



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 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.

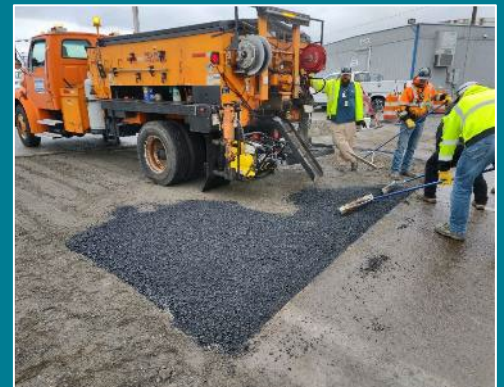
## Ensuring Reliable Infrastructure Investments

Investments in infrastructure reduce the footprint as areas are cleaned, 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 Energy Northwest Columbia Generating Station and the Laser Interferometer Gravitational-Wave Observatory (LIGO).

### Modernizing and repairing infrastructure.





# Infrastructure Needs for the Future (cont.)

## Infrastructure

### Electrical

**Status:** Four substations and more than 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 continue.

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

### Water (raw and potable)

**Status:** More than 100 miles of underground pipe and a water system that includes eight 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 experiences 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:** Approximately 274 miles of road, with an estimated 3.5-million-square-yards of legacy paved surfaces. Primary roads need upgrading and secondary roads have deteriorated.

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

### Sewer

**Status:** Seven miles of collection/transfer pipes and six lift stations 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 2024 Projects

- Initiate construction for 181-D Export Water System reconfiguration and upgrades
- Initiate 100 Area Mission-Critical Distribution Feeders Replacement procurement
- Initiate 400 Area Fire Station construction
- Continue Central Plateau Water Treatment Facility construction
- Continue 230-kV transmission line refurbishment
- Continue raw-water cross-connection isolation between 200 East and 200 West Areas
- Continue fire protection infrastructure for plateau raw-water system construction
- Complete design for the 181-B Export Water System reconfiguration and upgrade
- Complete replacement of 200 West Area potable water tank
- Complete installation and commissioning of emergency radio core system to ensure reliable communication
- Install additional fiber-optic cable to Waste Treatment and Immobilization Plant for added redundancy
- Increase fiber-optic capacity from city of Richland to Central Plateau, using new technology
- Integrate portions of 200 West Area water system into water local area network

