

Welcome to "Water and Life," an exhibit designed to give you a meaningful look at the many aspects of world renowned Grand Coulee Dam, keystone of the Water and Power Resources Service's Columbia Basin Project.

You will see this multipurpose water resource development project as a marvel of engineering; massive amounts of concrete holding back the great force of the Columbia River, mighty turbines turning the world's largest hydrogenerators, and enormous pumps filling Banks Lake. Awesome as they are, these things are only a means to an end, for water is life.

The Columbia Basin Project delivers water to irrigate up to a million acres of dry, arid country. Currently, over a half million acres provide a harvest of produce consumed throughout the nation and in many parts of the world. Clean, efficient, renewable hydropower provides energy for homes, hospitals, hotels, factories, offices and schools. The floodwaters which once roared down the Columbia Valley have been almost eliminated. Now they are harnessed behind Grand Coulee, and other dams like it.

The Coulee Dam National Recreation Area on Franklin D. Roosevelt Lake, as well as recreational developments throughout the Columbia Basin Project to the south, are available for the enjoyment of the public. Waterfowl and other wildlife abound where once was only sagebrush. Fishing and hunting opportunities are plentiful.

Water is life. The purpose of Grand Coulee Dam is to make that water available when and where needed. We hope you enjoy your visit.

UNITED STATES DEPARTMENT OF THE INTERIOR • WATER AND POWER RESOURCES SERVICE



GRAND  
COULEE  
DAM

# water and life

1

The Visitor Arrival Center (VAC) is the first stop for your Grand Coulee Dam visit. Our giant introductory theme mural, "Water and Life," was created by Mike Casad of Seattle.

The VAC provides restrooms, drinking fountains, and a public telephone. To prepare you for your tour, we have provided a movie titled "Fountain of Life," which is shown in our comfortable upstairs theatre.

Also on display is an orientation map showing Columbia Basin Project facilities and a three dimensional model of Grand Coulee Dam. A variety of information is on hand to help plan your tour. Minicomputers provide interesting facts, including information on recreational opportunities available in the area. In addition, there is a major exhibit on the construction of the dam, and a photo exhibit portraying the dam's history and technology.

2

The Pump-Generator Plant, just uphill from the VAC, is where irrigation action begins. There are two levels to visit at this stop.

In the upper area, an animated display traces the irrigation and flood control process. In addition, information is presented on the exciting geology of the area and how the dam affects the environment around it.

At a lower level, you'll overlook the huge units which lift water from Lake Roosevelt into Banks Lake and onto the irrigation system. Here you'll learn how half the units operate as pumps and can be reversed to generate electricity.

3

The Spillway, atop the dam about one-half mile from the Pump-Generator Plant, offers a panoramic view of the river 350 feet below, as well as the Power Plants, the VAC, and the city of Coulee Dam.

At one time, great flows hurtled unharnessed down the Spillway. Additional storage reservoirs in Canada now tame massive runoffs.

The Spillway gates are now opened only as a visitor attraction. When supplies are adequate, water tumbles down the spillway every afternoon and evening during the visitor season.

At night, hundreds of multi-colored lights illuminate the cascading water and are coordinated with recorded sound. This program is viewed from the VAC area.

Parking is provided on top of the dam.

4

The Right Power Plant lies three-tenths of a mile from the Spillway. Both the Left and Right Power Plants each house nine original Grand Coulee Dam generators.

An elevator will carry you to visitor areas. The first stop is a gallery, or tunnel in the Dam. Continuing down, you may visit the agate and artifact room which tells the story of the area's early inhabitants.

Overlooking the generators is the main floor visitor area. Here, turbine and generator principles are explained. Displays on the nature of electricity, sociological history, and hydroelectric unit operations are just a short elevator ride away in the shaft view area. You'll also view a spinning generator shaft which you'll want to compare later with the size of those in the Third Power Plant.

Visitors may take the elevator up to the third level, where control of the entire Grand Coulee Dam complex is explained.

5

The Third Power Plant visit begins a short distance from Tour Stop 4 with an incline elevator ride. The glass-enclosed car glides first to the midstation, where you'll learn about the plant's planning, architecture and construction.

A crossover bridge leads to an interior viewing area high above the generator floor. Exhibits include a Third Power Plant generator model, along with an explanation of Grand Coulee's importance to the overall energy picture.

Walk on through to an exterior balcony overlooking the tailrace where water churns back into the river after turning hydroelectric units. An eagle sculpture by Paul Wegner honors our national symbol. Bald eagles can be seen near the dam at certain times of the year.

A fitting climax to the tour is a trip to the shaft area, where you may view two of the plant's six turbine generators, the largest of their kind in the world.

