WHRO Public Media – Embracing Education As Its Foundation and Its Future

Submitted by Belinda Elliott, Marketing Content Manager, WHRO Public Media

While many are familiar with WHRO Public Media and the vast number of television and radio programs they offer, they may not be aware of the educational services they provide to students and teachers across Virginia.

WHRO Public Media was originally founded to support local K-12 school divisions. The station was formed in 1961 as Virginia's first non-commercial, educational television station, bringing televised teaching into the region's classrooms. As the only public media station in the country owned by a collaboration of 21 local school divisions – including those on the Eastern Shore – education is still at the heart of all they do.

Teacher Resources: As member-owners of the station, Eastern Shore school divisions receive a wealth of services and resources that they can put to use the very next day in the classroom. WHRO supports local educators by providing ongoing, high-quality teacher trainings; innovative, technology-based instructional resources; and regional opportunities for recognition. WHRO offers an extensive catalog of professional development and continuing education courses, as well as hands-on workshops and webinars. In 2020-2021, WHRO offered 11 online professional development sessions that were attended by more than 1,500 teachers from member-owner schools, including 95 teachers from the Eastern Shore.

Online Courses: WHRO also provides online courses, custom educational content, and accessible, statewide delivery platforms for school systems. Their catalog of textbook-independent, media-rich courses are aligned to Virginia’s Standards of Learning (SOL) and are fully customizable to meet the needs of school divisions. In addition, teachers also have access to eMediaVA.org, Virginia’s premier online destination for free, innovative, SOL-aligned learning content for their classrooms. While schools were closed during the pandemic, WHRO saw record use of this platform, as teachers and students found it to be a valuable resource for at-home learning.

Van Programs: Eastern Shore students benefit from additional services available through WHRO, including their colorful vans, often parked outside a local elementary school or at a community event. WHRO has 3 vehicles, featuring children's favorite PBS Kids characters, to take learning on the road. In WHRO's Literacy Van Program, children learn about reading, hear a story read aloud, and take a pledge to practice so they will become better readers. Through the STEM Van Program, students learn coding, math, and engineering concepts while creating fun crafts and competing in games on an iPad.

The most recent addition, an environmental van, features environmental content and SOL-aligned curriculum.

Technology for the Eastern Shore: This summer, WHRO also helped coordinate an effort to bring new technology to classrooms in Eastern Shore schools. An anonymous donor and supporter of WHRO wanted to assist Eastern Shore's public

See WHRO, cont’d on p. 6

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After an unprecedented COVID-related cancellation in 2020, CBES is grateful that along with our cyclists, the Shore community stuck with us. Generous sponsors and dedicated volunteers made for a popular 28th Between the Waters Bike Tour. This major fundraiser allows CBES to continue its work protecting what you love about the Shore. Also, as one of the biggest Shore ecotourism events, the Bike Tour has a positive economic impact on towns and businesses, bringing in visitors while showing why our coastal gem’s protection is vital.

Please share our thanks with the following folks and support those who support our community!

We salute CBES Bike Tour Coordinator, Mary Ehmann. It was her first year at the helm and she exceeded all expectations with her skill, grace, humor, and muscle!

**She Makes Us Look So Good**

CBES official Between the Waters Bike Tour Artist, Bethany Simpson’s gorgeous art once again graced our promotional materials, T-shirts, and Bike Apparel. This year’s Bay Bike Mermaid was especially popular. She donates her work 100%, helping CBES to raise much-needed funds. We are honored by her generosity.

**Special Thanks to Those Who Shared Their Spaces**

Chesapeake Bay Bridge Tunnel, Eastern Shore of Virginia Welcome Center
Eastern Shore of Virginia National Wildlife Refuge
Susan and Phil Harris, Look East Farm
Sally and Kurt Lewin, Lakeview
Laughing King Retreat, MJ Golibart and Hungar’s Beach Community
Northampton County, Morley’s Wharf Boat Ramp
Shockley Farms, Pattie and Thomas Shockley
Sunset Beach Hotel and KOA Resort
Cape Charles/Chesapeake Bay
The Nature Conservancy
Town of Cape Charles
Town of Exmore, Exmore Town Park
University of Virginia Coastal Research Center

**Online Auction Donors:**

*You Made Our 1st Year a WINNER!*

At Altitude Gallery, Gordon Campbell
Burnham Guides, Mary Burnham
Cape Charles Brewing Company, Chris and Mark Marshall
Diana Davis
Eastern Shore Custom Carts, Elizabeth Russell
Gone Coastal ESVA, Tammy Edmonds
Jim Baugh Outdoors, Jim Baugh
Mary Miller
Moonrise Jewelry, Meredith Lusk
REI Virginia Beach Store, Kelly Keys
Savoy Studio, Sarah Morgan

Sea Glass by Kathy Grook
Seaside Boheme Studio, Helene Doughty
Seaside Ecotours, Meriwether Payne
Table and Tonic, Leigh Greer
The Forrest Photography Gallery, Keith Forrest
The Sheep Lady, Gail Scott
Windsor Woodworks, Kurt and Sally Lewin

**Bike Tour Volunteers:**

*Our Hands & Hearts*

Lynn Allison
Sandra Beerands
Vincent Bochicchio
Elena Brown
Kevin Cannon
Susan Carrigan
John Coker
Martina Coker
Norman Colpitts
Chad Davis
Joani Donohoe
Kathy Durmick
Steven Ehmann
Matt Foley
Sally Goessel
Eleanor Gordon
Liz Harrell
Phil Harris
Susan Harris
Cora Johnston-Baird
Laurie Jones
Pauli Kaiser
John Kolos
Larry LeMasters
Laura LeMasters
Bo Lusk
George Mapp
Sue Mastyl
Annie McConnell
Mary Miller
Sarah McConnell
Anne Mytnik
William Mytnik
Barbara O’Hare

See Bike Tour, cont’d on p. 3
The 28th Between the Waters Bike Tour was dedicated to the memory of Dr. Henry Dixon. A founder of the Tour, he cared tirelessly for our community.

The 28th Between the Waters Bike Tour had many challenges regarding the Start/Finish. CBES is most grateful for the cooperation and patience of the Eastern Shore Wildlife Refuge. We also recognize the event could not have happened if not for the advice, planning assistance, and hands-on help, starting months prior to the tour, by our community-minded friends at the Chesapeake Bay Bridge-Tunnel.

Start and Finish Crew, Eastern Shore of Virginia National Wildlife Refuge and Chesapeake Bay Bridge-Tunnel

CBBT Director of Operations-Chief of Police, Officer Eddie Spencer
CBBT Executive Director, Jeff Holland
CBBT Flagmen Mike Toy and Lavor Dunton
CBBT Maintenance Personnel, Zane Strickler and John Perkins
CBBT Police Officers, Officer Ernie Hall and Lieutenant Jeff Lilliston
National Wildlife Refuge Manager, Meta Griffin

Thanks for a Great Bike Tour!

This group of riders, shown here at The Nature Conservancy’s Box Tree rest stop on the seaside east of Machipongo, was unfailingly positive and energetic throughout the ride.
Tides and Currents, Part II
By George Mapp

(Part I was all about the moon and the sun and the influence of weather.)

River Flow

Freshwater input from the Susquehanna, James, Potomac, etc., can have a big influence on the magnitude of Bay tides, particularly in the upper Bay. After widespread rains on the huge Chesapeake Bay watershed, which extends up into New York state, river flow can overwhelm incoming (flood) tide so that there is only ebbing.

Freshwater is less dense than salty seawater, so it flows along the surface as it moves into the Bay. Conversely, salty ocean water flows inland along the bottom of the Bay. Mixing takes place in between. Some animals take advantage of this 2-way flow by migrating up and down in the water column to access favorable currents.

Basins

The size and shape of the “basin” – the bottom of the ocean, bay, or seaside lagoon – plays a big role in tides and currents. If the basin is deep and wide enough, water levels can rise and fall like slowly swirling coffee in a cup, instead of simply flowing upstream and downstream.

In fact, tides are considered by marine scientists to be very long, very shallow waves. In short, narrow, closed-end basins, slack water occurs at high and low tides. However, in larger bodies like the Bay, slack water can occur in-between highs and lows. For example, at Fisherman Island at the mouth of the bay, maximum currents occur at high and low tides, with slack water in between.

On the Bayside, the average tide range is about 3 feet at the southern tip, decreasing to 2 feet along Accomack County. On the Seaside, with narrow inlets and channels that meander through wide shallow bays, mudflats, and marshes, it’s more like 4 feet (Wachapreague, Hog Island), but can be higher – it’s 5 feet at Quinby. These are averages; spring highs will be higher and neap highs, lower.

Tidal Currents

Sailors, kayakers, fishermen, and to a lesser extent, power boaters, are sensitive to tides and tidal currents. Unfortunately, currents can be hard to predict, due to the sparseness of observations (compared to tide heights). With improved technology, this situation should improve.

According to a recent article in Chesapeake Bay Magazine,1 “Oceanographers will tell you that while it’s possible to predict the time of high and low water with precision, accurately predicting currents is far more difficult. On the Chesapeake, it’s nearly impossible. ...

“For instance, in the lower Bay, the flood tide starts earlier and runs stronger along the Eastern Shore, which may be due to the Coriolis Effect. Currents in the major rivers behave similarly to the main stem of the Bay, but in the mid-Bay region near the mouth of the Potomac, the currents are hard to predict.”

In 1988, VIMS researcher John Boon, for his first tide current measurements, placed an instrument near the mouth of the James River off Buckroe Beach. He was surprised that during the first 12 hours of observations, the currents continuously changed directions but did not vary much in speed, the vectors rotating much like the hour hand of a clock. There were no slack tides.

Measurements

Water levels are monitored at Saxis, Chincoteague, Wachapreague, Quinby, Bayford, Hog Island, Redbank, Oyster, Kiptopeke, Fisherman’s Island, and the Chesapeake Bay Bridge-Tunnel. Older tide gauges measure the water level in a vertical pipe with a small opening near the bottom. The small opening reduces the effects of waves. The pipe is called a “stilling well.” An acoustic sensor measures the water level. A float would work also, but these get fouled too quickly with barnacles. A newer technology employs a microwave sensor that hangs out over the water and does not use a stilling well. Since it does not contact the water, it’s much easier to maintain.

Modern current meters are acoustic or electromagnetic. Acoustic meters track the motion of small particles and are more accurate. Both have no moving parts.

With rising sea levels, tidal datums such as mean high water and mean low water must be adjusted periodically. In Virginia, private property extends to mean low water, and vegetated wetlands are defined as between mean low water and “an elevation above mean low water equal to the factor one and one-half times the mean tide range.”

It’s Complicated

The timing of high and low tides has been forecasted accurately for decades. Tide levels have been somewhat less accurately predicted; but this is improving, at least in the short term, as meteorology is being incorporated into models. Tide currents can be predicted most accurately where meters are deployed – not many places.

I hope we’ve piqued your interest in tides. It’s quite complex. So the next henning tide (fall highs good for hunting marsh hens), think of the moon and the sun and sustained onshore winds. And the next time you’re headed out into unfamiliar waters, beware that you may not be able to predict tidal currents, and have a good “Plan B.”

1Hale, T., 2016. Chesapeake Bay Magazine
https://chesapeakebaymagazine.com/they-bays-ups-downs/
A list of sources for this article is available at cbes.org.
Roasted Winter Squash Potage
With Bacon-Cheese Croutons

A nice potage in winter, with a little something warm and crunchy to go with it, makes a perfect early supper on a cold night. Potage just means a hearty creamy soup that’s been simmered almost smooth, but not thinned down much. This one takes a little time, is a bit French-fussy, but oh, the reward at the end of the afternoon. Any winter squash will work – butternut, small pumpkin, etc – and the flavors can be adjusted to taste.

- 8 cups of cut-up squash
- ½ cup chopped onion (optional)
- 4 to 6 cups chicken or vegetable broth
- 2 to 4 tbsp. butter
- Dried thyme
- Dried sage
- Salt and pepper
- Cream
- 2 to 4 tbsp. maple syrup

Peel, clean, and cut squash to 2” pieces (unpeeled squash may be pierced with sharp knife and roasted at 400° for 45 minutes or so, cooled, then peeled and cut up). Toss squash pieces with salt, pepper, onions if using, and olive oil – roast at 400° until very soft. Transfer to heavy saucepan and add a little broth – mash well or use food processor/immersion blender until squash is almost smooth. Add more broth until mixture loosens. Add spices, butter, and maple syrup. Simmer uncovered for an hour or so, adding broth from time to time. When soup starts to thicken for the final time, add the cream and heat gently to finish the potage.

Croutons:
- 4 oz. grated sharp cheese
- 3 slices cooked, crumbled bacon
- 1 beaten egg
- A few drops of tabasco sauce

Mix thoroughly and chill for ½ hour. Spread 2 tsp. of mixture on thin baguette slices. Place on baking sheet for 5 minutes or so in 400° oven.


Accomack Hearing on Changes to Election Districts and Voting Precincts

By Sue Mastyl

On October 25, the Accomack Board of Supervisors held a Special Hearing for input on the proposed changes to election districts and voting precincts in the county, based on results from the 2020 Census. No comments were received from the public. Changes are required after each Census, to ensure that districts don’t deviate more than 5% from the ideal district size. Changes will be in effect in 2022.

Based on the 2020 Census, the ideal district size for the county is 3,726 people. Five of the 9 districts were outside of the 5% range, with District 6 down by 10.4% and District 2 up by 18.3%.

Changes included:
- Addition of mainland area around NASA to District 1 (previously solely Chincoteague)
- Shift of portions of District 2 to District 4 (town of Hallwood and surrounding areas) and District 3 (additional areas around Hallwood and Temperanceville)
- Shift of portions of District 4 (west side of Route 316 towards Lee Mont) and portions of District 7 (north side of Onancock Creek) to District 6
- Shift of portion of District 8 (east of Route 13, south of town of Onley and Locustville Road) to District 7

Three minority majority districts (Districts 3, 5, and 9) were maintained as is or slightly strengthened with respect to minority population.

Election precincts were moved to align with the district changes. In addition, a portion of the current Greenbackville precinct around Wattsville was shifted to the Atlantic precinct, and a portion of the current Saxis precinct west of Hallwood was shifted to the Bloxom precinct.

ShoreLine comment: An examination of the map for the 9 districts – both current and proposed – shows that 4 of the 9 districts (Districts 6 to 9) stretch from the Bayside to the Seaside, with some areas protruding into other districts (https://go.boarddocs.com/va/coa/Board.nsf/files/C7TL6F54B198/$file/Proposed%20Districts%2020211007%20Updated.pdf). This configuration does not appear to meet the Virginia requirements that districts be “compact and contiguous,” with “clearly defined and observable boundaries.” Although a rural population presents unique challenges, we hope this can be improved in future modifications.
NOAA Releases Action Plan for Marine Debris

Earlier this year, NOAA released the 2021 Mid-Atlantic Marine Debris Action Plan (https://marinedebris.noaa.gov/regional-action-plan/mid-atlantic-marine-debris-action-plan), which is the result of collaborative efforts with more than 150 stakeholders in Delaware, Maryland, New York, New Jersey, Virginia, and the District of Columbia. The plan outlines a total of 54 actions to be undertaken by 2026 with 96 partner organizations, and also incorporates the principles of justice, equity, diversity, and inclusion as core values across all goals.

The 54 actions are designed to achieve the objectives for 4 goals, which are to understand, prevent, and mitigate:

- The impacts of consumer debris
- The impacts of derelict fishing gear
- The impacts of microplastics and microfibers
- The contributions of abandoned and derelict vessels (ADVs), shrink wrap, fiberglass, and other related debris

Specific actions include outreach, education, research, infrastructure, and policy and management. Some of the actions targeted by the end of 2026 include:

- Engage at least 50,000 Mid-Atlantic residents in meaningful interactions that promote source reduction of common consumer debris items, including single-use plastics
- Engage at least 250 private-sector partners in the food service, travel, and tourism industries to understand barriers and implement single-use plastic reduction practices
- Coordinate with local and state groups to reach new audiences and host new annual cleanup events in new locations to serve underserved areas and communities
- Engage with at least 10 aquaculture organizations to better understand debris issues, storm preparedness, and information gaps
- Implement 2 new projects to partner with watermen to use innovative technologies to prevent and remove derelict fishing gear in coastal and marine environments
- Engage at least 5 fashion, textiles, manufacturing, production, distribution, and/or retail industries in pilot projects to prevent or capture microfibers from clothing and textiles in wastewater
- Identify opportunities to create state inventory programs for ADVs and identify hotspots
- Provide technical assistance and information on funding opportunities to remove ADVs considered priorities by local, state, and federal agencies

Competition: WHRO sponsors several annual competitions that allow students to develop hands-on skills and celebrate their successes. Students, parents, and teachers all enjoy these competitive learning events. The regional competition for the Scripps National Spelling Bee is held in the spring each year to determine which student will represent the region in the national competition. The Great Computer Challenge is an opportunity for young scholars to demonstrate their knowledge of various computer applications and programming skills. The WHRO Young Storytellers Contest is a writing contest for students in grades K-5.

Much has changed since WHRO began airing in 1961 as Home Room One, as a way to use a new technology – television – to enhance learning in the classroom. Sixty years later, educators across Virginia still rely on WHRO to help them meet their needs as well as the needs of their students. Learn more about WHRO’s educational resources for teachers and families at whro.org/educators.
Don’t Forget Annual Giving

The Shore needs CBES; CBES needs the Shore.

As the holiday season gains fever pitch, please take a moment to contribute to CBES. With your help, CBES can continue our 33 years of keeping the community informed on critical issues through our monthly ShoreLine, pertinent emails, and online forums. Help us maintain our role in actively engaging citizens to participate in the Shore’s governance and our responsibility as your local government watchdog.

That includes our long history of CBES Candidate Forums, this year provided in a special edition Shorefacts print and online publication. And our newest commitment, fighting for accessible, affordable internet for all citizens.

CBES celebrates our diversity and strengthens bonds at the annual Community Unity Day. And we walk the talk – or should we say, cycle it – as we bring sustainable economic development to our businesses and small towns across the Shore through the now-28-year-old Between the Waters Bike Tour.

Go to www.cbes.org to donate, or send a tax-deductible check with your contact info to CBES, P.O. Box 882, Eastville, Virginia 23347.

Please give as generously as you can. All donations are welcome and appreciated!

Help us protect what you love about the Shore.

Northampton Supervisors Set General Assembly Priorities

The county has proposed a draft of its General Assembly (GA) priorities for the 2022 Session. They include:

- The cost of competing teacher salary adjustments for both counties (approved on a trial basis in 2021)
- Sustainable funding for waterway communities to build and maintain the infrastructure critical to the economy and culture
- $1,000,000 grant for reconfiguring the old Machipongo Middle School into a community center (successful in 2021 GA)
- Opposition to elimination of vehicle safety inspections; supports a several-year exemption for new vehicles and increased access to inspection sites
- Grants and no-interest loans for workforce housing
- Tourism funding for Eastern Shore communities

Keeping Track

For-Profit Companies Challenge ESVBA Application

In September, the Eastern Shore of Virginia Broadband Authority (ESVBA) submitted their application to the Virginia Telecommunications Initiative (VATI) for 2022 grants. The application was for $12,310,777.25, with matching funds (21.2% of the total project cost) of $3,314,865.50 coming from the 2 counties and ESVBA. The total project would include building an additional 269 miles, with 421 segments and 14,526 passings (homes or businesses). The full application can be found at https://www.dhcd.virginia.gov/sites/default/files/Docx/vati/FY2022-vati-applications/1-eastern-shore-virginia-broadband-authority-accomack-northampton-broadband-expansion-project.pdf.

Both Neubeam (part of Declaration Network Group, Inc.) and Spectrum have challenged ESVBA’s application. Spectrum claims that it already serves more than 10% of the service area designated in ESVBA’s application; they requested and were granted Freedom of Information Act (FOIA) exemption for data on their coverage, making a detailed rebuttal difficult. Neubeam claims that 38% of the proposed homes or businesses are serviceable by them, although ESVBA intentionally avoided the areas previously designated by a USDA grant for coverage by Neubeam.

ESVBA’s challenge rebuttals were due by November 18, and the challenge determination will be made by December 3.

As previously discussed in ShoreLine, ESVBA is a nonprofit municipal authority formed to provide fiber broadband services to both counties. Neubeam and Spectrum are for-profit companies; Neubeam provides wireless services, while Spectrum provides fiber services.

ShoreLine comment: As we’ve been noting since our coverage of broadband began in November 2020, the intersection among the nonprofit municipal authority, ESVBA, and the for-profit companies has been problematic. As Spectrum’s FOIA exemption indicates, the for-profit companies don’t want to share their plans or their coverage maps. And the maps maintained at the state and federal level are based on data provided by these companies. There is also a complete lack of oversight and accountability here, since these companies get to designate whole areas for coverage, without having to go back and prove they’re actually providing the service. In fact, there are households/businesses that are considered “covered,” but in reality, are not. And ESVBA can’t use VATI grants to pay for areas that fall in this coverage gap. This is problematic for a service that is now considered essential. We hope that the new infrastructure bill will begin to address this issue, and we’ll keep our readers informed as details become available.
**INFORM, ENGAGE, EMPOWER!**

Check your label – if it doesn’t show ‘22 or Life, you need to renew (cbes.org).

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**Community Calendar***

*NOTE: For current status of public meetings, go to the appropriate website or contact by email or phone.*

<table>
<thead>
<tr>
<th>County</th>
<th>Contact Details</th>
<th>Schedule</th>
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<tbody>
<tr>
<td>Northampton</td>
<td>757-678-0440 <a href="#">www.co.northampton.va.us</a></td>
<td>1st Tues: Board of Zoning Appeals (BOS) 10 AM, Eastville&lt;br&gt;1st Tues: Planning Commission (PC) 6 PM, Eastville&lt;br&gt;2nd Tues: Board of Supervisors (BOS) 6 PM, Eastville&lt;br&gt;3rd Wed: Wetlands Board Meetings as needed, Eastville&lt;br&gt;3rd Wed: PC Work Session 2 PM, Eastville&lt;br&gt;4th Tues: BOS Work Session 5 PM, Eastville&lt;br&gt;4th Thurs: School Board 6 PM, Machipongo</td>
</tr>
<tr>
<td>Accomack</td>
<td>757-787-5700 <a href="#">www.co.accomack.va.us</a></td>
<td>1st Wed: Board of Zoning Appeals 10 AM, Accomac&lt;br&gt;2nd Wed: Planning Commission (PC) 7 PM, Accomac&lt;br&gt;3rd Wed: Board of Supervisors (BOS) 5 PM, Parksley&lt;br&gt;3rd Wed: School Board 6:30 PM, Accomac&lt;br&gt;4th Tues: PC Work Session 7 PM, Accomac&lt;br&gt;4th Thurs: Wetlands Board 10 AM, Accomac&lt;br&gt;CBES and Other Activities&lt;br&gt;1st Wed: VIMS Public Seminar 7:30 PM, Wachapreague&lt;br&gt;3rd Tues: ES Ground Water Committee 10 AM, Accomac or Machipongo&lt;br&gt;3rd Tues: CBES Board Meeting 7 PM, Eastville or Belle Haven</td>
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Give your friends a membership in CBES this year! It’s perfect for people who are new to the community.

For only $25, they will receive *ShoreLine* by email or USPS (by request) and will be given advanced notice of CBES events and initiatives. For 33 years, CBES has encouraged Shore citizens to come together to improve the lives of all, while being good stewards of the environment.

Go to cbes.org or contact CBES by mail at P.O. Box 882, Eastville, VA 23347

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For membership and other CBES information: www.cbes.org