

Careers in Environmental Science

Employment

Environmental scientists held about 81,000 jobs in 2004. About 44 percent of environmental scientists were employed in State and local governments; 15 percent in management, scientific, and technical consulting services; 14 percent in architectural, engineering and related services; and 8 percent in the Federal Government. About 5 percent were self-employed.

Job Outlook

Employment of environmental scientists is expected to grow about as fast as the average for all occupations through 2014. Job growth for environmental scientists should be strongest at private-sector consulting firms. Demand for environmental scientists will be spurred largely by public policy, which will oblige companies and organizations to comply with complex environmental laws and regulations, particularly those regarding ground-water decontamination, clean air, and flood control.

Job opportunities also will be spurred by a continued general awareness regarding the need to monitor the quality of the environment, to interpret the impact of human actions on terrestrial and aquatic ecosystems, and to develop strategies for restoring ecosystems.

Many environmental scientists work in consulting. Consulting firms have hired these scientists to advise and help businesses and government comply with new regulations on issues related to underground tanks, land disposal areas, and other hazardous-waste-management facilities. Currently, environmental consulting is maturing and evolving from investigations to remediation and engineering solutions. At the same time, the regulatory climate is evolving from a rigid structure to a more flexible risk-based approach. These factors, coupled with new Federal and State initiatives that integrate environmental activities into the business process itself, will result in a greater focus on waste minimization, resource recovery, pollution prevention, and the consideration of environmental effects during product development. This shift in focus from reactive solutions to preventive management will provide many new opportunities for environmental scientists and hydrologists in consulting roles.

Some opportunities are expected for environmental scientists at State geological surveys, stemming from the need to conduct environmental site assessments for local governments to help improve the flow of railroad and automobile traffic in urban areas. In addition, environmental scientists will be needed to help planners and communities develop and construct buildings, transportation corridors, and utilities that protect water resources and reflect efficient and beneficial land use.

Federal and State geological surveys depend to a large extent on the public climate and the current budget. Thus, job security for environmental scientists and hydrologists within a State survey may be cyclical. During periods of economic recession, layoffs of environmental scientists and hydrologists may occur in consulting firms; layoffs are much less likely in government.

Earnings

Median annual earnings of environmental scientists were \$51,080 in May 2004. The middle 50 percent earned between \$39,100 and \$67,360. The lowest 10 percent earned less than \$31,610, and the highest 10 percent earned more than \$85,940.

Median annual earnings in the industries employing the largest number of environmental scientists in May 2004 were as follows:

According to the National Association of Colleges and Employers, beginning salary offers in July 2005 for graduates with bachelor's degrees in an environmental science related field averaged \$31,366 a year.

Related Occupations

Environmental scientists perform investigations for the purpose of abating or eliminating sources of pollutants or hazards that affect the environment or some population—plant, animal, or human. Many other occupations deal with preserving or researching the natural environment, including conservation scientists and foresters, atmospheric scientists, and some biological scientists and science and engineering technicians.

Federal Government	\$73,530
Management, scientific, and technical consulting services	\$51,190
Architectural, engineering, and related services	\$49,160
Local government	\$48,870
State government	\$46,850

Environmental scientists have extensive training in physical sciences, and many apply their knowledge of chemistry, physics, biology, and mathematics to explain certain phenomena closely related to the work of geoscientists.

Using their qualitative and quantitative problem-solving skills, physicists; chemists; engineers; mathematicians; surveyors, cartographers, photogrammetrists, and surveying technicians; computer systems analysts; and computer scientists and database administrators may perform similar work in environment-related fields.

Examples of Environmental Science Jobs

Land use planner
Landscape architect
Fishery biologist
Oceanographer
Engineer
Environmental managers
Environmental lawyers
Teachers
Game managers
Chemist
Physicists
Mathematicians
Planners
Writers
Zoologists
Farmers
Geneticists
Foresters
Wildlife managers

Career Opportunities in Environmental Science

List 3 different careers:

1) _____

2) _____

3) _____

Choose 1 of the above careers to research further.

What education is required for this profession?

What training is required for this profession?

What experience is required for this position?

Does this profession interest you? Why?

