

## The Corps in the Pacific Northwest

The Seattle District provides a full range of services to the Pacific Northwest. Our district is committed to developing, managing, and conserving the region's water resources and continues to provide safe harbors and navigation, hydroelectric power, disaster relief, protection of wetlands, and flood control. Today, its civil works boundaries encompass 99,000 square miles that includes 4,700 miles of shoreline.

### W. T. Preston

Floating logs, stumps, and other debris can threaten navigation. In 1929 the Seattle District put the W.T. Preston to work collecting debris from Puget Sound, Lake Washington, and tributary rivers. Named for: W.T. Preston, the only civilian to ever hold the title of Seattle District Engineer.

- Size: 163.5 feet long by 34.5 feet wide
- Crew: 15
- Yearly Removal: 1,100 cubic yards of debris a year
- Biggest Haul: A damaged airplane
- In 1981, the W.T. Preston was replaced by the Puget. On the National Register of Historic Places, the W. T. Preston is now a museum in Anacortes, Washington.

Did you know?

The U.S. Army Corps of Engineers is a major provider of recreational opportunities in the United States? In the

Northwest, the Corps' recreation areas draw nearly 16 million visitors each year? The Corps manages over 4,300 recreation areas, nationwide, at civil works projects that attract more than 650 million visitors each year? The Corps built a sediment retention structure and levees to help provide relief after Mount St. Helens erupted? The Chief Joseph Dam is the second largest hydropower producer in the United States? It supplies enough electricity to light a city the size of Seattle? Most of the water used to irrigate crop lands in the Willamette and Rogue River Valleys of Oregon comes from 15 lakes operated by the Corps? The Corps is working with the Idaho Department of Fish and Game to help save the white sturgeon? These are just a few of the projects that help residents of the Pacific Northwest enjoy a high quality of life.

#### Energy Produced by Flowing Water

The Corps is among the world's largest producers of hydropower. In the 1930s, the focus of the Corps' activities was on flood control; the Corps began building and operating hydroelectric plants during that time. After World War II, focus shifted to multi-purpose projects involving navigation, water storage, irrigation, power, recreation, and flood control. As a result, the Corps became a leading producer of hydroelectric power. Today, the Corps operates and maintains a large number of facilities, but most new hydropower facilities are not built by the Corps. The Corps remains involved

in an advisory capacity.

Protecting Our Environment

Seattle District's scientists and engineers work with the Department of Defense, U.S. Environmental Protection Agency, and other agencies to investigate and clean up soil and water contaminated by past disposal activities, landfills, leaking underground storage tanks, and other sources of hazardous, toxic, and radiologic wastes.

A Superfund Success Story

When Corps geologists determined that a 1,400-foot water well at Fort Lewis might be leaking contaminants into the deep groundwater, the Corps moved quickly to solve the problem. Using a technique borrowed from the oil drilling industry, they used explosive charges to create small holes down the whole length of the well's empty casing. Cement and bentonite mixture was then pumped into the casing. As the cement oozed out of the holes, it provided a seal around the outside of the well casing while it slowly filled up and closed the inside of the casing. This prevented contamination from traveling down the well casing and into the groundwater.

Wetlands

Can you identify wetlands? Wetlands can be difficult to identify because all wetlands aren't wet all the time. They are wet at least long enough during the year to have created hydric soils and to support plants that are adapted to these soils. What Good are Wetlands?

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recreation. Wetlands provide opportunities to hike, boat, fish, hunt, and view wildlife.

- **Flood Control:** Because wetlands are often broad and flat, they can slow and store water.
- **Fish and Wildlife Habitat:** Many species of fish and wildlife use wetlands for feeding, breeding, and shelter.
- **Erosion Control:** Wetlands are often the transition between water and land, so wetland plants stabilize shorelines, slowing down wind and water erosion.
- **Water Supply:** Wetlands slow down and hold water, allowing more of it to sink into the groundwater.
- **Water Quality:** Wetlands restore and protect water quality by trapping sediments and retaining excess nutrients and other pollutants. So who is taking care of these valuable resources? The Corps is very active in protecting wetlands. **Protecting Wetlands** Anyone wanting to work in any water of the United States, including wetlands areas, must receive a permit from the U.S. Army Corps of Engineers. With the mandate to protect and preserve wetlands, the Corps weighs the public and private need for each activity, its positive and negative effects, and alternatives before granting a permit. **Creating Wetlands** The Corps created the new 19-acre wetlands at Jetty Island by building an 1,800-foot-long berm (barrier) to trap seawater brought in by the tides. Planning for the project involved the National Marine Fisheries Service,

U.S. Department of Fish and Wildlife,  
Environmental Protection Agency, Tulalip Tribes,  
and Washington State Departments of Fisheries  
and Wildlife, and Ecology. **Saving Wetlands** The  
Corps joined forces with the State of Louisiana to  
divert fresh water to stop the loss of coastal  
wetlands by halting seawater intrusion.

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