

Wastewater Reclamation

THE RECLAMATION PLANT'S PAST AND FUTURE

CLEANER.
WATER.
FASTER.

Did You Know?

This wastewater treatment plant was not only the first treatment plant on the Spokane River, but also the first secondary treatment plant in the Pacific NorthWest. Secondary treatment was not mandated until the passage of the Clean Water Act of 1972.

The latest upgrade to the plant includes a tertiary, or third, removal process to eliminate phosphorus from entering the river.



WASTEWATER PLANT NOW
Adding a tertiary removal process to the wastewater treatment plant has helped the quality of water in the Spokane River and neighboring areas. Removing phosphorus means cleaner water, healthier environment, and a happier community.

A HISTORY OF WATER RECLAMATION

The Coeur d'Alene wastewater treatment plant was built in 1939 for processing the city's wastewater. It was contracted at \$115,552.00, and was initially a secondary plant, meaning it processed the cities wastewater both mechanically and chemically. The primary portion consisted of screening and disinfection with chlorine; and a flocculator (grit remover) followed by a single primary clarifier, which obtained the suspended materials.

Originally, water was not chlorinated for disinfection before being discharged to the Spokane River through an open pipe that ended about 200 feet from shore.

In 1979 the state imposed a moratorium on new sewer connections because the plant was overloaded, which was short-lived but was followed by one that the city imposed in 1981 because of actions from the Environmental Protection Agency.

By 1982, the city allowed a contract to construct improvements that allowed the

lifting of the moratorium. By 2017 some \$100 million plus will have been spent on the plant since 1982. In 2015 dollars the replacement value of the plant is in excess of \$125 million.

The latest improvements include complete tertiary treatment to remove phosphorus. Phosphorus is a nutrient that promotes the growth of algae. The algae consume dissolved oxygen when they die. One pound of phosphorus produces enough algae to consume 16 pounds of dissolved oxygen, which eliminates life-supporting oxygen from Lake Couer D'Alene.

The 1939 plant was designed for a population of 15,000. This equates to an average daily flow of around 1.5 million gallons per day (mgd). Today's flows are about 3.6 mgd for a population of 46,000. The 20 year plus planning horizon has the plant to be able to treat 6 mgd or a population equivalent of about 80,000.



WASTEWATER PLANT THEN
As one of the first treatment plants in the NorthWest, this plant was cleaning water for many people. Before receiving this plant, locals would dig a ditch for running water and put their outhouses by it so that it may be removed that way

Learn More!

