

Inside Business

The Hampton Roads Business Journal

**SALUTING
THE FINEST
ENVIRONMENTAL
STEWARDS ON THE
ELIZABETH 2024**



**ELIZABETH RIVER
PROJECT**

RIVER STAR BUSINESS

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Congratulations, River Stars!

The Elizabeth River Project **POLLUTION REDUCED:**

launched River Star

Businesses for

organizational

partners in 1997.

Since then, River Star

Businesses have

become the finest

environmental stewards

on the Elizabeth.

374
MILLION POUNDS

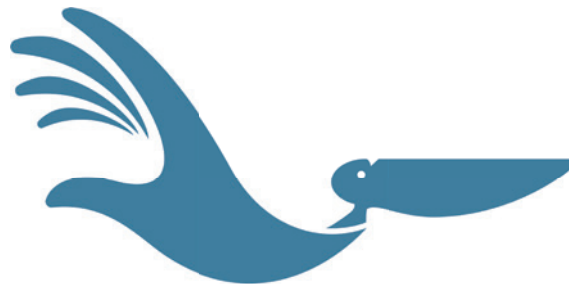
WILDLIFE HABITAT
RESTORED, CONSERVED:

2,555
ACRES

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

BUSINESS PARTNERS DOING SOMETHING BEAUTIFUL

You, too, can be a star



ELIZABETH RIVER
PROJECT

RIVER STAR BUSINESS

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, community and government facilities that line its shore.

Thank you to this year's record 164 facilities (including 20 newcomers) who together are making environmental stewardship the business standard on the Elizabeth. The non-profit Elizabeth River Project salutes these business and government facilities and

other organizations for reducing pollution voluntarily by 374 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: SIMS Metal Management in Chesapeake last year began re-using stormwater for dust suppression, saving a million gallons of water a month while also reducing runoff pollution reaching the river.

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: 757-828-5422, 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 18, 2024,

11:30 a.m. to 2:00 p.m.

WHERE:

The Founders Inn and Spa

COST: \$25

TO REGISTER:

757-399-7487

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ADVANCING TO MODEL LEVEL 2024

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.

Elizabeth River Crossings

Next time you're sitting in tunnel traffic, think about this cheery news: For all 65 "lane miles" of tunnels and approaches, along with 80 plus acres of facilities operated by Elizabeth River Crossings, there is a treatment system to remove pollution from runoff before it reaches the river. Since polluted runoff is the top source of new pollution in our urban river, that's a hefty help. Tanks below the tunnels collect the runoff; then sludge from the tanks



Elizabeth River Crossings treats 100 percent of runoff from its tunnels and approaches. Courtesy of The Virginian-Pilot.

is recycled for mulch and other uses.

Elizabeth River Crossings has been systematically improving its environmental practices, including implementing just about every idea our technical team could suggest, from adding sediment filters and designing new forebays for stormwater, to planting native trees and growing 2,000 oysters. A new "Green Team" coordinates efforts. The

company last year gave all 177 employees each a reusable metal water bottle. Along with installing filtered water refill stations, this avoided 6,185 plastic bottles. Toward our new River Star expectation for inclusive environmental action, Crossings sponsored seven buses to serve three routes between Norfolk and Portsmouth and sponsored extending Elizabeth River Ferry service by 90 minutes.



Norfolk Office of Resilience

If you want to see an eco-friendly "coastal community of the future," look no further than Norfolk's own Chesterfield Heights. Just East of Harbor Park, you will find not only flood berms and raised streets to adapt to rising sea levels, but also a restored tidal creek (Ohio Creek), as well as a four-acre "living shoreline." Marlboro Road, traversing the small neighborhood, now features pervious pavers to let the rain soak in. Knitting together the projects, public parks are underway to reconnect residents to the outdoors and the river.

Norfolk's Office of Resilience has spearheaded the "Ohio Creek Project" with \$112 million from the US Department of Housing and Urban Development and involvement by eight city departments. The project aims to reduce flooding, improve public spaces and ensure the communities thrive for years to come. For inclusive environmental action, the city office conducted extensive community engagement and has included public access features such as a fishing pier for Chesterfield Heights. As well, the office leads resilience planning for Norfolk including a progressive "resilience quotient" to promote resilient development practices.

Ohio Creek lives again, thanks to Norfolk's Office of Resilience and a forward-thinking, \$112 million project in Chesterfield Heights. Courtesy of City of Norfolk.

Advancing to Achievement Level 2024

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



Dan McGregor (left) and Christopher Beach, co-owners of EcoGardens 757, help spread the landscape company's sustainable practices far and wide. Courtesy of EcoGardens 757.

EcoGardens 757

Deep in the heart of the city: A huge chicken coop where neighbors gather eggs. Pear trees; fig trees. A community garden where you aren't allowed to use chemicals. It's the Peace Garden in Park Place – and EcoGardens 757, a small, organic landscaping business, donates supplies and labor. In its business practices, 757 uses all-electric tools, rejects pesticides and herbicides and upcycles pallets for fencing. For inclusive action, the company hosts free workshops as well as helping the Peace Garden.



Fairwinds Landing is developing 110 acres at Lambert's Point docks into a green port. Courtesy of Fairwinds Landing.

Fairwinds Landing

The new operator of Lambert's Point Docks aims to become Virginia's hub for offshore wind power. Fairwinds is developing a master plan to strive to make the 110-acre site a green port facility as well, with plans such as for more than

100,000 sq. ft of solar power on the roof of one of the larger warehouses. So far, Fairwinds boasts "cold ironing" or shore-to-ship power to reduce emissions, recycled 6M lbs. of steel from excess rail and is growing oysters.



West Park View Community League conducts Sweep the Creek twice a year, by land and sea. Courtesy of West Park View Community League.

West Park View Community League

This is not your ordinary litter pick up. "Sweep the Creek" means REALLY sweep Portsmouth's Scott's Creek – and twice a year. Whether you have a dinghy or a john boat, come on out. On shore will be the land crew,

not just members of the community league but adjacent neighborhoods, boat clubs and more. The league that created Owens Creek Park also oyster gardens and manages pet waste stations.

Entering at Commitment Level 2024

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



You can follow one of the green practices checklists to hold an event here. Courtesy of Chesapeake Conference Center.

Chesapeake Conference Center

The conference center is a Virginia Green Facility. Operations are paperless where possible and use green products where possible. A green practices checklist goes to event clients.



Ashley Gudknecht, owner, practices green yoga at her GUD Yoga studio. Courtesy of GUD Yoga.

GUD Yoga

Yoga here is green as well as “gud.” Cork flooring helps make the studio eco-friendly along with efficient HVAC, LED lighting and a reflective “cool” roof.



Andrew Hund makes many of his bikes from recycled parts. Courtesy of Elizabeth River Project.

Hund's Re-Cycle Factory

We know bikes are green but when they are made from recycled parts, that is really green. Meet Hund's Re-Cycle Factory; also donating 1,000 bikes to those in need.



Immanuel Presbyterian Church gets new “pervious” paving to let the rain soak in. Courtesy of Elizabeth River Project.

Immanuel Presbyterian Church

Park here and feel good. The church converted 2,000 sq. ft. of parking to pervious paving to share with the Elizabeth River Project's Ryan Resilience Lab next door.



Aeroponic growing systems may offer a new approach for community gardens, thanks to Lifted Wellness. Courtesy of Lifted Wellness.

Lifted Wellness

This non-profit teaches self-care with sound baths and yoga while piloting vertical, aeroponic growing systems with a goal of sustainable community gardens.



Visit this environmentally-friendly store at MacArthur Mall. Courtesy of LUSH.

LUSH

The cosmetic company uses 100% vegetarian products. Its environmentally friendly store at MacArthur Mall even composts and aims for the least packaging possible.



Market Heights Apartments reflects a wide range of sustainability practices. Courtesy of Lawson.

Market Heights Apartments

This 3.5 acre site is “Earthcraft Gold” certified, meeting a wide range of sustainability considerations and was the first site to meet Norfolk's new resilience criteria.



This mermaid grows flowers with the river in mind. Courtesy of Kate Thompson.

Mermaid City Flowers

This “mermaid” operates an urban micro-farm, raising its own cut flowers for arrangements. The florist-farmer uses compost tea and beneficial bugs for pest control.



Jessica Robinson (left) and Alison Fechino take their mobile pet food pantry on the road. Courtesy of Elizabeth River Project.

Norfolk Animal Care Center

The animal shelter practices transferable sustainability such as insulating garage doors and switching to a peroxide based cleaner (Rescue). “Waggin’ Wheels” is a mobile pet food pantry.



Norfolk Southern’s Portlock Intermodal Yard takes great care of its stormwater treatment system. Courtesy of Norfolk Southern.

Norfolk Southern Portlock Intermodal Yard

The yard is aggressively improving and maintaining its stormwater treatment systems to reduce flooding and runoff pollution. All exterior lighting has been replaced with LED.



Nevis Muir, displays products from locally sourced wood at the Norfolk Wood Shop. Courtesy of Elizabeth River Project.

Norfolk Wood Shop

This woodworking supply store prides itself on selling locally sourced woods from local millers. The store is creating a flower garden on site for Mermaid City Flowers.



PRA Group volunteers build oyster cages. Courtesy of PRA Group.

PRA Group

A financial services company intentionally located near the Tide, PRA subsidizes mass transit passes for employees, prioritizes energy management, volunteering and non-profit support.



This taproom on North Colley reuses 3,000 lbs. of spent grain annually. Courtesy of Reaver Beach Brewing Co.

Reaver Beach Brewing Co.

The bar is made of wood reclaimed from old barns at this taproom in a refurbished post office. Reaver re-uses 3,000 lbs. of spent grain annually.



Get your art along with your lunch at this stop in the coming Eco-District on North Colley. Courtesy of Elizabeth River Project.

Starving Artist Cafe

An art show on wetlands has been on exhibit here, where the owners are helping Elizabeth River Project spearhead a coming “Eco-District” on North Colley. They compost and grow restaurant herbs.



Sam Bowling, far right, here at work with WPA, led design of Elizabeth River Project’s Ryan Resilience Lab. Courtesy of WPA.



Tim Stromberg (far left) leads a tour for area architects of the model landscape he designed at Elizabeth River Project’s Ryan Resilience Lab. Courtesy of SGA.

Stromberg/Garrigan & Associates

This environmentally conscious design firm won a resilience entrepreneur challenge for design of a stormwater treatment system, now installed at the Ryan Resilience Lab.



VIA Design gained multiple certifications and awards for its renovated green office. Courtesy of VIA Design.

VIA Design

The architecture firm earned green building certifications and awards for renovating the former Essex building for its office. VIA has committed to achieving carbon neutral by 2030.

Work Program Architects (WPA)

The brain power behind the Elizabeth River Trail, the Ryan Resilience Lab, the Assembly building at 400 Granby, forward-thinking zoning and much else that is both cool and green in Norfolk: WPA.

Sustained Distinguished Performance 2024

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**, inaugural Hall of Fame winner, avoided 25,133 lbs. of air emissions by replacing a diesel air compressor with an electric one.

★★★ **Chesapeake Parks, Recreation & Tourism** opened the 88-acre Newton Neck Park on the Southern Branch and added wildflower meadows at Bells Mill Park.

★★ **Christ & St. Luke's Episcopal Church** is incorporating resilience and efficiency in church renovations.

★ **CJ's Catered Greatness** increased efforts to reduce single-use plastics.

★ **Coastal Virginia Conservancy** pioneered conservation of wetlands to adapt to sea level rise at a Norfolk home.

★ **Daphne's Hair Studio** is now one of only two "Green Circle Salons" in the area for waste reduction and sustainability.

★ **Electrified Marina** added a rain barrel and became a "spat catcher" for oysters on Knitting Mill Creek.

★★★ **Elizabeth River Trail Foundation** created a new pocket park with a community needs pantry.

★★★ **Friends of Indian River** planted native trees and

shrubs to improve a bridge crossing on Indian River Road.

★★★ **General Dynamics NASSCO-Norfolk** - This River Star Hall of Fame shipyard switched to a more efficient generator and lighting.

★★ **Habitat for Humanity of South Hampton Roads** constructed a downspout planter to reduce impervious surface, filter stormwater, reduce flooding and add habitat.

★★★ **Hampton Roads Transit** launched the "Am I Clean Campaign" last Earth Day to encourage patrons to report trash and added solar lighting to 181 bus stops.

★★★ **Hermitage Museum & Gardens** initiated a water reduction program through monitoring of water usage and rain.

★★★ **HRSD**, Hall of Fame winner, removed 3.9 million lbs. of nitrogen and phosphorous prior to discharge to the Elizabeth River through upgrades to its VIP and Army Base plants.

★★ **Intracoastal Marine** recycles 126,000 lbs. per year of oil and fuel and is helping a customer replenish an oyster bed.

★★★ **Keep Norfolk Beautiful/Norfolk Environmental** Commission expanded Adopt-A-Spot participants from 62 to



SIMS Metal Management is pursuing carbon neutral by 2030. Courtesy of Elizabeth River Project.

more than 200, also expanding the Green Bucket Brigade, a litter kit adoption program.

★★★ **Kinder Morgan Elizabeth River Terminals** implemented a wash water re-use system to conserve water and reduce the risk of wash water reaching the river.

★★★ **Kinder Morgan Southeast Terminal** closed all underground tanks and finished bringing all pipelines above ground to be able to detect leaks.

★★★ **Lady Fern's Native Plants** added planters to intercept rainfall and hosted four workshops demonstrating the site's exemplary rain harvesting.

★★★ **Lafayette Wetlands Partnership** began a pilot program to test control of

the invasive reed, *Phragmites australis*, on Knitting Mill Creek by cutting young growth monthly instead of using chemicals.

★ **McAllister Towing of Virginia** launched a highly efficient tug, the Jane McAllister, meeting "EPA Tier IV" standards.

★★★ **Nauticus'** new Green Team is increasing stewardship. A traveling exhibit focuses on climate change. A new aquarium features life in the Elizabeth and Chesapeake Bay.

★★★ **Naval Station Norfolk** added environmental deputies and enhanced project coordination to reduce risks to the river.

★★★ **Norfolk Environmental Storm Water Management**, Hall of Fame winner, continued

to lead the region in restoring wetlands and vegetated buffers with 6,100 sf of "living shoreline" at Pleasant Point and 3.79 acres in Barraud Park and Lindenwood, among multiple sites.

★★★ **Norfolk Southern Lambert's Point**, Hall of Famer, developed a new system to improve efficiency and maintenance of the yard's re-use of stormwater for dust-suppression, and won HRSD's Pretreatment Platinum Excellence Award.

★★★ **Norfolk State University with Elizabeth River Project** added a 3,000 sf pollinator meadow and conducted week-long Earth Day activities.

- ★ **Norfolk Yacht & Country Club** lengthened pilings for resiliency and added protections to the club's vessel fueling system to reduce risks to the river.
- ★★★ **Old Dominion University**, Hall of Fame winner, planted 189 mostly native trees on campus while adding another certified green building.
- ★★ **People for Ethical Treatment of Animals** worked with partners to clean up a challenging site where marine debris was accumulating.
- ★★★ **The Port of Virginia**, Hall of Fame winner, added 10 hybrid shuttle trucks and reduced truck turn time at terminals, reducing emissions.
- ★ **Portsmouth Boating Center** raised docks and constructed an innovative system on pulleys to be able to raise fuel pumps up to seven feet higher during storms.
- ★★ **The Retreat at Harbor Pointe Apartments** added a community garden for its low-income residents and oyster gardening.
- ★★ **SIMS Metal Management Chesapeake** began using captured stormwater for dust suppression, saving 1 million gallons a month!
- ★★★ **SPSA Operations'** tire processing facility shredded nearly 20 million lbs. of tires for re-use.
- ★★★ **Top Guard Security** reports its new patrol accountability software is transformative - reducing paper by 10,000 lbs. per year.
- ★ **Virginia Department of Environmental Quality - Tidewater Regional Office** is piloting "Purple air sensors," intended for citizens to read and understand air quality at residential sites.



Annamaria Bathory shows the muscle of Electrified Marina, applied to catching oyster spat at the Knitting Mill Creek marina. Courtesy of Elizabeth River Project.



Chesapeake Parks, Recreation & Tourism

Staff of Chesapeake Parks, Recreation & Tourism gather around a wood carver's depiction of the wildlife benefitting from the city's more than 80 parks. Courtesy of the city of Chesapeake.

If you enjoy deep woods and extensive trails along the Elizabeth River, it's probably thanks to Chesapeake Parks, Recreation & Tourism. The department has been adding large swaths of conserved land to its public parks for decades. Most recently, Chesapeake opened 88-acre Newton Neck Park, dense forest along 5,000 feet of shore on the Southern Branch near the Dominion Boulevard Veterans Bridge. The Coastal Virginia Conservancy took the lead to obtain the land, but the city's commitment to operate it as a public park was key. Add that to the recently revitalized Elizabeth River Park, offering the only free fishing pier in the region (the city maintains a fishing license for this purpose). Then there's the Dismal Swamp Canal Trail, 8.3 miles long; Indian River Park, 90 forested acres along the tributary's headwaters, and a "Blueway Trail" for paddling at Western Branch Park. "Chesapeake's parks along the Elizabeth are some of its very best spaces for connecting people with the river, in ways that celebrate the river and the ecosystem," says Marjorie Mayfield Jackson, Executive Director, Elizabeth River Project. Chesapeake's park department also strives for pollution prevention. Sustainability and stormwater control were a focus in the renovation of Elizabeth River Park and trails often are made with crushed recycled concrete. "Paddle for the Border," drawing hundreds of paddlers, is among popular events to immerse the public in nature.

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 "doing something beautiful" can be cumulative.

Inside Business River Star Hall of Fame

2011 Inaugural Winner BAE Systems Norfolk Ship Repair	2018 Winner Naval Support Activity Hampton Roads Portsmouth Annex
2012 Winner The Port of Virginia	2019 Winner General Dynamics NASSCO-Norfolk
2013 Winner Kinder Morgan/ Elizabeth River Terminals	2020 Winner Naval Station Norfolk
2014 Winner Old Dominion University	2021 Winner Norfolk Southern Corp. Lambert's Point
2015 Winner Win-Waste Innovations (Wheelabrator Portsmouth)	2022 Winner Norfolk Environmental Storm Water Management
2016 Winner HRSD	2023 Winner Virginia Wesleyan University
2017 Winner Norfolk Naval Shipyard	2024 Winner Chesapeake Parks, Recreation & Tourism