

Water Works

It takes some very cool science to get clean water into your kitchen, bathroom, and neighborhood fire hydrant!

All across New Jersey, dams, reservoirs, pumping stations, water treatment plants, water tanks, and pipes pump, clean, and distribute water 24 hours a day, seven days a week. Right now, deep under your feet, pipes are carrying freshwater and wastewater across the state. Many of them are more than 100 years old! The smallest of these pipes is two inches in diameter, and the largest is 72 inches. That's a lot of water.

Every day teams of engineers, scientists, and environmental experts use science to design ways to make water delivery more energy efficient and pumps, gravity, friction, and magnetism all play important roles. Look at your classroom poster and trace the path of raw water into treatment plants and then into homes, businesses, and schools.

Now let's look at how science transforms raw water into clean, drinkable water.

Water Treatment Process

Coagulation

Special compounds make dirt clot and cling together.

Water from river...

Sedimentation

The dirt settles to the bottom and the water becomes cleaner.

Filtration

Water passes through filters to purify it further.

Disinfection

Kills the germs.

...to your home.

THINK ABOUT IT:

New Jersey American Water produces 330 million gallons of water a day. That's enough to fill Giants Stadium.