



Hanford's infrastructure support consists of electrical, water, roads, and sewer.

Mission

Hanford's cleanup mission requires critical infrastructure that provides power, water, electricity, roads, and other services that support environmental cleanup and the Hanford Site's transition to 24/7 operations to treat liquid tank waste. As cleanup of large areas of the Site has been completed, infrastructure has been right-sized to meet the future mission. At the same time, the demand for safe and reliable services in operations areas is increasing. The acceleration of infrastructure projects across the Site ensures the U.S. Department of Energy (DOE) can be successful in its mission to protect workers, the public and the environment.

Infrastructure Supports the Hanford Mission

Modernizing and repairing antiquated infrastructure supports the Hanford transition to 24/7 tank-waste treatment operations at the Waste Treatment and Immobilization Plant and critical remediation work, through the following:

- Storing, treating and disposing of liquid tank waste, and solid waste containing hazardous chemicals and radioactive material
- Removing groundwater contaminants and cleaning up contaminated facilities and soil sites
- Monitoring and maintaining the remaining lands

Reliable Infrastructure

Reliable infrastructure provides a safe and secure site with emergency response capability, as well as electrical utility and facility services needed to support an increased pace of operations.

Ensuring Reliable Infrastructure Investments

Investments in infrastructure are reducing the infrastructure footprint as areas are cleaned up, updating old infrastructure that serviced past missions, and supplying services to new facilities to ensure success of the Hanford cleanup mission.

Hanford's Infrastructure Organization

Hanford's infrastructure organization also supports lease agreements with the Columbia Generating Station and the Laser Interferometer Gravitational-Wave Observatory (better known as LIGO).

Modernizing and repairing infrastructure.



Infrastructure Needs for the Future (cont.)

Infrastructure

Electrical

Status: Four substations and over 200 miles of high-voltage transmission and distribution system lines and equipment provide more than 20 megawatts of power to the Hanford Site. The Bonneville Power Administration uses Hanford's system to transmit 100 megawatts of power to surrounding areas. The system is beyond its design life and failures are occurring.

Completed and planned system upgrades ensure future missions will have necessary and dependable power.

Water (raw and potable)

Status: Over 100 miles of underground pipe and a water system that includes four pump houses, four reservoirs, two large potable-water storage tanks, and a water treatment facility. Many system components are more than 70 years old, and the system is experiencing failures with increasing frequency.

Ongoing renovations will right-size the system and provide a reliable water supply for all current and future cleanup activities.

Roads

Status: There are approximately 350 miles of road, with 1 million square yards of paved surfaces up to more than 70 years old. Primary roads need upgrading, and secondary roads have deteriorated.

Prioritized renovations support safe transport of personnel, materials and equipment to and from Hanford's Central Plateau.

Sewer

Status: There are seven miles of collection/transfer pipes and six lift stations that convey sanitary waste to the 31-acre evaporative lagoon complex in the 200 West Area.

Focused project investments ensure environmental compliance and worker safety.

Fiscal Year 2023 Projects

- Initiate construction for 181-D Export Water System reconfiguration and upgrades
- Initiate procurement of the 100 Area Mission Critical Distribution Feeders Replacement
- Initiate construction of the 400 Area Fire Station
- Continue construction of the Central Plateau Water Treatment Facility
- Continue refurbishment of the 230-kV transmission line
- Continue raw-water cross-connection isolation between the Hanford 200 East and 200 West Areas
- Continue reconfiguration of the emergency radio system to ensure reliable communications
- Continue fire protection infrastructure for plateau raw-water system construction
- Complete design for the 181-B Export Water System reconfiguration and upgrade
- Complete construction of the replacement 200 West Potable Water Tank

