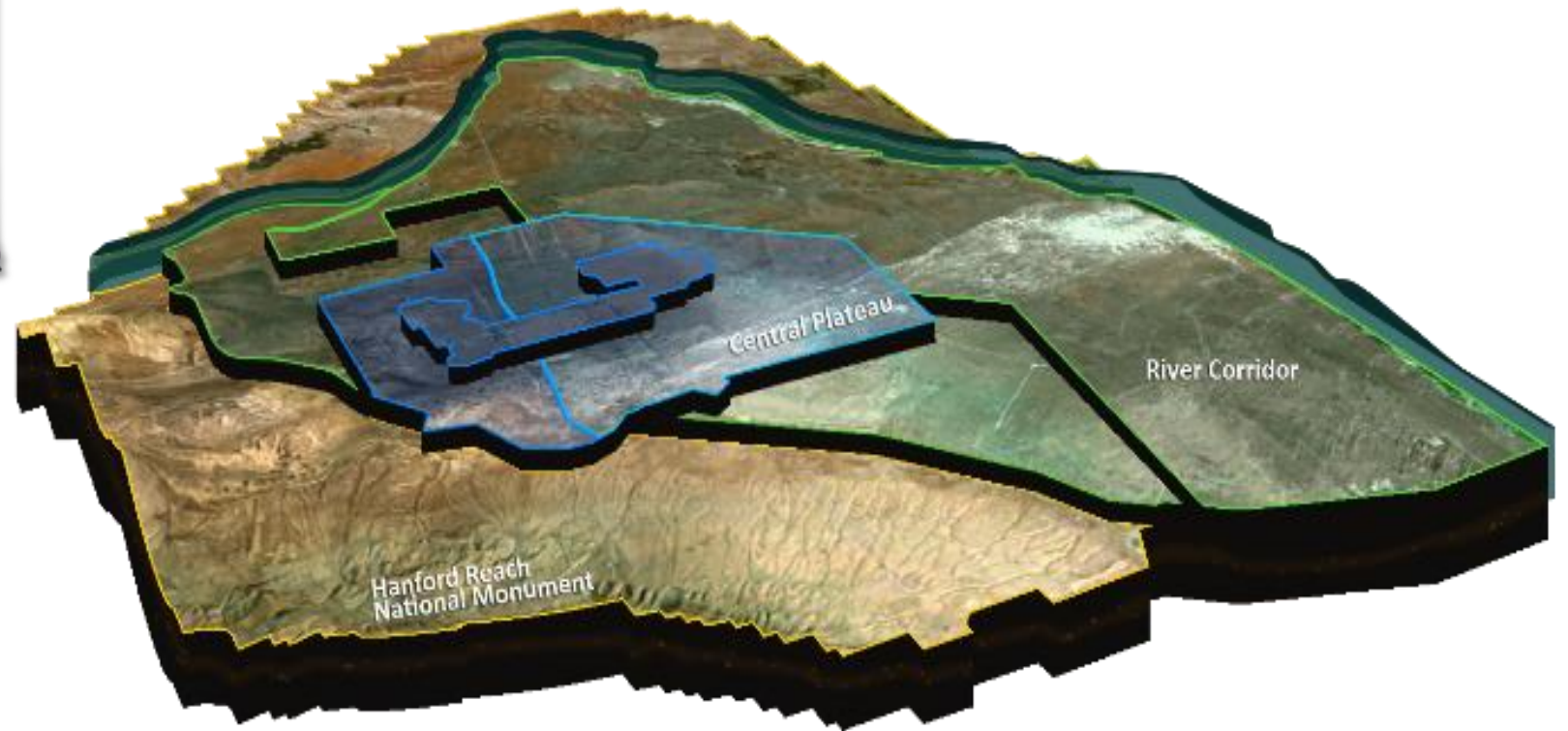




Three Cleanup Components

- River Corridor
- Central Plateau
- Tank Waste



Historical Overview

1940s – Building Hanford



1944-1989 – Producing Plutonium



Present – Shifting Focus to Central Plateau



1990s, 2000s – Cleaning Up Near Columbia River



2005



2015



- 100 miles of buried pipe
- Most components are 70 years old



- Four substations
- 200-plus miles of high-voltage transmission lines (and equipment)



- 350 lane miles of road
- 1 million square yards of paved surfaces
- Roads are 45 years old



- Electrical Utilities distribution lines are being removed from the River Corridor as the mission consolidates to the Central Plateau
- Water Utilities cut/capped 7.7 miles of water lines
- Consolidating 8 septic systems and drain fields into a collection system conveyed to the 200W Lagoon
- Road restrictions reducing annual O&M costs on roads no longer supporting site mission (FY16 – FY18)



- Transition of site office and contractor completed March 2015
- Liquid Effluent Retention Facility has three basins designed to hold ~23,000,000 gallons of material
- Effluent Treatment Facility has capacity to treat up to 28,000,000 gallons of waste water each year



- Sustained Infrastructure funding is required to meet demands for all Hanford cleanup missions
 - 70 years has aged the infrastructure
 - Changing Hanford missions (nuclear operations vs. cleanup)
- Right-sizing, Reconfiguring, Rejuvenating the infrastructure ensures focused application of resources
- Improved performance and planning results in predictable delivery



Infrastructure built over 70 years ago to support reactor operations and plutonium production on the Central Plateau is not reliable to support 24/7 waste treatment operations – present and future.

- Water/electrical utilities, roads, facilities failing at an increasing rate
- IT needed to support technology implementation



- Beginning in 2017, most of 200 East drain fields and septic tanks will be replaced with more than seven miles of new collection transfer pipe
- Six lift stations will convey sanitary waste to 31-acre evaporation lagoon complex that began operation in 2012.



- Robust multi-year planning with structured process and using best practices
- Disciplined development of mission needs
 - Infrastructure and Alignment Services Plan (ISAP), 5-year Plan, Master Plans, System Health Reports
- Planning process improves confidence in project delivery
 - Alternatives Analysis, Cost Benefit Analysis, Functional Requirements, Design Criteria, Project Execution Plan (PEP), NEPA, cultural reviews, ground scans, surveying, early interface with other Hanford contractors (OHCs)



Types of changing conditions

- Identification of new requirements
- Adjust to mission/operation needs
- Maturity from planning to design
- Adjust to schedule needs
- Project execution strategies



System health is actively being managed and tracked on a total of 23 key infrastructure systems that support the Hanford Site

- Tracks the Overall System Status using Availability, Maintenance, and Configuration Management
- Each report is developed by qualified engineering Design Authorities and is informed by computerized maintenance management system (Enterprise Asset Management [EAM]), system walkdowns, and coordination with operations staff
- Information gained from developing each report is being used to:
 - Develop timely and solid technical bases for capital and expense funded projects to increase system reliability, capability and priority;
 - Provide input into the Site's risk management program;
 - Integrate the technical content of each infrastructure Master Plan to ensure that future needs are addressed; and ultimately inform the ISAP