

Environmental Scientists and Specialists

SOC: 19-2041 • Career Profile Report

■ Key Facts

\$80,060

Median Salary

90,300

Employment

+4.0%

Growth Rate

■ Requirements & Salary Range

Education: Bachelor's degree

■ Automation Risk Assessment

Low Risk - 8.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■ Work-Life Balance

7.5/10 - Good work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

| | | | |
|--------------|--------|---------------|--------|
| Realistic | 6.2/10 | Investigative | 9.4/10 |
| Artistic | 5.6/10 | Social | 6.4/10 |
| Enterprising | 4.8/10 | Conventional | 6.4/10 |

■ Top Skills Required

Analytical skills, Communication skills, Interpersonal skills, Problem-solving skills, Self- motivation

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Environmental Scientists and Specialists are professionals who study and protect the **natural environment, human health, and ecosystems** by analyzing environmental problems and developing science-based solutions. They work at the intersection of science, policy, and sustainability to address issues such as pollution, climate change, resource management, and environmental compliance. Their work helps communities, businesses, and governments reduce environmental impact and protect natural resources.

This career is well suited for individuals who are passionate about environmental protection, scientific analysis, and applying data to real-world sustainability challenges.

What Do Environmental Scientists and Specialists Do?

Environmental scientists and specialists investigate environmental conditions and recommend corrective actions.

Common responsibilities include:

- Collecting and analyzing air, water, soil, or biological samples
- Assessing environmental hazards and pollution sources
- Conducting environmental impact assessments
- Developing plans to prevent or reduce environmental damage
- Ensuring compliance with environmental laws and regulations
- Preparing technical reports and presenting findings
- Advising organizations and policymakers on environmental best practices

Areas of Focus and Specialization

Environmental scientists and specialists may focus on specific environmental challenges:

- Environmental Protection and Conservation: Preserving ecosystems and natural habitats.
- Pollution Control and Remediation: Cleaning up contaminated sites.
- Climate and Sustainability Analysis: Studying climate impacts and mitigation strategies.
- Environmental Health and Safety: Protecting human health from environmental risks.
- Regulatory Compliance: Ensuring organizations meet environmental standards.

Skills and Abilities Needed

These professionals combine scientific expertise with analytical and communication skills.

Core Professional Skills

Personal Qualities That Matter

Education and Training Pathway

Entering this field typically requires postsecondary education in environmental or natural sciences:

- Bachelor's Degree (common): Environmental science, biology, chemistry, geology, or related fields
- Master's Degree (often preferred): Environmental science, policy, or specialized areas
- Field and Laboratory Experience: Gained through coursework, internships, or research
- Professional Certifications (optional): Environmental or sustainability credentials
- Continuing Education: Staying current with regulations and scientific advances

Where Do Environmental Scientists and Specialists Work?

They are employed across public and private sectors:

- Environmental Consulting Firms
- Government and Regulatory Agencies

- Engineering and Infrastructure Companies
- Research Institutions and Universities
- Manufacturing and Energy Companies
- Nonprofit and Conservation Organizations

Work may involve a mix of fieldwork, laboratory analysis, and office-based research.

How Much Do Environmental Scientists and Specialists Earn?

Earnings vary by education level, sector, and specialization:

- Entry-Level Scientists: Typically earn competitive science-based salaries
- Experienced or Specialized Professionals: Often earn higher compensation
- Consulting or Leadership Roles: May earn more depending on responsibility

Compensation often includes benefits and opportunities for advancement.

Is This Career Difficult?

This career is intellectually demanding and sometimes physically challenging. Professionals may work outdoors in varied conditions, analyze complex datasets, and navigate regulatory frameworks. The challenge lies in translating scientific findings into practical solutions that balance environmental protection with economic and social needs.

Who Should Consider This Career?

This career may be a strong fit if you:

- Care deeply about environmental protection and sustainability
- Enjoy scientific research and data analysis
- Are comfortable working in the field and the office
- Want to influence environmental policy or business practices
- Prefer a mission-driven science career

How to Prepare Early

- Take courses in biology, chemistry, earth science, and math
- Participate in environmental clubs or conservation projects
- Gain field or lab experience through internships
- Learn data analysis or GIS tools
- Explore environmental science or sustainability degree programs

Environmental scientists and specialists protect the future by applying science to today's challenges—turning data, fieldwork, and analysis into solutions that safeguard ecosystems, public health, and the planet for generations to come.

*Generated by StartRight • Data from U.S. Bureau of Labor Statistics & O*NET*

Source: <https://www.bls.gov/ooh/life-physical-and-social-science/environmental-scientists-and-specialists.htm>