



ELIZABETH RIVER  
PROJECT

DO SOMETHING BEAUTIFUL

# Elizabeth River **Blue Green** Career Guide

Inspiring youth to choose  
education, training, and careers  
in the Elizabeth River watershed.



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The Elizabeth River Project is a non-profit organization working to restore the Elizabeth river through equitable collaboration with diverse communities, businesses, and governments.

Prepared by Elizabeth River Project's Deputy Director, Education with the support of funding from Bank of America.

Cover photo includes Elizabeth River Project's Youth Conservation Interns from Portsmouth Public High Schools.

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## ABOUT

This Elizabeth River Blue Green Career Guide provides resources for college preparation and career readiness for the Elizabeth River Blue Green workforce.

Our hope is that this guide serves as a road map for planning your career of the future with school counselors, teachers, parents, and youth.

Download this guide @ [elizabethriver.org/youth-conservation-internships/](http://elizabethriver.org/youth-conservation-internships/).



## WHAT ARE BLUE GREEN CAREERS?

According to the U.S. Bureau of Labor Statistics, **green jobs** are where businesses produce goods or provide services that benefit the environment or conserve natural resources.

**Blue jobs** are where workers produce goods or provide services that specifically benefit our bodies of water such as rivers or oceans.

Consider becoming an environmental educator aboard Elizabeth River Project's Dominion Energy Learning Barge. [www.elizabethriver.org](http://www.elizabethriver.org)





# ELIZABETH RIVER BLUE GREEN CAREERS

Organizations across the watershed cities of Norfolk, Portsmouth, Chesapeake, and Virginia Beach need your help to restore the Elizabeth River.

Choosing a blue green career within the Elizabeth River watershed is vital for the local community and the environment to become resilient. Careers in fields such as marine biology, environmental engineering, coastal resilience planning, maritime industries, horticulture, and renewable energy can help address challenges related to climate change, rising seas, and sustainable resource management. Your blue green career can also contribute to the preservation of our local ecosystem, the protection of natural resources like the Elizabeth River, and the development of innovative solutions to address pressing environmental challenges.



Source: <http://www.virginiaplaces.org/watersheds/graphics/eliz.png>

# EXAMPLES OF BLUE GREEN CAREERS

The following are possible **Blue Green** careers at organizations in the Elizabeth River watershed found on page 14 of this guide.

An **Air Pollutant Analyst** monitors, analyzes, and assesses air quality to identify and mitigate sources of pollution. The average salary is \$78,000.

An **Arborist** tends to nature through repairing, fertilizing, watering, and pruning trees and plants. The average salary is \$53,000.

A **Civil Engineer** plans, designs, and oversees the construction and ongoing maintenance of building and infrastructure projects. The average salary is \$97,380.

A **Climatologist** studies and makes predictions about climate change using data from the research and experiments they conduct. The average salary is \$90,000.

A **Coastal Planner** develops and implements strategies and plans for sustainable management and development of coastal areas. The average salary is \$100,000.

A **Commercial Fisherman** uses their knowledge of different fish species to implement various techniques to catch fish and use environmentally conscious fishing practices. The average salary is \$51,000.

A **Data Analyst** gathers and performs a statistical analysis of collected data and then configures this data to be presented to personnel within an organization. The average salary is \$68,500.

An **Ecologist** studies the relationships between organisms and their environment and investigates interactions within ecosystems to understand their function and create plans to support ecosystem health. The average salary is \$72,000.

An **Ecotourism Guide** leads and educates visitors on tours in natural environments while promoting responsible and sustainable practices. The average salary is \$39,000.

An **Environmental Consultant** provides expertise and guidance on environmental issues and regulations to individuals, businesses, and organizations. The average salary is \$70,000.

An **Environmental Educator** teaches students about various topics relating to Environmental Science such as ecology, sea-level rise, or native plants and animals. The average salary is \$43,700.



An **Environmental Journalist** uses the research collected to construct reports on current environmental issues. The average salary is \$40,500.

An **Environmental Lawyer** aids in the protection of the environment by defending environmental laws and regulations in court cases and lobbying for future environmentally conscious legislation. The average salary is \$92,000.

An **Environmental Protection Specialist** can work for a variety of employers from the military to a non-profit organization and they oversee and promote environmental compliance and conservation within the organization to ensure the adherence to governmental regulations and policies. The average salary is \$81,400.

An **Environmental Scientist** collects data from samples taken from nature and analyzes them in conducting environmental research and promoting environmental health. The average salary is \$76,500.

A **Fishery Observer** monitors and collects data on commercial fishing vessels to ensure compliance with fishing regulations and promote sustainable fishing practices. The average salary is \$55,500.

A **Habitat Restoration Specialist** assesses ecological damage, and constructs plans to improve ecosystem biodiversity in order to restore natural habitats to their original condition. The average salary is \$35,000.

A **Historian** collects historical data in order to interpret and share stories about a particular place, period in time, or historical event. The average salary is \$72,300.

A **Horticulturist** manages crop products and ensures plant health in order to improve the yield and commercial use of crops. The average salary is \$57,000.

A **Hydrologist** specializes in studying the distribution and quality of water and conducts analysis of water resources in order to develop models and make predictions about water quality and availability. The average salary is \$74,800.

A **Lab Specialist** receives, labels, and analyzes samples and may conduct experiments in a laboratory. The average salary is \$58,400.

A **Landscape Architect** designs aesthetically pleasing and functional parks, gardens, residential areas and a variety of other outdoor spaces. The average salary is \$97,700.

A **Landscaper** curates and maintains gardens and lawns through practices like mowing, raking, and weeding. The average salary is \$28,500.

A **Longshoreman** loads and unloads freight from cargo ships to docks and are crucial to the importation and exportation processes of goods. The average salary is \$57,000.

A **Marine Biologist** conducts research and collects data of marine organisms and their habitats in order to conserve and manage marine ecosystems. The average salary is \$65,000.

A **Nature Photographer** takes pictures of animals, plants, and natural landscapes and edits these photos to be presented by an organization. The average salary is \$36,400.

A **Park Ranger** patrols natural environments and ensures the safety of visitors and the native plants and animals. The average salary is \$40,000.

A **Recycling Officer** plans and manages waste reduction policies for businesses, organizations, or the government. The average salary is \$53,500.

A **Renewable Energy Scientist** works to develop technology that harvests energy from solar, wind, or hydroelectric sources. The average salary is \$111,000.

A **Researcher** gathers data and analyzes this data in order to investigate a hypothesis or a research question and aid in the advancement in a certain field. The average salary is \$60,200.

A **Ship Captain** commands the vessel, its passengers, cargo, and crew and implements efficiency and safety measures. The average salary is \$94,400.

A **Solar Technician** installs, performs maintenance, and repairs solar energy systems to ensure efficient energy production. The average salary is \$48,000.

An **Urban Planner** develops land use plans for cities and towns and finds ways to implement sustainability and efficiency in urban settings. The average salary is \$51,500.

A **Water Quality Scientist** looks at how specific factors impact water quality overtime and helps devise plans to improve water quality. The average salary is \$52,995.

A **Wetland Scientist** specializes in the study of management of wetland ecosystems and preserves wildlife, maintains a cleanliness water resources, and plans projects to help wetlands like litter cleanups. The average salary is \$64,000.

A **Wildlife Veterinarian** tend to the health of wild animals through medical examinations, vaccinations, and surgery. The average salary is \$120,000.



# TRAINING & EDUCATION

## VOLUNTEER OPPORTUNITIES

By volunteering for a local blue green organization like the Elizabeth River Project, you can build your resume and gain valuable experience.

### Chesapeake Bay Foundation

Clean the Bay Day, Clean Water Captains, Stream and Shoreline Restoration  
<https://www.cbf.org/about-cbf/locations/virginia/offices/richmond/volunteer.html>  
(410) 268-8816

### Elizabeth River Project

Litter Clean-Ups, Paradise Creek Nature Park, Restoration Projects  
<https://elizabethriver.org/volunteer/>  
(757) 399-7487

### Keep Norfolk Beautiful

Community Cleanup, Adopt- A-Spot Cleanup, Green Bucket Brigade Cleanup, Beautification Event  
<https://www.norfolk.gov/2376/Keep-Norfolk-Beautiful>  
(757) 441-1347

### Nauticus

Battleship Crew Member, Discovery Crew Member, Guest Ambassador, Sail Nauticus Crew Member, Restore BB64  
<https://nauticus.org/give/volunteer/>  
(757) 664-1043

### Virginia Zoological Park

Zoo crew volunteer, conservation youth team, episodic volunteer  
<https://virginiazoo.org/get-involved/volunteer/>  
(757) 441-2374



## INTERNSHIPS

You can get an internship with an organization in the Elizabeth River watershed to explore your blue green career options and gain useful work experience.

### **Chesapeake Bay Internship Program**

Spring and summer internships for high school, graduate, and undergraduate students.

<https://www.cbf.org/about-cbf/jobs-internships/internships/>  
(888) 728-3229

### **Elizabeth River Project Youth Internships**

Youth conservation summer internships are 8-weeks, and held at Paradise Creek Nature Park, Portsmouth, Virginia for Portsmouth high school students to learn horticulture and landscaping skills, earn a Chesapeake Bay landscaping professional certificate and stipends.

<https://elizabethriver.org/youth-conservation-internships/>  
(757) 399-7487

### **Nauticus Internships**

For college students seeking experience in museum field.

<https://www.volgistics.com/appform/871867132>  
(757) 664-1000

### **Virginia Department of Marine Science (VIMS) Summer Internship Program**

[https://www.vims.edu/education/college/summer\\_intern/dates/index.php](https://www.vims.edu/education/college/summer_intern/dates/index.php)  
(703) 292-7709





## APPRENTICESHIPS

Apprenticeships can help you build your skill set and establish long-lasting relationships with local organizations and give you real-world experience.

### Colonna's Shipyard Apprenticeship

<https://www.colonnaship.com/shipyard-careers/>  
(800) 265-6627

### Hampton Roads Sanitation District Apprenticeship

<https://www.hrsd.com/apprenticeship>  
(757) 460-2261

### Norfolk Naval Shipyard Apprentice

<https://help.tcc.edu/s/article/Norfolk-Naval-Shipyard-Apprentice-Program>  
(757) 929-2219

### Tidewater Wooden Boat Workshop

<https://twbw.org/programs>  
(757) 937-6812

### Carter Machinery Marine Apprentice Technician

<https://www.careersatcarter.com/apprenticeship/>  
(800) 768-4200



## COLLEGES

You could consider attending a local trade school or community college that offers an expedited path to earn a degree for your dream blue green career.

### **CENTURA COLLEGE**

Wind turbine technician program  
(877) 523-9528 |  
<https://www.centuracollege.edu/>  
Administrative offices located at 4455 South Blvd., Virginia Beach, VA 23452 (campuses located in Chesapeake, Norfolk, Virginia Beach, Newport News)

### **VIRGINIA PENINSULA COMMUNITY COLLEGE**

(formerly known as Thomas Nelson Community College)  
Engineering, Science, Science specialization in Computer Science, Science specialization in Education  
(757) 825-2700 |  
<https://www.vpcc.edu/index.html99>  
Thomas Nelson Drive Hampton, VA 23666 (Hampton Campus)

### **TIDEWATER COMMUNITY COLLEGE**

Renewable Energy Technologies Certificate  
(757) 822-1111 |  
<https://www.tcc.edu/>  
Green District Administration Building  
121 College Place, Norfolk, VA 23510  
(campuses in Norfolk and Virginia Beach)



Consider the Access College Foundation as a tool for making your pathway to higher education easier.

2555 Ellsmere Avenue, Suite 110 Norfolk, Virginia 23513 |  
[info@accesscollege.org](mailto:info@accesscollege.org) | (757) 962-6113



## UNIVERSITIES

You can attend one of the accredited 4-year institutions to develop a robust knowledge in a certain field.

### **CHRISTOPHER NEWPORT UNIVERSITY**

Computer Science, Environmental Science, Environmental Studies, Biochemistry  
(757) 594-7000 |  
<https://cnu.edu/>  
Newport News, VA 23606

### **JAMES MADISON UNIVERSITY**

Architectural Design, Biology, Computer Information Systems, Earth Science  
(540) 433-5300 |  
<https://www.jmu.edu/>  
800 South Main Street  
Harrisonburg, VA 22807

### **NORFOLK STATE UNIVERSITY**

Storm Water Pollution Training Program, Biology, Botany, Restoring Oyster Habitats  
(757) 823-8600 |  
<https://www.nsu.edu/>  
700 Park Avenue Norfolk VA 23504

### **OLD DOMINION UNIVERSITY**

Biochemistry, Biology, Coastal Engineering Certificate, Environmental Science, Earth Science Education  
(757) 683-3000 |  
<https://www.odu.edu/>  
5115 Hampton Blvd Norfolk, VA 23529



### **REGENT UNIVERSITY**

Biology, Computer Engineering  
(800) 373-5504 |  
<https://www.regent.edu/>  
1000 Regent University Drive, Virginia Beach, VA 23464

### **UNIVERSITY OF VIRGINIA**

Architecture, Engineering Science, Environmental Science  
Environmental Thought and Practice  
(434) 924-0311 |  
<https://www.virginia.edu/>  
1827 University Avenue, Charlottesville, Virginia.

### **VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY**

Agrobusiness, Biology, Crop and Soil Sciences, Ecological Restoration, Fish Conservation, Meteorology  
(540) 231-6000  
<https://www.vt.edu/>  
800 Washington Street, SW, Suite 150  
Blacksburg, VA 24061

### **VIRGINIA WESLEYAN UNIVERSITY**

Earth and Environmental Sciences, Biology, Chemistry, Environmental Management, Sustainability Management  
(757) 455-3200 |  
<https://www.vwu.edu/>  
5817 Wesleyan Drive Virginia Beach, Virginia 23455

### **WILLIAM & MARY**

Environment and Sustainability, Geology, Biology, Chemistry  
(757) 221-4223 |  
<https://www.wm.edu/>  
200 Stadium Dr, Williamsburg, VA 23185



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RIVER STAR BUSINESSES

River Star Businesses is the program of the Elizabeth River Project for organizations that are “Doing Something Beautiful” with voluntary pollution prevention and wildlife habitat.



Without the help of Elizabeth River Project’s River Star Businesses, improving the health of the Elizabeth River would be impossible.

Visit this link <https://elizabethriver.org/river-star-businesses/> to view the River Star Businesses and consider working at one of these great businesses with significant opportunities to Do Something Beautiful.

JOIN ELIZABETH RIVER PROJECT: <https://elizabethriver.org/>