ◆ Processing and disposing of thousands of cubic meters of radioactive waste
- ◆ Cleaning up hundreds of inactive waste disposal sites
- ◆ Dealing with over 100 square miles of radioactively and chemically contaminated groundwater
- ◆ Dispositioning of over 300 contaminated facilities, including five massive "canyon" facilities used for chemical processing of nuclear fuel
- ◆ Operating waste facilities and providing infrastructure in support of the cleanup mission



**DOE's Office of River Protection**

- ◆ Was specially created by Congress to highlight the importance of addressing the 177 underground storage tanks
- ◆ Will retrieve high-level radioactive waste from the underground waste storage tanks, process the waste into a stable form, and close the tank farms.



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## The Strategy:

6/28/00

8/17/00 Address Urgent  
Cleanup Challenges in the  
Central Plateau

Modernize and Operate  
Waste Management Facilities  
to Complete Cleanup of the  
Hanford Site

Transition the Hanford Site to  
Long-Term Stewardship

## Our Plan

### *To address urgent cleanup challenges, we will:*

- ◆ Stabilize plutonium
  - ◆ Complete all plutonium processing by 2005
  - ◆ Maintain plutonium in safe storage prior to offsite shipment beginning about 2010
- ◆ Stabilize and remediate waste disposal sites and potential sources of groundwater contamination
  - ◆ Identify and begin activities for high-priority legacy waste disposal sites by 2002
  - ◆ Make decisions for remediation of groundwater plumes by 2010
  - ◆ Contain or remediate all imminent sources of groundwater contamination
- ◆ Disposition facilities to prevent releases to the environment
  - ◆ Gain approval to close large canyons in place as disposal facilities for certain types of waste by 2002
  - ◆ Complete demolition of 233-S Plutonium Concentration Facility by 2005



Plutonium Finishing  
Plant Operations

### *To modernize and operate waste management facilities, we will:*

- ◆ Modernize facilities in compliance with environmental regulations
- ◆ Transuranic waste (TRU)
  - ◆ Complete the first six shipments of TRU offsite in 2000
  - ◆ Begin removal of buried TRU for treatment and offsite shipment by 2002
  - ◆ Begin treatment of remote-handled TRU by 2013
- ◆ Safely store highly radioactive materials in modern facilities
  - ◆ Begin storage of spent nuclear fuel from the K Basins in the Canister Storage Building during 2000 – complete transfer by 2005
  - ◆ Store vitrified waste logs from storage tanks
  - ◆ Provide for long-term storage of cesium/strontium capsules prior to disposal
- ◆ Support Office of River Protection's tank waste remediation program
  - ◆ Continue activities to support waste storage and initiate activities to support waste vitrification by 2007



Canister Storage Building

### *To complete cleanup and transition Hanford to long-term stewardship, we will:*

- ◆ Make cleanup decisions and implement solutions to close disposal sites and facilities along with the tank farms
- ◆ Develop monitoring and stewardship plans to protect public health and the environment