



NATURAL  
RESOURCES

# Hydrologist

A Hydrologist examines the physical characteristics, distribution, and circulation of water above and below the earth's surface.



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Inspiring Minds to Grow

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# career profile

Name: James Ramirez  
Job Title: Hydrologist

Employer: United States Geological Survey

Education: BS, University of New Hampshire: Durham

☀️ I remember being told when I was young that the water molecules I drink today could have been drunk by a dinosaur millions of years ago. That possibility and the idea of water cycling on Earth really fascinated me. I learned more about the water cycle and hydrology in high school and decided to major in environmental science so I could become a hydrologist.

☀️ I am one of the many hydrologists employed by the United States Geological Survey. I study the movement of water and its impacts on the environment. I manage field research trials and supervise the technicians that assist with the research. I see my work as being important in

regards to environmental preservation, remediation, and flood control. My research involves measuring the properties (like volume and stream flow) of bodies of water. I use computer models to forecast future water supplies, the spread of pollution, and other events. I study water contamination, how it takes place, and how it can be prevented. I am also required to prepare reports and documents with findings and recommendations.

☀️ As I've gotten a little older, I find that I am still fascinated with the water cycle. I take pleasure in knowing that my work helps the environment and everyone who depends on water resources. I can't think of anything I'd rather be doing.



# Hydrologist

## overview



A **hydrologist** studies the quantity, distribution, circulation, and physical properties of groundwater and surface waters.

## suggested high school courses



agricultural science, biology, chemistry, earth science, physics, and mathematics

## experience needed



Seek job placement opportunities while attending school. Plan and implement a related Supervised Agricultural Experience (SAE) Program.

## degree(s) required



A bachelor's degree in earth science, geology, chemistry, or environmental science/engineering is adequate for some entry-level jobs. However, better jobs usually require at least a master's degree.

## potential employers



private laboratory analysis firms, state environmental or natural resources agencies, United States Geological Survey

## salary range



\$59,496 to \$82,000

## employment outlook and trends



The employment outlook for hydrologists is considered to be **very good**.

## professional organizations



International Association for Environmental Hydrology [hydroweb.com/](http://hydroweb.com/)  
American Water Resources Association [www.awra.org/](http://www.awra.org/)



## Want to Learn More?

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