



**ELIZABETH RIVER
PROJECT**

DO SOMETHING BEAUTIFUL

Our Elizabeth River, Our Responsibility

Providing MWEEs and Inclusive Elizabeth River Education



Our children will become hopeful, resilient leaders who innovate and persevere to safeguard our community as our lives change with a changing environment. Pictured above: Students hold Periwinkle snails

The nonprofit Elizabeth River Project engaged students and teachers from Portsmouth Public Schools through park and barge field investigations, and teacher workshops. Projects were

completed that focused on environmental literacy, sea level rise education and opportunities to act as engaged environmental stewards through Meaningful Watershed Educational Experiences (MWEEs).

Resilient Youth Projects:
Christopher Academy “Oyster Restoration and Energy Conservation”

Monthly, the 4th grade students at Christopher Academy travel to Hoffler Creek to clean, measure and care for 2,000 oysters. They check water turbidity, salinity and temperature noting any unusual



weather events. They also document other observations from the float and the oyster bag and track morbidity. At the end of April they deposited oysters on the Lynnhaven River to their forever home on an oyster reef so they continue to grow and clean our waterways. Second graders at Christopher Academy explored ways to conserve energy. They worked together to make a list of ways to save energy in their homes, then used those tips to make posters to hang around the school to share with other students and teachers.

Cradock Elementary School School “Planting for Pollinators”

Third and fourth grade students at Cradock Elementary planted 50 native pollinator plants (milkweed, lavender, fennel, black eyed susan, coneflower, bee-balm) at their school yard to celebrate Earth Day! These plants will benefit native butterflies, bees and birds as well as beautify the school grounds, capture rain water and help maintain a healthy watershed.



I. C. Norcom High School “The effects of saltwater on Atlantic White Cedar trees”

Students from I. C. Norcom High School grew Atlantic White Cedar tree seedlings for a year and conducted research on their growing conditions. They tested water with various salinity readings to determine how the tree growth is impacted by sea level rise and flooding. They planted their seedlings at Paradise Creek Nature Park during a field investigation/visit with guest scientist.



Portsmouth Public Schools, Oyster Project Summer Camp “Restore Oysters in the River”

Portsmouth Public School 6th graders participated in a summer camp to learn about the importance of oysters in the Elizabeth River and Chesapeake Bay. They created 10 public service announcements (PSAs) at the end of the camp to share their



knowledge and increase awareness of oysters. They also planted 6,000 small oysters at established oyster beds in the Elizabeth River at Portsmouth City Park!

Westhaven Elementary School “Leave it better than you found it”.

Westhaven Elementary School 5th graders noticed that there was too much trash on their school ground and so they added several drums for new trash containers and reduced runoff pollution! They worked with the art teachers to paint the new trash containers so people would notice and use them. So far this year they have collected 47.5 lbs of trash!



Teacher Training: Educators were provided on-line, self-paced resources as well as options for in-person training for the Resilient River Star Schools program. The self-paced virtual lessons help the teachers become more confident in teaching about sea level rise and resiliency. The teachers learn how pollution and sea-level rise affect their communities and themselves, along with stewardship actions that can help. Elizabeth River project educators helped with training and resources and support, in addition to providing funding for action project supplies.



Public Involvement: The students’ parents/guardians supported the students participating in field investigations and implementing youth resilient projects. In addition, they were invited to view the submissions on the Elizabeth River Project website and YouTube site:

[Youth Projects & Resilience Expo - Elizabeth River Project](#)

https://youtube.com/playlist?list=PLmoNvHeLvotUwt_2Q-HbvcPd48BCHTN5

Youth Water Monitoring:

Portsmouth youth helped track the river’s health and progress by monitoring the water quality in their neighborhood. Each youth

March 18th - May 12th

Water Monitors spend 8 weeks on the water testing temperature, pH, dissolved oxygen, bacteria, nitrates, phosphates, turbidity and salinity. All of their results are posted here each week, so we can all keep track of the river’s health.

THIS WEEK’S RESULTS

Citizen Water Monitoring Test Averages										
Week 7 - April 29th-May 5th										
	Water Temp.		pH	Bacteria	Nitrates	Phosphates	D.O.	D.O. %	Turbidity	Salinity
	°F	°C			(ppm)	(ppm)	(ppm)	saturation	(JTU)	(ppt)
Main Stem	71	22	7	+	5	1	4	46%	40	19
Lafayette	68	20	8	+	5	1	8	88%	40	13
Eastern Branch	66.667	19	7	+	5	3	5	51-70%	75	10
Southern Branch	65	18	7	+	5	1	8	84%	100	19
Western Branch	70	21	7.5	+	3.5	1	4.5	51-70%	20	30
Overall Averages	68.133	20	7.3	Positive	4.7	1.4	5.9	51-70%	55	18.2
Rank	N/A	N/A	Excellent	Poor	Good	Excellent	Good	Fair	Fair	N/A

Week 7 results show similar measurements as previous weeks. The lowest dissolved oxygen sample location was along the Western Branch. The Southern Branch sampling location had the highest turbidity reading. Turbidity can increase as a result of runoff after rain events. Bacteria continues to be present in all samples. Please remember to scoop the poop especially before a rain.

received training and supplies and then the education staff supported them throughout the eight weeks. They collected data including water temperature, pH, bacteria, nitrates, phosphates, dissolved oxygen, turbidity and salinity. Data was then uploaded weekly and shared via <https://elizabethriver.org/youth-water-monitoring/>.

Program Development with Portsmouth Public Schools

The Elizabeth River Project’s education staff have been working with Portsmouth Public School’s teachers to plan Oyster Camp. The camp will be held at Elizabeth River Project’s River Academy at Paradise Creek Nature Park in Portsmouth. Students will participate in a field investigation aboard the Learning Barge, kayak at the park, and learn river science including testing water quality and learning all about oysters and their value.

