

Environmental Professions – Kansas River Ambassadors

1. Park Ranger

- a. A park ranger performs enforcement duties for the protection, conservation, use and management of natural and cultural resources in park areas or similar operations, which involve the application of law enforcement authorities and procedures to protect visitors and resources. They conduct patrols by foot, vehicle, bicycle, boat and other alternative vehicles to protect cultural and natural resources and the public's use of those resources. They also provide timely responses to emergency medical incidents, search and rescues, wild land and structural fire incidents.
 - i. **Skills:** interpersonal communication, public relation, analyzing problems, a park ranger is a commissioned "Peace Officer" designated by Department of Natural Resources
 - ii. **Classes:** Natural Resources, Geology, Archeology, Forestry, Environmental courses

2. Environmental Manager

- a. An environmental manager is responsible for overseeing the environmental performance of private, public and voluntary sector organizations. They develop, implement and monitor environmental strategies, policies and programs that promote sustainable development. They examine corporate activities to establish where improvements can be made and ensure compliance with environmental legislation across the organization.
 - i. **Skills:** management, leadership
 - ii. **Classes:** Ecology, Environmental courses, Environmental Management

3. Environmental Consultant

- a. An environmental consultant works on commercial or government contracts to address environmental issues for their clients. They cover a wide range of disciplines such as assessment of air, land and water contamination, environmental impact assessments, environmental audits, waste management and development of environmental policy and management systems.
 - i. **Skills:** conduct surveys, develop models, write reports, communication
 - ii. **Classes:** Ecology, Geology, Environmental Management, Environmental courses,

4. Environmental Technician

- a. An environmental technician determines sources and methods of controlling pollutants by conducting tests and field investigations. They

address environmental issues providing information and deliberations by recommending options and courses of action for addressing the issue. They gather environmental data by techniques and prepare summaries and charts for displaying information.

- i. **Skills:** field testing, monitoring data, data management, data recording
- ii. **Classes:** Ecology, Geology, Biology, Chemistry, Environmental courses

5. Environmental Lawyer

- a. Environmental lawyers specialize in regulations, laws and disputes relating to the environment. The field encompasses a wide range of issues, including biodiversity, agriculture, species protection, hazardous waste, water and air quality, and waste management. A lawyer works to uphold federal statutes for the protection of the environment. They provide equal and unbiased representation for individuals and organizations in relation to environmental health.
 - i. **Skills:** communication, attention-to-detail, writing, research
 - ii. **Classes:** Law Degree, Environmental law, environmental policy, environmental economics, writing courses

6. Conservation Biologist

- a. Conservation biologists analyze current environmental situations, including population and distribution of plants and animals. They analyze environmental degradation, flora and fauna, methods to improving ecosystem health and consult with government, conservation agencies, and industry to develop land and water management plans.
 - i. **Skills:** testing, laboratory work, data recording
 - ii. **Classes:** Biology, Chemistry, Bio-Chemistry

7. Naturalists

- a. Naturalists are scientists who help people gain an appreciation for the natural world and our environment. They are involved in protecting plants and animals that live in the wild. Naturalists participate in projects aimed at protecting and preserving geographical areas such as forests, parks, rivers and wetlands. They often educate the public in sustainable practices and maintenance of ecosystems.
 - i. **Skills:** Observant, educational teaching
 - ii. **Classes:** Environmental courses, plant taxonomy, ethology, urban planning

8. Forester

- a. A forester manages public and private forested lands for economic, recreational and conservation purposes. They inventory type, amount, and location of standing timber, appraise the timbers worth, negotiate the purchase and draw up contracts for procurement. They determine how to

conserve wildlife habitats, creek beds, water quality and soil stability while complying with environmental regulations. They devise plans for planting and growing trees, monitoring trees and determining harvesting schedules as well as develop management plans for public and privately owned forested lands.

- i. **Skills:** analytical, supervisory, communication
- ii. **Classes:** biology, forestry, environmental science courses, hydrology, agronomy, wildlife, forest resource management

9. Recreation Manager

- a. A recreation manager develops, manages, promotes and implements group recreation programs. They provide coordination, promotion and oversight for activities in the community.
 - i. **Skills:** researching, planning, organizing, leadership
 - ii. **Classes:** parks and recreation management, wild land recreation management, recreation leadership

10. Ecologist

- a. An ecologist conducts surveys, records, and monitors species and their habitat. They are involved in carrying out environmental impact assessments for planning permission, writing reports and research. They may collect and manage biological information for national databases contributing ideas for new environmental policies and legislation.
 - i. **Skills:** presentation, report writing, surveying, communication
 - ii. **Classes:** ecology, biology, environmental management, conservation biology, botany, zoology

11. Environmental Lobbyist

- a. A lobbyist is a public relation specialist with strong communication skills who can persuade legislators to vote on public policy in favor for the environment. They are directly involved with politics and moving environmental agendas forward within the government and work directly with decision makers for local, state and federal governments.
 - i. **Skills:** communication, economics, public relations, political science
 - ii. **Classes:** political science, environmental economics, environmental law and policy

12. Environmental Engineer

- a. Environmental engineers use the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems. They are involved in efforts to improve recycling, waste disposal, public

health, and water and air pollution control. They help to minimize effects of problems like global warming, acid rain and car emissions.

- i. **Skills:** communication, interpersonal, technical, organization
- ii. **Classes:** environmental planning, engineering courses

* Environmental careers and degrees are interdisciplinary. This means you need to have knowledge of the hard sciences (ex. Biology, chemistry, geology) and also an understanding from other disciplines (ex. economics, history and urban planning) to get a full understanding of the who, what, when, where and why's of the earth and environmental processes.