

Hanford: Beyond Cleanup

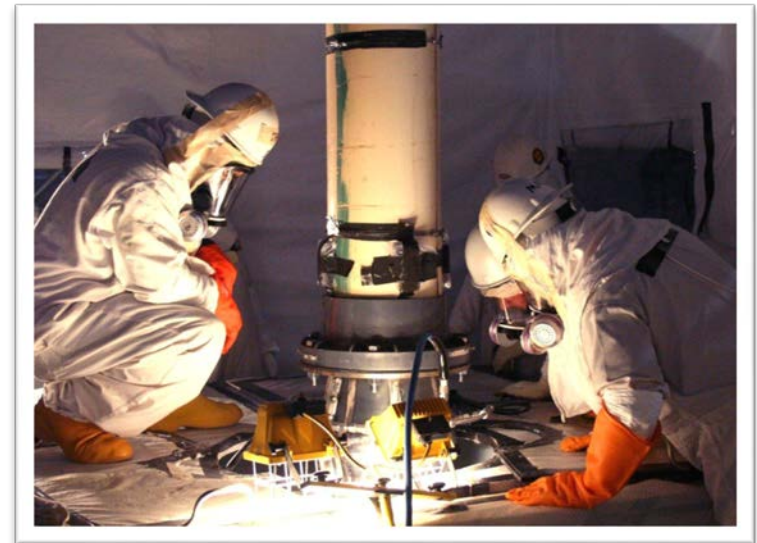
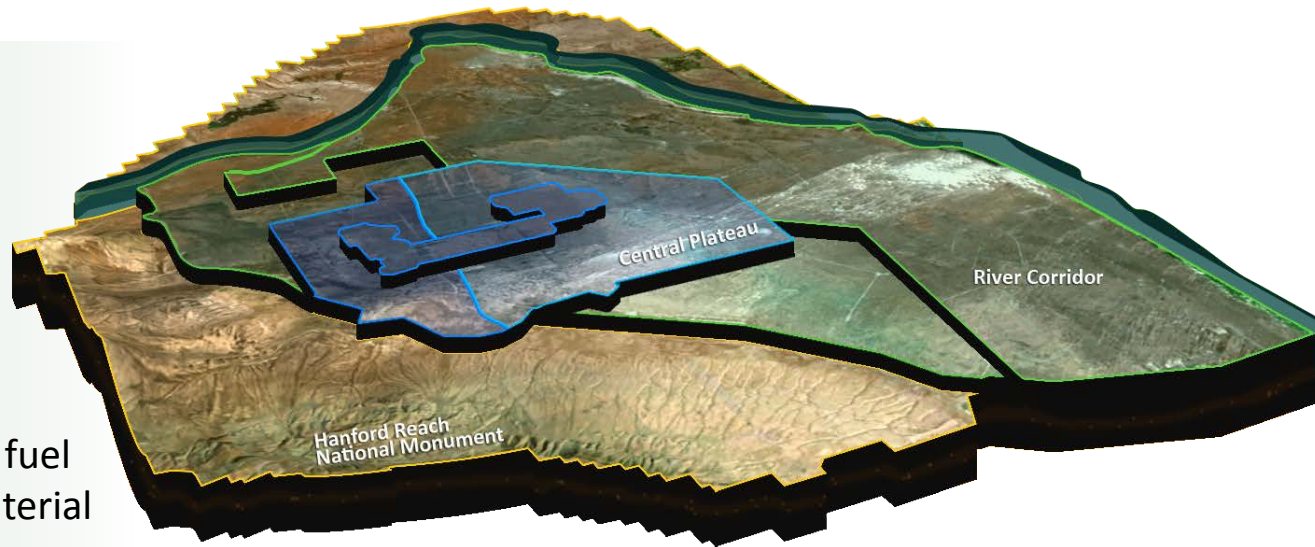
*Stacy Charboneau, Manager
Richland Operations Office*

March 16, 2015

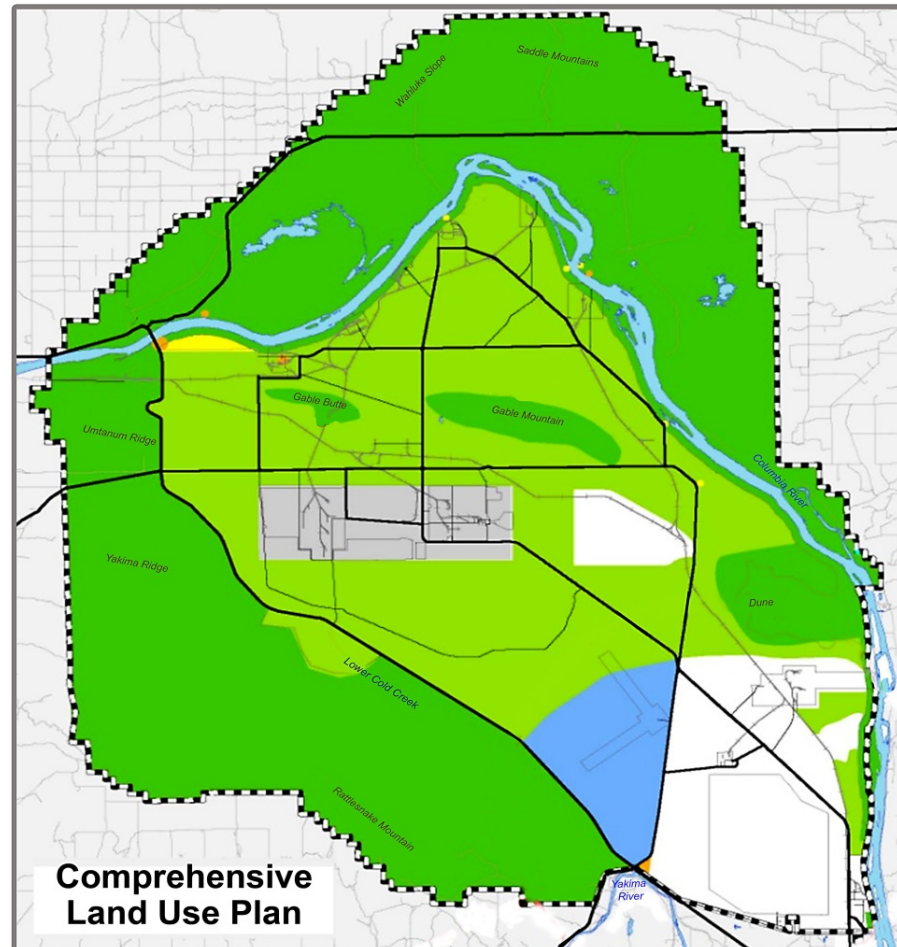


Hanford Cleanup Overview








- Three Components
 - River Corridor
 - Central Plateau
 - Tank Waste
- Cleanup Work
 - Stabilize spent nuclear fuel and special nuclear material
 - Demolish facilities
 - Remove buried waste and contaminated soil
 - Treat contaminated groundwater
 - Retrieve underground tank waste
 - Treat waste for safe disposal



Comprehensive Land Use Plan



Other Designations:

- | | | | |
|---|-----------------------------|--|----------------------------|
|  | Industrial (Exclusive) |  | Recreation (Low Intensity) |
|  | Conservation (Mining) |  | Industrial |
|  | Preservation |  | Research & Development |
|  | Recreation (High Intensity) | | |

River Corridor Progress – F Reactor Area



F Reactor, the third of Hanford's nine plutonium production reactors, was constructed to support the nation's defense program during World War II and the Cold War. The reactor operated from 1945 to 1965. Crews have demolished 112 facilities and cleaned up 88 waste sites, removing a total of 1.5 million tons of contaminated material away from the Columbia River for permanent disposal during cleanup operations.



2012

River Corridor Progress – N Reactor Area



N Reactor operated from 1963 to 1987, making it Hanford's longest running reactor and the last to be shut down. N Reactor was decommissioned when the Cold War ended in 1989, marking the beginning of the cleanup era at Hanford. Workers have placed the reactor in interim safe storage. Additionally, crews demolished 114 facilities and remediated 107 waste sites, removing approximately 1.4 million tons of contaminated material away from the Columbia River.



2014

River Corridor Progress – 300 Area



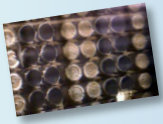
For nearly 60 years, the 300 Area was the center of Hanford's radiological research and fuel fabrication. Located just 1.5 miles north of the City of Richland, the former industrial complex is along the west bank of the Columbia River. Hanford workers have demolished 224 buildings and cleaned up 303 waste sites removing the contaminated material for permanent disposal.

2014

Significant Progress Achieved in Cleanup



Stabilized, packaged 20 tons of **plutonium material** left in the Plutonium Finishing Plant after the Cold War. Completed offsite plutonium shipments in 2009. Demolition of Plutonium Finishing Plant 68 percent complete (55 of 81 facilities demolished).



Removed all **spent nuclear fuel** (~2,300 tons) from facilities along the Columbia River and placed in dry storage in central Hanford



Treated 12 billion gallons of **contaminated groundwater**, removing approx. 157 tons of contaminants



Remediated 91 percent (919 of 1,012) of **waste sites** in the River Corridor



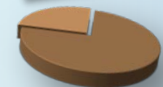
Demolished 82% (427 of 522) of **contaminated/excess facilities** in the River Corridor



Disposed of 17 million tons of **contaminated waste** in the Environmental Restoration Disposal Facility



Placed 6 of 9 of **nuclear reactors** in Interim Safe Storage/ 1 preserved/ 2 remain



Reduced active **cleanup footprint** (479 of 586 square miles)

Hanford Site Post 2015 Cleanup Vision for Access and Use

Controlled Access to Some of the Cleaned-up River Shoreline

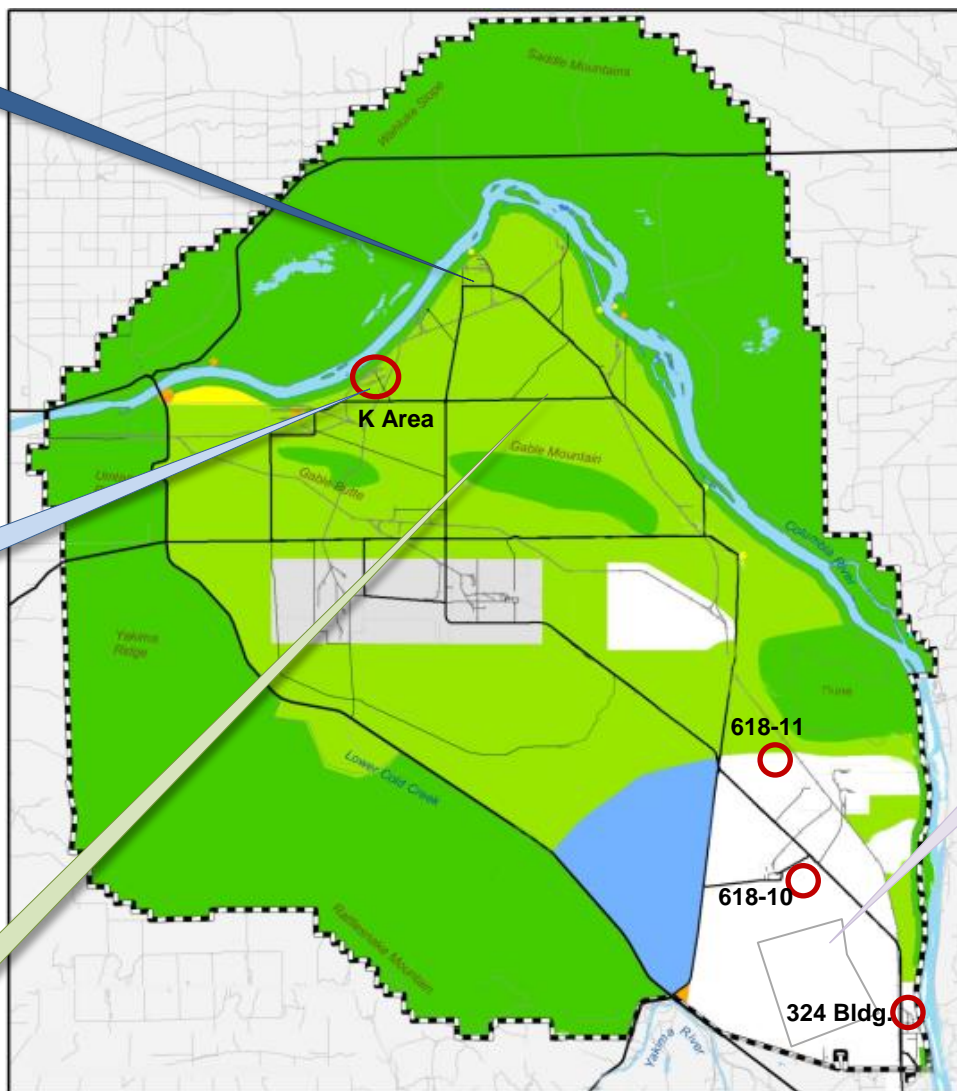
- Phase in controlled access so the public can enjoy the area for the first time since the 1940s
- Several cleanup areas will remain

Heritage Tourism

- Partner with National Park Service to implement the Manhattan Project National Historical Park legislation
- Provide broadest possible public access to B Reactor and other historic sites
- Continue to reduce restrictions on site access (e.g. age limits) to encourage more visitors to historic sites

Tribal Cultural Use

Increase Tribal use of the River Corridor for religious and cultural activities of their choosing



Natural Resource Preservation

Conserve Hanford's unique ecological and biological resources

Use Industrial Lands to Transition the Economy and Create Jobs

- About 60 square miles available
- 1,641 acres will be conveyed to the Community Reuse Organization (TRIDEC) by September 30, 2015
- Work with the Community Reuse Organization to evaluate opportunities to lease land for suitable projects

Controlled Site Access

- Evaluate what might be possible for controlled public access and expanded Tribal use of cleaned up areas of the River Corridor
 - Many constraints
- Goal is to recognize the unique character of the land and provide ongoing protections, while phasing in controlled access over time
 - Safety and accountability requirements will remain



Tribal Use and Access

- Recognize mutual concern for a cooperative relationship regarding tribal use of and access to traditional areas and resources through a Memorandum of Understanding (MOU)
- Develop Protocols such as use and access to traditional areas, tribal sampling and data analysis and protection of tribal significant properties
- The area covers the conservation, preservation and recreation areas of the River Corridor managed by DOE as designated in the Comprehensive Land Use Plan
- The MOU would not alter, repeal, interpret or modify tribal sovereignty or any treaty rights, or preempt, modify or limit the exercise of such right



Public Access

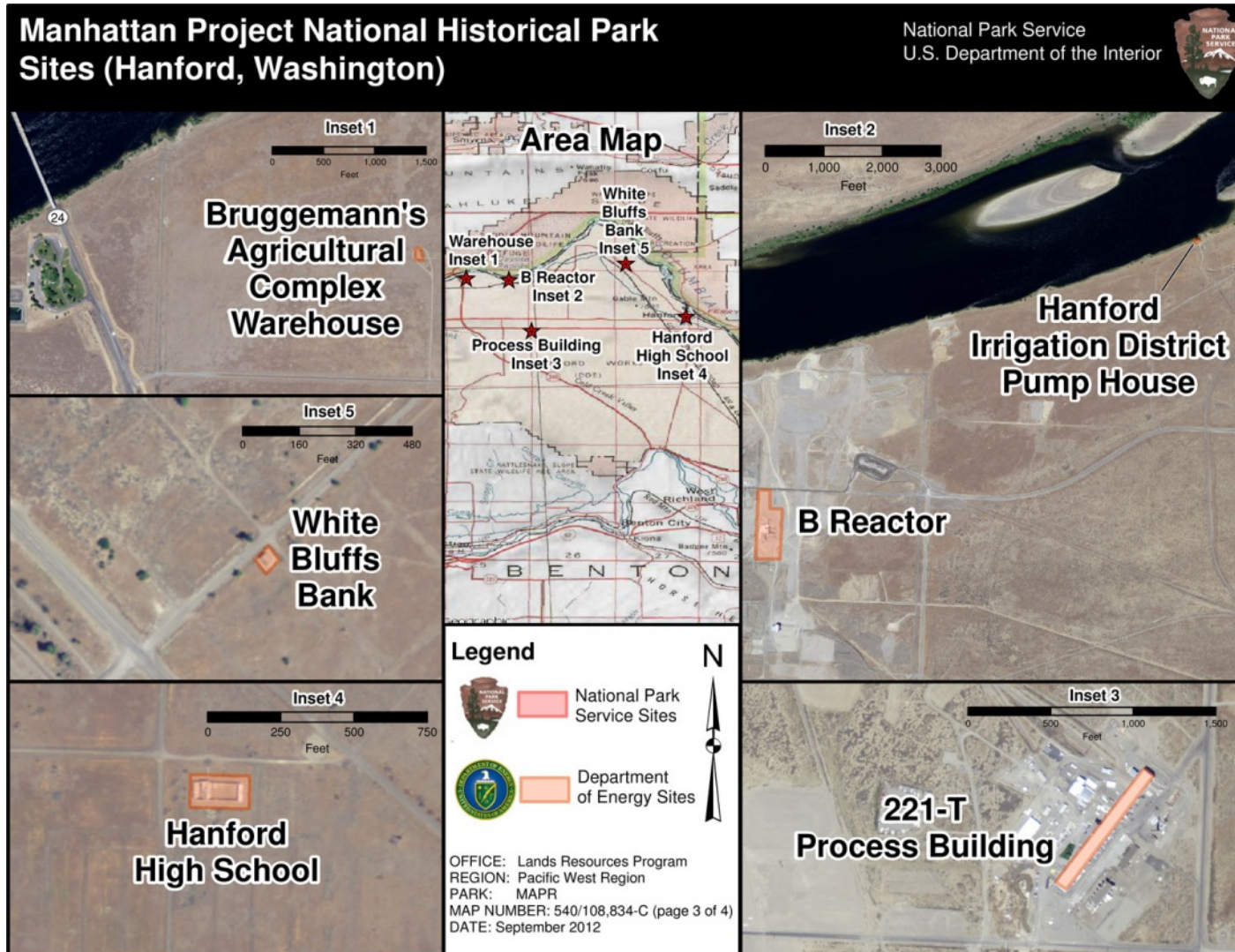
- Current Tour Program
 - Public Tours – 1,700 visitors/year
 - B Reactor National Historic Landmark Tours -- 10,000 visitors/year
- New Historic Tour Program 2015
 - Tours of the Historic pre-Manhattan Project town sites of Hanford and White Bluffs
 - Include a walking component on existing roadways
 - Provide information on site history, cultural resources and site's unique ecological resources



Manhattan Project National Historical Park at the Hanford Site



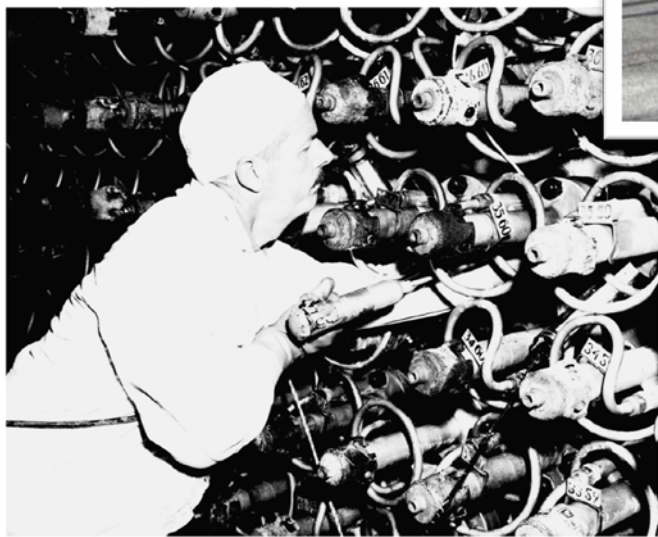
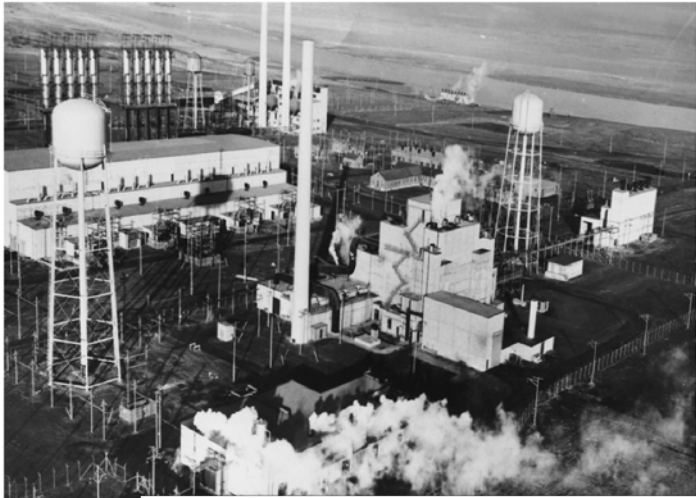
Named Hanford Facilities



Requirements

- Within 1 year of enactment
 - Manhattan Project National Historical Park must be established by Department of Interior (DOI)
 - Secretary of Interior, in consultation with Secretary of Energy, decides which of the named facilities will be in the Park - B Reactor is automatically included in Park
 - DOI and Energy must enter into an agreement covering their respective roles in the park, including enhanced public access, management, interpretation and historic preservation
- Within 3 years of funds being made available, the DOI NPS must complete a general management plan for the Historical park
 - With concurrence of the Secretary of Energy, and in consultation and collaboration with the field offices
 - This will be a NEPA document (preparation led by NPS) covering all three sites
 - Currently discussing Interpretive approach, accessibility, visitor services, anticipated partners, etc.

B Reactor National Historic Landmark



Bruggemann Warehouse



Hanford Irrigation District Pump House (1908)



White Bluffs Bank



Hanford High School



What Has Made the Difference for Us

- Comprehensive Land Use Plan is a road map
- DOE Senior Management position created to focus on future use issues and work with the community
- There is alignment in the community on the community's vision and priorities
- Strong political support for historic preservation and historic tourism as economic development