

## **CASE STUDY**

# **Campsite Modernization Siuslaw National Forest**

**Location:** Cape Perpetua, Oregon

### **HIGHLIGHTS**

Replaced 5,000 feet of water lines using directional boring to minimize environmental disruption to the sensitive coastal area.

The team worked through harsh weather and dicult terrain to deliver the project on time while maintaining uninterrupted service for park visitors.

Crews upgraded both the water and wastewater systems, including a new chlorination system and a modern wastewater treatment plant.

#### MODERNIZING CAPE PERPETUA'S WATER SYSTEMS

Nestled within the Siuslaw National Forest, the Cape Perpetua Scenic Area is a popular destination on the central Oregon coast. To protect this natural treasure and ensure visitor safety and comfort, the United States Forest Service embarked on a critical infrastructure upgrade of the Cape Perpetua Campground's water and wastewater systems. This project required a complete overhaul of the existing infrastructure to meet modern standards and provide reliable service for years to come.

#### CHALLENGES FACED

- Harsh Weather: The project took place during the netoriously rainy Oregon Coast season, which created difficult working conditions.
- **Difficult Terrain:** The site had highly variable subsurface conditions, including rocky and steep terrain, and was littered with massive buried tree stumps, one of which was 12 feet in diameter.
- Environmental Sensitivity: The project required minimizing the impact on the park's environmentally sensitive areas and the adjacent coastal highway.
- Maintaining Service: IWS had to ensure continuous water and wastewater services to concessionaires throughout the construction process to prevent any interruption to the public.



#### **SOLUTIONS IMPLEMENTED**

- **Environmental Protection:** To minimize the project's footprint, IWS used directional boring to install new water lines. This avoided extensive open trenches in the sensitive parkland and protected the coastal ecosystem.
- **System Overhaul:** The old, underperforming aeration basin was decommissioned. IWS installed new fiberglass tanks, including a primary tank, a recirculating tank, and a dosing tank, within the existing concrete basin. Two Advantex AX-100 pods were also set up to provide a new, effective treatment system.
- Centralized Controls: Controls for both the water and wastewater systems were integrated into a single building allowing for efficient and centralized management.
- **Uninterrupted Service:** IWS provided ongoing traffic control and maintained all services for concessionaires. ensuring no disruption to the public.

#### **OUTCOME AND IMPACT**

- Improved Infrastructure: The campground's water and wastewater systems were brought up to modern standards, ensuring a safe and reliable experience for all visitors.
- Sustainable Impact: By using directional boring and other low-impact techniques, the project successfully delivered a critical infrastructure upgrade while protecting the natural beauty of the area for future generations.







The project delivered a critical upgrade that will serve the National Forest Service and the public for years to come, all while protecting the natural beauty of the area.







