

Inside Business

The Hampton Roads Business Journal



ELIZABETH RIVER
PROJECT

RIVER STAR BUSINESS

SALUTING THE FINEST ENVIRONMENTAL STEWARDS ON THE ELIZABETH 2023

BY GABRIELLA OLIVIERI
Courtesy of Elizabeth River Project

SPONSORS

MEDIA (\$10,000+)

Inside Business
The Hampton Roads Business Journal

PLANTINUM (\$5,000)

BAE SYSTEMS
INSPIRED WORK

CMA CGM

enviva

GENERAL DYNAMICS
NASSCO-Norfolk

NS
NORFOLK SOUTHERN

GOLD (\$2,500)

BUCKEYE PARTNERS, L.P.

PENDER & COWARD
ATTORNEYS AND COUNSELLORS AT LAW

WM
WASTE MANAGEMENT

SILVER (\$1,000)

- ♦Accurate Marine Environmental
- ♦Elizabeth River Crossings
- ♦Bay Environmental
- ♦The Port of Virginia
- ♦Cox Communications

BRONZE (\$500)

- ♦Bay Power Solutions
- ♦Perdue Agribusiness
- ♦Jennifer and Burr Henderson
- ♦Vulcan Materials Company
- ♦Pam Boatwright
- ♦Wickers Crab Pot Seafood

Congratulations, River Stars!

The Elizabeth River Project launched River Star Businesses for organizational partners in 1997. Since then, River Star Businesses have become the finest environmental stewards on the Elizabeth.

POLLUTION
REDUCED
373
MILLION
POUNDS

WILDLIFE
HABITAT
RESTORED,
CONSERVED
2,512
ACRES

OTHER
MATERIALS
REDUCED,
RECYCLED
OR REUSED
**MORE THAN
A BILLION
POUNDS**

Business partners for a healthy home river



**ELIZABETH RIVER
PROJECT**

RIVER STAR BUSINESS

You, too, can be a star

Because the Elizabeth River is one of the mightiest military and industrial ports in the world, restoring this urban river to health depends on leadership from the business and government facilities that line its shore.

Thank you to the 148 facilities who together are making environmental stewardship the business standard on the Elizabeth. The non-profit Elizabeth River Project salutes these business, government facilities and other organizations for reducing pollution voluntarily by 373 million pounds since the program started in 1997. Each year a committee of participant peers and technical experts recognizes new efforts documented for committee review. Often the company achieves additional benefits while reducing pollution or restoring wildlife habitat. An example from this year's documentation: BAE Systems Norfolk Ship Repair completed several energy sustainability projects, together saving the shipyard \$24,667 annually.

Free for any facility in the Elizabeth River area, River Star participation is most successful where it can make the most difference. That's usually with sites presenting large opportunities to reduce toxic pollution or restore and conserve wildlife habitat. If this sounds like you, there's a starring role for you in the restoration of your home river.

Among typical projects, our River Star facilities may help bring back the native oyster while addressing erosion with "living shorelines," or add stormwater controls, or perhaps switch to pollution reducing technologies. Others improve energy efficiency, restore native plants and much more. In return, River Stars may not only discover cost savings, but also reduce liability and improve worker safety and morale. And then, as you're seeing here, there's the positive publicity awarded by media such as Inside Business, which each year sponsors this special report as well as a River Star Business Hall of Fame award to the top program participant.

Recognition is just part of the program. Elizabeth River Project also provides free assistance to help you identify and carry out projects, with technical staff and peer mentors at the ready.

Find out if your company is right for River Star Businesses. Contact Pam Boatwright, River Stars Businesses Program Manager, Elizabeth River Project: 757-399-7487, pboatwright@elizabethriver.org. Find out more at www.RiverStarBusinesses.org.

The Event ANNUAL RIVER STAR RECOGNITION LUNCHEON,

presented by
Elizabeth River Project.

When:
Thursday, January 19, 2023,
11:30 a.m. to 2:00 p.m.

Where:
The Founders Inn and Spa,
Tapestry Collection
by Hilton

Cost: \$25

To register: 757-399-7487

What's Inside

3 Best of the Best –
Model Level

4 Well-Rounded –
Achievement level

5 Start-up -
Commitment Level

6, 7 Sustained
Distinguished Performance

8 Inside Business
Hall of Fame

Advancing to Model Level 2023

This year's best of the best... These River Star facilities lead the community in environmental stewardship through exceptional results in pollution prevention and wildlife habitat - and mentor others.

CMA CGM

CMA CGM is not just a leader for sustainability locally. This River Star is making a global difference. The world's third-largest container shipping group, with more than 130 ships calling in the Elizabeth River each year, CMA CGM is committed to reaching Net Zero Carbon by 2050. The company is taking a lead role to reduce ocean plastics, no longer shipping recycled plastic and partnering with Plastic Odyssey. CMA CGM's U.S. headquarters in Norfolk in 2022 transformed an unremarkable stormwater pond into a beautiful native habitat, improving treatment of runoff from a large urban area. Volunteers and Elizabeth River Project installed 2,000 plants, from white lilies to marsh hibiscus and fringe trees. This global player in sea, land, air and logistics solutions also is working alongside the Woods Hole Oceanographic Institution to help protect whales through innovative technology such as acoustic detection.

Installing aquatic plants at CMA CGM's North America headquarters. Courtesy of Elizabeth River Project.



Lady Fern's Native Plants

Native plants are the single best thing you can give back to the ecosystem. In Hampton Roads, only one store focuses on selling them to the public daily – Lady Fern's Native Plants on Colley Avenue in Norfolk. Nicole Knudson, owner, grows many of them on her farm on the Eastern Shore, then waters them exclusively with rain collected at her Norfolk store. She has yet to use any city water. Lady Fern's in 2021 upgraded its cisterns with an additional 1,000 gallon tank, avoiding 27,000 gallons of municipal usage. The retailer has converted 116 sq. ft. of grass into a pollinator garden while planter boxes reduce impervious parking. Nicole is an active volunteer and plant donor with Lafayette Wetlands Partnership and Elizabeth River Project.

Nicole Knudson, owner, has yet to need city water for the native plants she sells, thanks to giant cisterns. Courtesy of Lady Fern's Native Plants.



Advancing to Achievement Level 2023

Achievement Level River Stars document significant results in both pollution prevention and wildlife habitat.

Habitat for Humanity of South Hampton Roads



Habitat for Humanity not only builds affordable homes – the South Hampton Roads division is focused on building a healthier planet. The non-profit's re-use store on Tidewater Drive in Norfolk in the last year installed solar panels on its roof to provide 8,500 watts of power. The Executive Director had spent a week living on the roof to raise the funds! For habitat, employees say they are delighted with the birds living in their new .5-acre no mow zone.

Building a better world, not just better housing, atop the Re-Store owned by Habitat for Humanity of South Hampton Roads. Courtesy of Habitat for Humanity of South Hampton Roads.

Hampton Roads Planning District Commission

The planning district office in Chesapeake worked with Elizabeth River Project to create 200 linear feet of shoreline buffer that includes pollinator plants, a no mow zone. Improvements included removal of invasive species, improved access to remove debris and native plants such as blue mistflower and columbine. The planning district representing 17 localities coordinates many environmental education and planning efforts, from “askHRgreen” to regional resilience planning. The site is also phasing in LED lighting.



Andrew Margason, General Services Manager, confers with Elizabeth River Project's Pam Boatwright. Courtesy of Elizabeth River Project.



Norfolk uses a harvester to remove 200,000+ lbs. of invasive plants from Lake Whitehurst. Courtesy of Norfolk Department of Utilities.

Norfolk Department of Utilities

Bye bye, 200,000+ lbs. of invasive aquatic plants. Norfolk's Department of Utilities removed them last year from Lake Whitehurst with an Aquatic Plant Harvester. The invasives were landfilled to reduce spread. The department also purchased a one-acre strip on Lake Wright as a development buffer while working with homeowners on its lakes to promote responsible shoreline management. Upgraded HVAC and electrical systems improve efficiency and resilience at the Moores Bridges Water Treatment Plant.

Entering at Commitment Level 2023

Commitment Level River Stars documented significant results in either pollution prevention or wildlife habitat.



CHEMRES volunteers help out at Paradise Creek Nature Park. Courtesy of CHEMRES.

CHEMRES

This provider of medical polymers achieved ISO 14001 certification and Silver rating with ECOVADIS for environmental management. Efforts include 95% LED lighting as well as equipment upgrades. Team Environmental volunteers at Paradise Creek Nature Park.



Fans and lighting are more efficient now in tunnels under the Elizabeth. By Stephen M. Katz, courtesy The Virginian-Pilot.

Elizabeth River Crossings

Your tunnel manager has avoided 54,000 lbs. of air emissions through fan and lighting efficiencies, improved stormwater management, and installed a real-time tide gauge as part of resilience planning.

Daphne's Hair Studio

Get a "green" hairdo without the dye. Visit Daphne's Hair Studio in Norfolk where green practices include sulfate and ammonia free hair products. Daphne Frank will refill your bottles and donates cut hair to non-profits.



Daphne Frank's hair products are ammonia and sulfate free. Courtesy of Elizabeth River Project.

Grandiflora Wine Garden

Natural wines are on the menu along with herbs grown on-site and education on sustainable agriculture at Grandiflora Wine Garden in Chelsea. The wine bar and inn, formerly an historic home, harvests rain water.



The wine bar promotes sustainable agriculture. Courtesy of Elizabeth River Project.



These are the quietest jet skis you ever heard – they're electric! As are other vessels at Electrified Marina. Courtesy of Elizabeth River Project.

Electrified Marina

You won't believe these are jet skis, they're so quiet. This marina on Knitting Mill Creek is gathering electric-only jet skis and motor launches for rent later this spring, and already offers EV charging.



The Norfolk distillery repurposes mash. Courtesy of Elizabeth River Project.

Reverend Spirits

This small-batch distillery of gin, vodka and bourbon in Chelsea repurposed 5,400 lbs. of mash as a livestock food supplement in cooperation with Smartmouth Brewing, also a River Star, and sources locally when possible.

Norfolk Kayak Rentals

The Lafayette branch of the Elizabeth is now accessible by kayak rental with this firm that also offers eco-tours and pursues the smallest possible carbon footprint with no office and hand-cart transport.



Eco-tours and kayak rentals make the Lafayette accessible. By Joe Justice, courtesy of Norfolk Kayak Rentals.



Norfolk State University students celebrate Earth Day with a native plant installation. Courtesy of Elizabeth River Project.

Sustained Distinguished Performance 2023

Sustained Distinguished Performance is awarded when a River Star completes a significant new initiative with no change in recognition level. The stars reflect the participant's level in the program.

★★★ **BAE Systems Norfolk Ship Repair** – The inaugural River Star Hall of Fame winner avoided nearly 300,000 lbs. of air emissions through energy projects.

★ **Bay Power Solutions** – The engine and generator company donated four EV charging stations to WHRO and continued to reduce energy at its headquarters.

★★★ **Buckeye Terminals LLC Chesapeake** – When the fuel terminal noticed an osprey attempting to nest on a dock crane, employees built an alternative: An osprey platform on a light pole. The platform was

immediately occupied: Win-win for all!

★ **Celebrate! Trees** – Norfolk's tree program planted additional "Living Legacy Groves" comprised of 126 trees at schools and parks. At Jeff Robertson Park, the trees complemented a constructed bioswale to filter stormwater.

★ **Chesapeake Central Fleet Management** – The department overseeing the city's vehicles added to its varied alternative fuel fleet and switched most vehicles to synthetic oil to reduce oil, filters and labor.

★★★ **Chesapeake Parks, Recreation & Tourism** introduced the "WaterMonster,"

a 125-gallon water refill station to reduce single-use plastic at events, while adding nine park acres for conservation and connectivity.

★ **Chrysler Museum of Art** hosted exhibits on impacts of sea-level rise, climate crisis and tidal flooding as part of an on-going theme to educate on resilience.

★ **CJ's Catered Greatness** – The caterer keeps neighboring curb and stormwater inlets clean while adding more LED lighting for efficiency.

★★ **Coastal Virginia Unitarian Universalists** – The church added

composting and began collecting plastics bags to meet Trex's "bags to benches" challenge.

★ **Colonna's Shipyard** – The shipyard converted all exterior lighting to LED while removing both a railway and a dilapidated bulkhead.

★★★ **Enviva Port of Chesapeake** – This wood pellet terminal increased oyster tending, from six cages to 20. The facility added efficient HVAC and LED lighting.

★★★ **General Dynamics NASSCO-Norfolk** – This River Star Hall of Fame shipyard found a company to refurbish

1,800 lbs. of old computers to sell to non-profits at a steep discount – “beneficial re-use.”

★★★ **Hermitage Museum & Gardens**

–The museum in Norfolk planted 1,100 native plants and managed invasive species with the help of volunteers.

★★★ **HRSD**

– The River Star Hall of Famer took new steps to prepare for impacts of sea level rise on wastewater treatment while improving monitoring and source tracking for environmental and public health.

★★★ **Keep Norfolk Beautiful/Norfolk Environmental Commission**

– The commission is testing a platform to measure litter at 300 locations. A new “Bag the Park” program prevented 500 lbs. of litter at Lafayette Park.

★★★ **Lafayette Wetlands Partnership**

–The volunteer group worked at multiple sites to manage invasive species, add mulch and native plants and remove debris, while recruiting new “Wetlands Steward Team Leaders.”

★★★ **Nauticus**

– The center’s students created a pollinator garden in a rowboat built by the students. With recycled trash cans as additional planters, the garden features wildflowers and herbs for butterflies, bees and birds.

★★★ **NOAA Marine Operations Center Atlantic**

– The ship support facility added more efficient equipment and lighting, while doubling native plants in landscape beds.

★★★ **Norfolk Environmental Storm Water Management**

– The Hall of Fame winner constructed a stormwater wetland next to the Hague and retrofitted ditches as a pilot with Elizabeth River Project to determine scalability.

★★★ **Norfolk Naval Shipyard**

–The shipyard and Hall of Famer improved waste management with color-coded dumpsters to sort materials. A pilot



Chef CJ keeps curb inlets clean. Courtesy of Elizabeth River Project.

drone improved inspection of an exhaust system, reducing risk to workers and saving time and resources.

★★★ **Norfolk State University**

upgraded HVAC systems and climate controls while adding LED lighting. Earth Day celebrated three new areas landscaped with native plants in the school’s green and gold.

★★★ **Old Dominion University**

– The River Star Hall of Fame winner installed a rain garden with two cells to reduce flooding along a path to the stadium. This and another filtration area, replacing 1,000 sf. of paving, feature native trees and shrubs.

★★ **Pender & Coward**

– The law firm continued multiple environmental seminars and service projects. The largest, “Restore the Shore,” removed 1,261 lbs. of debris at Riverside Memorial Park in Norfolk.

★★★ **The Port of Virginia**

– The port increased barge service from Norfolk

to Richmond, reducing emissions by 1.5 million lbs. over prior years, compared to truck transport. The port added 10 hybrid shuttle trucks and reduced truck turn time at terminals, also reducing emissions.

★★★ **Unity Renaissance Church**

– The faith community more than doubled its solar power, which now offsets all electrical needs – even with a building expansion. Built over prior paving, the expansion added no new impervious area.

★★★ **US Army Corps of Engineers, Norfolk District**

– The headquarters removed 3,500 lbs. of trash on Clean the Bay Day. Meanwhile, “the Front Street Striders” are employees who run together some weekdays, picking up trash as they go.

★ **Virginia Department of Environmental Quality – Tidewater Regional Office**

– The agency replaced two HVACs with more efficient ones while continuing a campaign to reduce single-use plastics, last year switching to reusable mesh bags for ice to keep water samples cold.

★★★ **Virginia Wesleyan University**

– The school landed a grant allowing

students to plant 5,625 native shrubs and grasses at Poplar Hall Park, culminating years of partner efforts to improve the ecosystem at the Norfolk park. Students also mapped vulnerable communities where trees could mitigate heat islands.

★ **West Park View Community League**

– The civic group in Portsmouth removed 5,580 lbs. of debris in a “Sweep the Creek” cleanup of Scott’s Creek. A re-established neighborhood watch discourages illegal dumping.

★★★ **Win-Win Waste**

– The waste to energy plant in Portsmouth implemented a new ash screening process that allowed 435 million lbs. of ash to be re-used as daily cover at a regional landfill.



At General Dynamics NASSCO-Norfolk, old computers head to non-profits after refurbishing. Courtesy of General Dynamics NASSCO-Norfolk.

Recertifying 2023 -

These River Stars “recertified” achievements documented three years ago by peer review. The stars reflect their level in the program

★ Chesapeake Animal Services	★★★ Norfolk Tug Co.
★ Colonial Pipeline	★ Ocean Yacht Marina
★ Defense Maritime Solutions	★ Park View Historic Civic League
★ Doody Calls – Hampton Roads	★★ Perdue Agribusiness Chesapeake Plant
★ Epworth United Methodist Church	★★ Smartmouth Brewing Co.
★★ Hampton Roads Hauling – Waste Management of VA	★★ St. Paul’s Episcopal Church
★★★ Luck Stone Berkley Yard	★★★ TCC Chesapeake Campus
★ Luck Stone Greenwood Yard	★ Top Rack Marina
★★ Marine Hydraulics International	★★ Vane Line Bunkering
★★★ Marine Oil Service	★★ Virginia Beach Parks and Recreation
★ Mclean Contracting Company	



There have been a few days when the sidewalk was so thick with monarch butterfly caterpillars, visitors had to detour to approach Virginia Wesleyan's Greer Environmental Sciences Center.

One of the lushest restored native landscapes in the region surrounds the center, also attracting "nesting snapping turtles, several species of dragonflies, frogs, ducks" and more, says Dr. Maynard Schaus, biology professor. That's one example of many behind Virginia Wesleyan's selection as winner, Inside Business River Star Hall of Fame 2023.

"The Greer Center represents how the whole university views sustainability now," says Pam Boatwright, program manager, River Star Businesses. "To me, it's the coolest building in the area because it's not only super-green but the entire building and all of its components were built to teach sustainability."

From bee-keeping to taking students into the field to build wetlands, "they just seem all in – from big to little," Pam says.

This university in the Elizabeth River's Eastern Branch "watershed," or drainage area, in Virginia Beach has reduced its greenhouse gas emissions by more than 60 percent since 2008, pursuing a goal to become carbon neutral by 2040.

Students last fall planted wetlands at Poplar Hall Park in Norfolk. Last summer, others added trees and shrubs to transform a frequently flooded site into a Chesapeake park. Still other students created a heat island map.

Elizabeth River Project's Executive Director, Marjorie Mayfield Jackson, can't get enough of the Greer's inspiring landscaping. "You just want to jump up and down – but that would scare all the critters."

It's "fins up" indeed as students get real-world experience with restoring wetlands. Courtesy of Elizabeth River Project.

Inside Business River Star Hall of Fame

2011 Inaugural Winner <i>BAE Systems Norfolk Ship Repair</i>
2012 Winner <i>The Port of Virginia</i>
2013 Winner <i>Kinder Morgan/Elizabeth River Terminals</i>
2014 Winner <i>Old Dominion University</i>
2015 Winner <i>Win-Win Waste (Wheelabrator Portsmouth)</i>
2016 Winner <i>HRSD</i>
2017 Winner <i>Norfolk Naval Shipyard</i>
2018 Winner <i>Naval Support Activity Hampton Roads Portsmouth Annex</i>
2019 Winner <i>General Dynamics NASSCO-Norfolk</i>
2020 Winner <i>Naval Station Norfolk</i>
2021 Winner <i>Norfolk Southern Corp. Lambert's Point</i>
2022 Winner <i>Norfolk Environmental Storm Water Management</i>
2023 Winner <i>Virginia Wesleyan University</i>

Inside Business The Hampton Roads Business Journal

RIVER STAR HALL OF FAME

The Inside Business River Star Hall of Fame recognizes one business each year that best exemplifies the spirit of the River Star business program. Results of "doin' right by the river" can be cumulative.

Virginia Wesleyan University "All in – from big to little"

