

OUR FUTURE, OUR CHOICE







33,400

pounds of trash removed



336,000

pounds of oyster shell collected for recycling



24
states



24,646

<u>volunt</u>eers



105,307

volunteer hours served



\$2.5 millior

economic value leveraged through volunteers

IMPACT AND PROGRESS

2016 was a remarkable year for Restore America's Estuaries. Working collaboratively with our member groups and partner organizations, we were able to bring about meaningful on-the-ground environmental results in vital coastal areas across the country while also making significant progress in our efforts to advance national initiatives to protect and restore bays, sounds, and estuaries. A number of our accomplishments of the past year are discussed in greater detail in the following pages, including successes such as:

Bringing together more than 1,200 attendees and 200 partners for our 8th National Summit on Coastal and Estuarine Restoration.

Launching the Living Shorelines Academy, an online one-stop shop for property owners and living shorelines practitioners.

Leading our most successful National Estuaries Week ever, with more than 19,000 people participating in 151 events, which generated 6.5 million social media impressions.

Hosting a regional symposium to improve water quality through nitrogen reduction in Long Island Sound, the Peconic Estuary, and the South Shore Bays.

Completing a "blue carbon" assessment of Tampa Bay, FL which found that Bay habitats will remove 73 million tons of carbon from the atmosphere over the next 100 years – equivalent to taking 160,000 cars off the road each year.

While it is an unfortunate fact that over the past year we saw the rise of formidable new threats to the health of our estuaries, we believe that through accomplishments such as the above 2016 will be remembered by the coastal and estuarine restoration and management community as a year in which Restore America's Estuaries led the way to a number of significant victories. Through these victories, we have been able to make considerable progress toward the protection and restoration of the coasts and waters that are of immeasurable environmental, economic, and cultural importance to our nation. This success gives us the confidence that we can ensure these natural areas continue to hold such importance well into our future. Yet, we recognize that we cannot do this by ourselves, and will therefore continue to work with our partners and supporters to achieve together what we cannot achieve alone. While the challenge in front of us is great, should we together make the choice to accept it, we can continue protecting and restoring the waters and resources that mean so much to all of us, and see to it that they are able to be enjoyed by generations to come.

Sincerely,



Jeff Benoit President and CEO the the

Jonathan Stone, Chair Board of Directors



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OUR COASTS, OUR FUTURE, OUR CHOICE: 2016 National Summit

Restore America's Estuaries and The Coastal Society planned and hosted the 8th National Summit on Coastal and Estuarine Restoration and the 25th Biennial Meeting of The Coastal Society December 10th - 15th, 2016 in New Orleans, Louisiana. The summit mobilized the restoration community to advance the knowledge, practice, scale, and success of coastal and estuarine habitat restoration. Participants included community, business and nonprofit leaders, consultants, restoration managers, scientists, tribal members, educators, volunteers, and others who engage in all aspects of habitat restoration.

Our Coasts, Our Future, Our Choice is the only national Summit focused on the goals and practices of coastal restoration and management. Estuaries and coasts are an important part of America's economy, history, and culture. The six-day Summit explored cutting-edge issues in restoration and coastal management, and was comprised of a community restoration event, field sessions, plenary session, expert presentations, networking evening events, workshops, a poster hall, and an award-winning coastal exposition hall.

trees planted Service

in 110

the Expo Hall

partners and

SUPPORTER SPOTLIGHT: SCOTTSMIRACLE-GRO

In 2016, RAE was proud to partner with ScottsMiracle-Gro in a variety of ways to protect coastal waters. Foremost among these was RAE's participation in the launch of Scotts' Water Positive Landscapes Initiative, whose mission to bring water stewardship to the forefront of lawn and gardening is a great fit with RAE's mission to protect and restore our country's estuaries. Through this program, Scotts is supporting the efforts of RAE and member/ partner groups in Texas, Florida, and Maryland to engage members of local communities in protection of their local waters, via outreach and education programs as well as on-theground restoration and conservation activities.

Scotts and RAE also partnered in 2016 to lead a Nitrogen Reduction Regional Symposium in Stony Brook, NY, which brought together a diverse group of stakeholders and community leaders to identify and discuss solutions to the problem of nitrogen pollution in Long Island Sound, the Peconic Estuary, and the South Shore Bays.

Further, Scotts co-sponsored the Community Restoration Event at RAE's 8th National Summit on Coastal and Estuarine Restoration in December 2016 in New Orleans. Through this event, 45 volunteers planted 850 trees to help protect and restore Louisiana's Caernarvon Freshwater Diversion Outflow Area.



RAE greatly appreciates the strong partnership and support of ScottsMiracle-Gro, and we look forward to working together in the years ahead to protect our nation's vital waters for the benefit of generations to come.

COMMUNITY-BASED RESTORATION: Local Focus, Nationwide Impact

Restore America's Estuaries works through our 10 member organizations to support restoration projects that are community-based from design to execution. In 2016, our Community-Based Restoration Program supported projects to which approximately 5,500 volunteers contributed more than 15,000 service hours to bring about tangible results including the restoration of nearly 30 acres. Projects completed by these volunteers included: oyster and scallop restoration, invasive plant removal, living shoreline construction,

and salt marsh planting. Our dedicated volunteers worked tirelessly to remove more than 33,400 pounds of trash, 50 tires, and 22,000 feet of fishing line from estuaries around the country.

They planted 850 trees and more than 100,000 plugs of salt marsh plants; and oyster gardeners cultivated 33,000 oysters. Our oyster shell recycling programs continued to grow and in 2016 more than 336,000 pounds of shell were recycled and kept out of landfills. Results such as these brought about by local community members demonstrate



not only the on-the-ground impact that RAE and our member organizations are able to produce, but also the value that coastal communities place on their local waters and natural resources.

GALVESTON BAY FOUNDATION'S Oyster Recycling

Oysters are vital to the Galveston Bay ecosystem and the local economy. They filter and keep our water clean in addition to providing food and habitat for aquatic life. However, the overharvesting of oysters in Galveston Bay along with extreme weather events has led to a shortage of hard substrate for oyster larvae to attach to and grow. While many surfaces are suitable for oyster larvae attachment and growth, oyster shells are the preferred substrate for larvae.

Galveston Bay Foundation's Oyster Shell Recycling Program provides a shell recycling service to local restaurants to reclaim the shells that are lost to landfills. GBF employees collect the oyster shells from restaurant partners on a weekly basis and stockpile and sun-cure the shells on land to rid them of bacteria. The recycled shells are then returned to the bay through GBF's shoreline protection projects, reef creation efforts, as well as reef enhancement initiatives such as volunteer oyster gardening.

The Galveston Bay Foundation Oyster Shell Recycling Program began in 2011. Since that time, more than 600 tons (1,200,000 lbs) of oyster shells have been recycled and more than 100 tons (200,000 lbs) of those shells have been incorporated in oyster reef restoration efforts. In 2016, the program reclaimed approximately 170 tons of shells (a 20 percent increase in shells collected compared to 2015). A portion of these shells have been returned to Galveston Bay through the construction of a linear reef structure, also known as an "oyster bar breakwater," which will function as both shoreline protection and oyster habitat. With the assistance of 128 volunteers, 200 feet of the oyster bar breakwater was constructed in 2016, which utilized 20 tons (40,000 lbs) of oyster shells from the recycling program. Additional shells were returned to the Bay through GBF's Volunteer Oyster Gardening Program. In 2016, more than 60 volunteers monitored oyster gardens in the bay and helped deploy more than 385 newly grown spat onto existing restoration reefs.





BLUE CARBON - Adding Value for Coastal Wetlands Through Climate Mitigation

RAE's Blue Carbon Program works nationally to increase awareness of "blue carbon" - the ability of healthy coastal wetlands to capture and store greenhouse gases.

2016 Blue Carbon highlights include:

RAE-led study in Tampa Bay revealing Bay habitats will capture 73 million tons of carbon over the next 100 years - equivalent to taking 160,000 cars off the road every year!

Partnering with federal agencies to include coastal wetlands into the U.S. National Greenhouse Gas Inventory, making the U.S. among the first countries to do so.

Building regional capacity through webinars and workshops to enhance management, support restoration, and pilot market incentives to support conservation efforts.

LIVING SHORELINES: **Creating Resilient Communities and Habitats**

2016 was a terrific year for RAE's living shorelines program! While they may be known by a number of terms such as soft stabilization, soft armoring, and others, living shorelines are a cost-effective suite of techniques that allow property owners to protect and restore their shoreline using naturally-occurring systems like saltmarsh and oyster reefs while also providing benefits to bays and estuaries. This approach provides shoreline stabilization and habitat functions, as opposed to "hardened" options like bulkheads and seawalls that exacerbate erosion and destroy critical habitat.

Here are some highlights from 2016:

In conjunction with our partners, RAE continued to develop and populate the Living Shorelines Academy (LSA) which is a combination of an online "one stop shop" for living shorelines and in-person trainings. Online aspects include training modules, an interactive



forum, searchable literature database, professional directory, and project locator. In-person workshops were held in Florida, Texas, and Louisiana in 2016, with more planned for Washington and Rhode Island.

The 2016 National Summit in New Orleans had a robust living shorelines presence, with <u>55 speakers and more than 20 posters.</u> The Summit also included a living shorelines workshop attended by more than 100 people.

We launched a national living shorelines community of practice, which provides a forum for communication and networking on the national level. Consisting of teleconferences, webinars, and electronic outreach, the community of practice allows practitioners to stay connected and updated without the expense and commitment of extensive travel. These virtual gatherings occur monthly and have featured a variety of topics including monitoring, developing meaningful metrics, shell recycling, permitting, and working with typically-underserved and faith-based communities.

NATIONAL ESTUARIES WEEK

Through RAE's leadership, National Estuaries Week (NEW) has become the nation's largest celebration of coasts and estuaries and the benefits they bring to communities nationwide. NEW 2016 not only featured the highest-ever numbers of registered events and social media impressions, we actually doubled the previous records! Highlights included:

151 events registered and shared on an online, interactive map. Events spanned 24 states and Puerto Rico.

19,146 volunteers and participants contributed 90,307 hours to improving, restoring, and appreciating their local waterways.

These volunteers contributed an estimated economic value of \$2.13 million.

6.5 million social media impressions on Twitter and Instagram.

1,594 posts from 669 unique users on Twitter, Instagram, and Facebook.

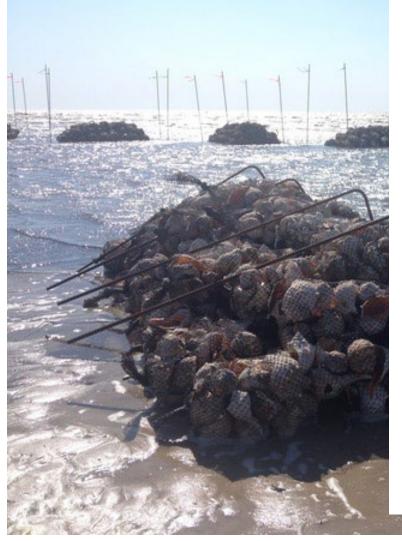
National Estuaries Week promotional video featuring TV personality Mehgan Heaney-Grier has been viewed more than 750 times.

A House Resolution honoring National Estuaries Week garnered 35 bipartisan cosponsors. A complementary Senate resolution garnered 25 tripartisan cosponsors.

30 proclamations from coastal state Governors and other officials to demonstrate state- and local-level support for estuaries and National Estuaries Week.



RAE was pleased to continue its partnership with CITGO as the National Estuaries Week Gulf Region Sponsor, together launching the National Estuaries Week mini-grants program to support new events and outreach throughout the Gulf of Mexico. The events funded through this partnership engaged 841 volunteers in more than 3,100 hours of service to remove 4,500 pounds of trash from local shorelines and restore or enhance more than 100 acres of habitat.



AMERICAN LITTORAL SOCIETY'S Horseshoe Crab Habitat Restoration

As part of the Atlantic Flyway, Delaware Bay is vitally important to the migration of shorebirds. Horseshoe crabs also use Delaware Bay beaches for spawning. Birds, such as the endangered red knot, feed on horseshoe crab eggs to fuel their migration to the Arctic Circle, making it a critical stopover site in a 9,000 mile journey.

In the fall of 2012, Superstorm Sandy decimated the Bayshore beaches, destroying horseshoe crab habitat, and further jeopardizing the threatened knots. The American Littoral Society responded by organizing an emergency beach restoration project that averted a natural disaster in the spring of 2013. Since then the Society has done restoration work on seven bay beaches, which have restored crab habitat and enhance the recovery of the shorebirds using the beaches.

In an effort to protect those beaches, the Society has also been building oyster reefs to guard them from wave action and erosion. Those reefs also provide habitat for other species and help increase the oyster population in the bay. Those bivalves are ecologically important, because one adult oyster can clean up to 50 gallons of water per day.

FINANCIAL REPORT

2016	2015
\$1,129,954	\$1,275,136
838,453	477,121
gs 756,059	37,860
45,336	45,100
4,924	9,443
\$2,774,726	\$1,844,660
\$2,414,466	\$1,781,112
142,774	138,937
202,774	85,572
\$2,759,448	\$2,005,621
\$15,278	\$(160,961)
\$873,922	\$1,034,883
\$889,200	\$873,922
	\$1,129,954 838,453 gs 756,059 45,336 4,924 \$2,774,726 \$2,414,466 142,774 202,774 \$2,759,448 \$15,278 \$873,922

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Restore America's Estuaries is appreciative of the many individuals, corporations, and organizations that have supported our work over the last year.

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