

**1** Packwood Lake was formed when a large mass of soil and rock slid off Snyder Mountain and dammed Lake Creek. The lake's elevation of 2,857 feet lies approximately 1,800 feet above the

**2** Water from the lake enters a concrete intake structure located approximately 424 feet downstream from the lake outlet.



**3** The structure feeds water into a six-foot diameter underground pipe that carries water five miles while dropping 1,800 feet in elevation before delivering water to the powerhouse near the town of Packwood.

4 Water reaches the powerhouse with approximately 780 pounds per square inch of pressure at the turbine. The water spins the turbine generator at 360 revolutions per minute producing up to 27.5 megawatts of electricity.

**5** After passing through the turbine, water is discharged to the Cowlitz River through a 6,670-foot tailrace canal. A fish screen at the entrance to the Cowlitz River prevents migrating fish from entering the Packwood facility.

Surge Tank

**21,691 Feet of Concrete Pipe** 

**27 MW Turbine Generator** 

**Powerhouse** 

5,621 Feet of Penstock

**Tail Race** 

**Cowlitz River** 

