



JOB PROFILE

Water Resource Recovery Operator

AND

Drinking Water Operator

WHAT DOES A WATER OPERATOR DO?

Water operators provide one of the most important services in a community: delivering safe water to every person.

Water operators are the backbone of any community. Without water operators, there would be no clean water to drink, shower, wash, cook, flush or swim in. Life as you know it would stop. Do you have the time and strength to walk to the nearest stream to get all 88 gallons (734 pounds) of water you use everyday? Luckily, you don't have to because there is a water operator at work in your community!

There are two types of water operators:

DRINKING WATER OPERATOR

Uses chemistry to make sure water from the environment is purified and safe to drink. Works to make sure the equipment that receives and delivers water for the community to use is healthy, affordable and reliable.

WATER RESOURCE RECOVERY OPERATOR

Uses biology to clean and sanitize wastewater from our homes and businesses so that it can be recycled back into the environment where it comes into contact with plants, wildlife and other communities.

WHERE DO WATER OPERATORS WORK?

Water operators work for a water utility. It is the business of a drinking **water utility** to provide clean drinking water that arrives via underground pipes to all the homes, businesses, hospitals and schools in a community.

Then, once the water is used (in sinks, showers, toilets or drinking fountains) it flows down the drain and is taken to a water **resource recovery** utility to be cleaned.

Once the wastewater is cleaned and sanitized, the water utility sends the water back into local rivers so that it can be used again downstream. Water utilities can be found in every community across the country.

Water utilities are diverse in size and complexity. Some utilities serve small communities of a few hundred

people, while others serve large cities with millions. Small utilities may only have a few miles of buried pipe and have a simple treatment processes. The largest utilities have pumps capable of filling an Olympic-sized swimming pool in a few minutes, and can have complex, highly automated treatment plants.

There may be only one water operator in a small water utility, who takes on varied job responsibilities across the community. In large utilities, it takes multiple water operators in order to manage the utility's immense demand for clean water.

Small or large, all water utilities must know and meet the water quality standards set by the state and federal government (**Environmental Protection Agency**).

WHO'S A GOOD FIT TO BE A WATER OPERATOR?

STUDENTS WHO LIKE TO...

Work for the good of the community

Do something different everyday

Build or fix mechanical things

Use tools and heavy machinery

Work outside and inside

Use different types of technology

Find answers to problems

Provide customer service

Respond to emergency situations when necessary

Work in a team and work alone

Get a little dirty at work, but also spiff-up for meetings

Set own work priorities to get everything done

WATER INDUSTRY VOCABULARY

Water utility (n.)

A water utility is a company that provides drinking water and/or water resource recovery services. Most utilities are run by local governments, but some are owned by private businesses. The word "utility" refers to something that is considered very useful or satisfying to people. (Like water!)

Resource Recovery (n.)

Resource recovery is the process of creating something valuable out of something once considered "waste." Operators reclaim, or recycle, dirty water back into clean water.

Environmental Protection Agency (n.)

The Environmental Protection Agency (also known as "EPA") is a federal government organization that protects human health and the environment by enforcing rules for businesses, governments, organizations and households. The water industry is highly regulated by EPA, due to its major impact on human health and the environment. Water operators must always know, and comply with, EPA regulations.