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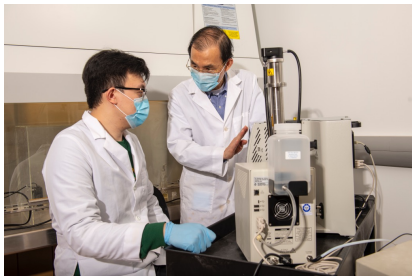
Careers in Environmental Science

Environmental scientists work in applied fields and interdisciplinary settings analyzing the effects that humans have on our environment and the plants and animals that populate it. From agriculture to healthcare to industry, environmental scientists teach, research, and work in business to help humans understand our work. While tasks do vary significantly from job to job, the scope of an environmental scientist job is listed below:

- Develop research methods and systems that are best fit for the chemicals and environment that are being researched
- Use observations, samples, and specimens to collect data
- Review current scientific literature on an ongoing basis to stay abreast of developments in the field
- Record and store observations, samples and specimens in the lab and in fieldwork
- Develop systems to better analyze data
- Present research findings to internal and external stakeholders through a variety of media channels
- Communicate with senior scientists and administrators through formal and informal reports



A senior environmental scientist or chief researcher may have the following or similar additional responsibilities, depending on the goals of the project. These additional tasks tend to be focused on project management and budgetary management:

- Create project timelines and budgetary metrics
- Ensure quality, integrity, project organization
- Track field and lab data
- Manage communications from the work group to stakeholders, senior administrators and the public
- Supervise field and lab work and overlapping project segments and workgroups
- Train and supervise administrative support staff
- Construct grant applications to be awarded funding

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Careers in Environmental Science

Careers in Environmental Science are so varied it is difficult to consider them as one category. You could end up working from home most of the time or traveling around the world on an annual basis. You could be doing desk work, field work, or some combination thereof. Your focus could be mathematical, physical, or written.

Environmental science is a holistic and multidisciplinary field that integrates the biological, physical, and earth sciences. Its goal is to understand how earth works and how it supports life. It also aims to identify, control, and prevent disruption to its systems and species caused by human activity.

Environmental scientists are problem solvers. They research environmental and health problems to determine their causes and come up with solutions. They investigate issues like mysterious deformations in frogs, unexplained cancer occurrences in a neighborhood, or disease in the former asbestos mining town of Libby, Montana. Environmental scientists conduct research to identify the causes of these types of problems, and how to minimize or eliminate them. They also conduct theoretical research that increases our understanding of how the natural world works. They use what they learn to make recommendations and develop strategies for managing environmental problems.

Environmental scientists use their knowledge of earth's systems to protect the environment and human health. They do this by cleaning up contaminated areas, making policy recommendations, or working with industry to reduce pollution and waste. They may also investigate the source of an environmental or health problem, and devise strategies to combat it.

Environmental scientists conduct research to identify, control, or eliminate sources of pollutants or hazards affecting the environment or public health. Their research generally involves determining data collection methods; collecting and analyzing air, water, and soil samples; analyzing environmental data gathered by others; and analyzing for correlations to human activity. They also need to prepare reports and presentations that explain their findings.

Environmental scientists also develop plans to prevent, control, or fix environmental problems like air pollution. They may also advise government officials that make policy, and businesses that need to follow regulations or improve their practices. Some conduct environmental inspections of businesses. Many assess the potential effects of development projects to prevent creating new problems. Some environmental scientists and specialists focus on environmental issues, while others focus on issues relating to human health. Either way, they work on critical issues, solving some of the most important problems of our day.

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Where Do Environmental Scientists Work?

Most environmental scientists work for federal, state, or local governments, where they conduct research, advise on policy, and verify that businesses are following regulations.

As of 2020, most environmental scientists (25%) worked for companies providing management, scientific, and technical consulting services.

Another 24% worked for state government. These professionals usually help companies comply with regulations. 12% worked for local government agencies. 10% provided engineering services, and 6% worked for the federal government.*

Environmental scientists work in offices and laboratories. While some may gather data and monitor conditions in the field, this is more likely to be done by technicians. Those who do work in the field may find it demanding, and work in all kinds of weather. Travel to client sites or conferences may be required.

Opportunities Abound in Rolla & Surrounding Areas

Mark Twain National Forest

Current River National Scenic Riverway

United States Geological Survey

Missouri Department of Conservation

Missouri Department of Natural Resources

Missouri Geological Survey

Triangle Environmental Science & Engineering

Terracon Consultants

Dow Agroscience

Bayer

Missouri Botanical Gardens

Danforth Plant Science Center

Tetra Tech

Missouri Agricultural Extension

Animal and Plant Health Inspection Service

Bureau of Land Management

electric companies

and many more!