

Environmental Career Opportunities

Adapted from CCHREI database

Environmental Protection

1	Environmental Occupational Health and Safety Specialist	Environmental Occupational Health and Safety Specialists prevent and moderate workplace-related health and safety risks caused by the workplace-related environment. They raise awareness of occupational health and safety, provide consultation on regulation compliance, and assist with policy improvement.
2	Industrial Hygienist	Industrial Hygienists maintain workplace health and safety by identifying and controlling exposure to chemical, physical and biological hazards. They also work with issues involving indoor air quality, noise and ergonomics.
3	Remediation Specialist	Remediation Specialists work to identify and correct damage caused by soil or water contaminants. They design, implement, and operate remediation systems and provide technical assistance to individuals and agencies.
4	Environmental Epidemiologist	Environmental Epidemiologists study correlations between human exposure to environmental contaminants and the occurrence and distribution of disease and health risk. They diagnose health conditions, determine the cause, and recommend preventive or control actions and identify potential treatments.
5	Air Technician / Technologist	Air Technicians assess, protect, and monitor air quality. Many of their duties revolve around managing air emissions and ensuring regulation compliance.
6	Meteorologist	Meteorologists analyze and provide consultation on climate and atmospheric phenomena. They often specialize.
7	Water and Wastewater Laboratory Technician / Technologist	Water and Wastewater Laboratory Technicians manage the technical process used for water purification and wastewater disposal. They also ensure that these processes are environmentally safe and are compliant with industry standards and methods.
8	Water Treatment Plant Operator	Water Treatment Plant Operators control the processes and equipment used in purifying and disinfecting water. They produce clean water that is safe for human consumption and for the environment to operate wastewater treatment systems according to health and pollution control requirements.
9	Hydrogeologist	Hydrogeologists study groundwater resources with regards to sustainability and contamination. They provide consultation in waste management, environmental impact assessment, and site remediation.
10	Soil Conservationist	Soil Conservationists provide consultation and technical assistance to help land users identify and apply appropriate soil management techniques. They often encourage holistic techniques that improve soil quality, productivity, and agricultural and environmental sustainability.
11	Industrial Water and Wastewater Inspector	Industrial Water and Wastewater Inspectors work to ensure that industrial water and wastewater is processed according to government

		legislation and licensing requirements. They also conduct inspections for the purpose of environmental impact assessments and water quality analyses.
12	Waste Management Specialist	Waste Management Specialists plan, implement, and coordinate waste management systems to maximize waste prevention, and identify opportunities to reuse and recycle. Areas of specialization include water and wastewater treatment to landfill management.
13	Hazardous Materials Specialist	Hazardous Material Specialists work to ensure that hazardous material is managed and handled using environmentally safe practices and in compliance with current regulatory requirements. They conduct inspections and investigations, review policies and procedures, and enforce the appropriate regulations where necessary.
14	Environmental Engineer	Environmental Engineers analyze and develop solutions for environmental problems. They engineer new advancements in environmental protection and conservation.
15	Environmental Planner	Environmental Planners develop urbanization and land use strategies that support environmental, economic, and social well-being. They also assist with planning and managing urban facilities and infrastructure.
16	Environmental Auditor	Environmental Auditors conduct audits to assess the performance of commercial and industrial operations. Following established procedures, they collect and document evidence, to assess a facility's compliance with environmental laws and regulations.
17	Environmental Technologist	Environmental Technologists provide technical expertise and support to environmental health and safety projects. They have a strong understanding of government regulations, industry standards, codes of practice, and environmental auditing.
18	Pollution Control Technologist	Pollution Control Technologists examine air, water, and soil for contamination. They also determine methods to control and correct environmental damage resulting from the contamination.
19	Environmental Lawyer	Environmental Lawyers act as both advisors and legal advocates in the protection of the environment and its natural resources. As advisors, they counsel clients on their legal rights and obligations with regard to the environment. As legal advocates, they represent clients in environmental trials and defend client interests.

Conservation and Preservation of Natural Resources

20	Wildlife Biologist	Wildlife biologists conduct studies on wildlife and habitat in order to develop conservation and resource management plans. They provide consultation to companies conducting environmentally sensitive projects and raise public awareness about wildlife conservation.
21	Zoologist	Zoologists study animals and organisms with regard to origins, behaviour, anatomy, and life processes. They

		participate in species protection, park and zoo planning, biodiversity research, and resource management.
22	Restoration Biologist	Restoration biologists provide expertise and guidance in planning and conducting habitat, watershed, and stream channel restoration projects. They also monitor endangered species and coordinate conservation activities.
23	Wetland Biologist	Wetland Biologists manage and protect wetland resources. They are responsible for implementing wetland conservation techniques, enforcing regulations, and providing consultation on construction projects in wetland-sensitive areas.
24	Oceanographer	Oceanographers study all aspects of oceans and their boundaries.
25	Fisheries Specialist	Fisheries Specialists study fish populations to improve disease control, maintain habitat quality, and develop conservation methods and safe industry practices. They often specialize in fish biology, habitat management, and population dynamics.
26	Conservation Officer	Conservation Officers enforce federal and provincial/territorial regulations governing the protection of wildlife, fisheries, and natural resources. They conduct conservation programs and raise public awareness of conservation regulations.
27	Park Interpreter	Park Interpreters develop and deliver educational programs to visitors of parks, zoos and conservation areas. They teach visitors about environmental conservation and protection and about the unique characteristics of these areas.
28	Botanist	Botanists study plants and apply their knowledge towards environmental conservation, land use planning and restoration, plant breeding, and pharmaceutical development.
29	Landscape Architect	Landscape Architects develop plans for arranging and modifying landscape features to achieve aesthetic, environmental, and practical requirements. They also perform analytical and consulting duties associated with landscape design.
30	Arborist	Arborists maintain tree health by assessing and treating disease and establishing appropriate policies, plans and procedures. They also monitor tree management practices for compliance with regulations.
31	Entomologist	Entomologists study insects and related organisms to develop or recommend programs for utilizing beneficial insects and controlling harmful ones. They research insect physiology, distribution and habitat.
32	Forestry Technician / Technologist	Forestry Technicians perform technical duties to forest management including silviculture, harvesting and conservation. They work closely with foresters in forest conservation, land classification, surveying, health management and data collection.

33	Forester	Foresters study and manage forest areas to ensure the conservation and preservation of forests and related resources. They plan and implement forestry programs and enforce the appropriate legislation and regulations.
34	Agronomist	Agronomists study the interaction between farming methods, soil, and crops. They improve agricultural systems to ensure better crops, higher yields, and healthier soil.
35	Animal Husbandry Specialist / Livestock Producer	Livestock producers/farmers manage animal breeding, feeding, and health care using sustainable farm or ranch management practices. They are also responsible for meat and crop production and promotion.
36	Agricultural Technologist	Agricultural Technologists provide technical support and services required for agricultural projects, often working closely with agricultural specialists. They advise farmers of sustainable soil practices and fertilizing applications.
37	Agricultural Specialist	Agricultural specialists work to promote environmental sustainability on agricultural lands. They advise farmers and assist them in improving production, yields, and profit and work with government on policy and regulation development.
38	Soil Scientist	Soil Scientists study the physical, chemical and biological properties of soil, and its interactions with living organisms. They provide recommendations on methods for using and managing soil in food production, soil conservation, land use management, and environmental activities.
39	Geologist	Geologists study earth material including rocks and minerals. They assist with locating and developing natural resources, observe the nature and effects on natural phenomena such as earthquakes and volcanic activity.
40	Petroleum Engineer	Petroleum Engineers develop and implement effective techniques for recovering, processing, and producing oil and natural gas. They apply engineering, environmental, and economic principles to ensure that exploration and development of oil and gas fields is efficient, cost effective and environmentally safe.
41	Geophysicist	Geophysicists use the principles of physics to study the earth's surface, internal composition, and natural forces such as magnetism and gravity.
42	Geological and Geophysical Technician	Geological and Geophysical Technicians provide electrical support to geologists, geophysicists, and mining and petroleum engineers. They assist with the exploration, production, and management of natural resources.
43	ISO 14000 Consultant	ISO 14000 Consultants plan and implement an organization's ISO 14000 systems. These systems allow the organization to better manage its environmental risks by providing standard, established and documented procedures to follow.

44	GIS Analyst	GIS Analysts develop, operate, and maintain GIS software and equipment used in studying the earth and its resources. Their expertise is critical in environmental decision making and computer modeling.
45	Environmental Compliance Specialist	Environmental Compliance Specialists ensure that environmental safety standards and regulations are met in waste disposal and treatment operations. Their goal is to maintain the quality of the systems used while minimizing harmful impacts on the surrounding environment.
46	Geographer	Geographers observe the environment's physical and cultural characteristics and its relationship with human activities.
47	Ecologist	Ecologists study the interaction between living organisms and their physical environment. They observe relationships and processes from a scientific and statistical point of view.

Environmental Education, Communication and Research

48	Environmental Education Specialist	Environmental Education Specialists develop educational programs that promote environmental awareness and responsibility. They ensure that environmental objectives are included in corporate strategies, government laws and regulations, and consumer decisions.
49	Science Teacher	Science Teachers prepare and deliver science programs to students in secondary schools. They teach daily lessons, administer and grade student assignments and examinations, and supervise practical activities such as science experiments and field trips.
50	University Professor	University Professors teach students at universities and other degree-granting institutions. They also conduct scientific research and publish their findings in professional academic journals and magazines.
51	Environmental Training Specialist	Environmental Training Specialists play an important role in improving the quality of the environmental workforce. They provide environmental professionals with opportunities for continuous skill development and establish training standards required for certifying occupations in the environmental industry.
52	Eco Tourism Operator	Eco Tourism operators coordinate and guide responsible travel to ecologically important sites. They inform visitors of the cultural and historical significance of a site and promote ways of enjoying the environment in a responsible manner.
53	Environmental Marketing Specialist	Environmental Marketing Specialists promote environmental products, services, and programs. They

		conduct market research and develop strategies for environmental organizations and firms.
54	Public Relations Specialists	Public Relations Specialists help businesses and organizations build and maintain positive relationships with the public. They ensure an organization's mission and environmental objectives and activities are communicated clearly and effectively to the audience they want.
55	Environmental Reporter	Environmental Reporters are responsible for informing the public of current environmental issues and the diversity of views associated with them. Their goal is to raise public awareness and to encourage active participation in environmental protection.
56	Environmental Chemist	Environmental Chemists work to improve environmental health and quality through the study of chemistry. They also investigate environmental contamination and monitor procedures for compliance with government regulations.
57	Microbiologist	Microbiologists study the growth and characteristics of micro-organisms and their interactions with, and effects on, other living organisms and the environment. Their knowledge is used for practical application in the industrial and medical fields.
58	Environmental Analyst (Statistician)	Environmental Analysts use statistical methods to interpret numerical data and generate useful information from environmental projects/activities. Their work is used in all aspects of research.
59	Toxicologist	Toxicologists study the harmful effects of physical and chemical agents on organisms and the environment. They monitor the levels of toxic substances in the environment to prevent and mitigate damage and health risk.
60	Environmental Economist	Environmental Economists study the relationship between the environment and the economy. They assess the economic cost of environmental activities and evaluate them against the associated benefits.

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	x				x		x								Wetland Biologist (pg 52)
	x				x		x								Oceanographer (pg 54)
	x				x		x								Fisheries Specialist (pg 56)
										x	x	x			Conservation Officer (pg 58)
				x								x		x	Park Interpreter (pg 60)
	x				x		x								Botanist (pg 62)
							x		x					x	Landscape Architect (pg 64)
							x		x						Arborist (pg 66)
						x			x						Entomologist (pg 68)
		x		x		x									Forestry Technologist/Technician (pg 70)
		x		x	x	x	x	x	x						Forester (pg 72)
	x				x				x						Agronomist (pg 74)
					x		x	x							Animal Husbandry Specialist/Live Stock Producer (pg 76)
							x		x						Agricultural Technologist (pg 78)
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						x		x							Soil Scientist (pg 82)
	x	x			x										Geologist (pg 84)
	x	x					x				x				Petroleum Engineer (pg 86)
	x						x							x	Geophysicist (pg 88)
		x				x				x					Geological & Geophysical Technologist (pg 90)
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	x													x	GIS Analyst (pg 94)
										x	x			x	Environmental Compliance Specialist (pg 96)
	x					x		x							Geographer (pg 98)
	x					x		x							Ecologist (pg 100)
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	x		x								x		x		Science Teacher (Senior High School) (pg 106)
	x		x		x						x	x	x		University Professor (pg 108)
			x								x		x		Environmental Training Specialist (pg 110)
		x	x								x		x		Eco Tourism Operator (pg 112)
								x			x				Environmental Marketing Specialist (pg 114)
	x										x				Public Relations Specialist (pg 116)
	x					x									Environmental Reporter (pg 118)
	x					x									Environmental Chemist (pg 120)
	x					x									Microbiologist (pg 122)
		x				x									Environmental Analyst (statistician) (pg 124)
	x					x									Toxicologist (pg 126)
	x					x			x						Environmental Economist (pg 128)