

Environmental Careers

Abstract: Students investigate water-related and other environmental careers; the education, training, salary, and job description of each; and interview a water career or environmental professional.

Objectives: Be able to:

1. Describe the great variety of environmental careers.
2. Compare the education, training, salary, and job descriptions for specific water-related or environmental careers.

State Standards Addressed:

Technology: E5

Time Frame & Schedule:

Preparation: 15 min.

Class: One 50 - min. period for *Gear-Up*

Oral presentations - dependent upon number of students

Materials: (K -Included in kit / O - Order / L - Obtain locally)

✓ Video: "Careers in Water Quality" (K) (O)

Teacher's Preparation:

1. Order video
2. Copy handouts

Description of Student Activities:

1. *Gear-Up:*
 - a. Ask students to share with the class their career goals. Are any water related or environmental?
 - b. As a full class activity, ask them to name as many water-related or environmental careers as they can think of and write them on the board.
 - c. Then have them give names of individuals that they know who have careers in these fields.
 - d. Hand out the List of Environmental Careers and tell them that each student will select one career from the list and investigate that career.
 - e. Show video "Careers in Water Quality" - 16:20 min.
2. *Explore:* (Work individually)
 - a. Hand out the Careers Checklist.
 - b. Have students begin the research of their water-related or environmental career. The information on the checklist should be the minimum information collected for each career. Research could include career guides from school counselors, encyclopedia, World Wide Web, and personal interviews.
3. *Generalize:*

- a. Have students hand in the Careers Checklist and make a 5 - 10 minute oral presentations to the class. Tell the students to take notes about each career.
- b. Invite water and/or environmental professionals to speak to the class about their careers and how they entered the field.

Extension Activities:

1. Make a bulletin board with career information and pictures of individuals in various careers.
2. Make a file or notebook of all the reports so students can have access to it for future reference.

Assessment:

1. Demonstrate an in-depth knowledge of one water-related or environmental career by making a 5 - 10 minute presentation to the class about that career.
2. Demonstrate knowledge of the scope of water-related or environmental careers by making a list (from memory) of as many water-related or environmental careers as possible. Expect students to list at least 10 careers.

References:

1. "Water Sourcebook," EPA Doc. No. EPA/904-R-94-017(d); Legacy, Inc., Auburn University and Troy State University; Water Environment Federation, Alexandria, VA 22314-1994; 1997.

Resources:

1. Poster - "The Water Cycle" (reverse side "Water Careers")
AWWA
6666 West Quincy Ave.
Denver, CO 80235
1-800-926-7337
FAX 303-347-0804
#70042
\$5.00 ea
2. Video: "Careers in Water Quality" (16 min.)
Water Environment Federation
601 Wythe Street
Alexandria, VA 22314-1994
1-800-666-0206
FAX 1-703-684-2492
#Z1400GJ
\$39.00

Environmental Careers

Agriculture Engineer
Aquarium Director
Archeologist
Aquatic Entomologist
Biologist
Biosolids Specialist
Botanist
Bottled Water Company Employee
Chemist
Chemical Engineer
Civil Engineer
Coast Guard
College/University Professor
Desalination Plant Employee
Ecologist
Environmental Attorney
Environmental Chemist
Environmental Engineer
Environmental Scientist
Environmental Supplies Sales
Farmer
Fisheries Biologist
Forester
Geologist
Government Regulator/Inspector
Groundwater Contractor
Hazardous Materials Specialist
Health Dept./Environmental Inspector
Hydraulic Engineer
Hydrologist
Laboratory Technician
Landscape Architect
Limnologist
Malacologist
Marina Owner/Operator/Employee
Marine Geophysicist
Marine Geologist
Marine Conservationist
Marine Technician
Meteorologist
Oceanographer
Physical Scientist
Plant Physiologist
Ranger
Recreation Director
Science Teacher
Snow Hydrologist
Soil Scientist
Utility Operator
Wastewater Treatment Plant Operator
Water Treatment Plant Operator
Water Resource Engineer
Water Quality Technician
Zoologist

Careers Checklist

1. Job Title:
2. Education required:
3. Where is this type of education available and how long does it take?
4. What kind of degree, certification, or bonding is required?
5. Who employs this type of worker?
6. What is the most common geographical location for this type of job?
7. What is the average annual salary range?
8. What are the job prospects/stability of employment?
9. Describe the work that is done on this job:
10. If there is anything else you learned in your research of this job, include it below:
11. Would you be interested in this type of job? Why or why not?