Earthshot Prize Update

Rotary Philanthropy is only one side of the coin.

Phase one of the Cape Cod Connected Communities Development
is funded and construction is underway.

ESRAG Eastern North America & Caribbean Presentation

Brian Braginton-Smith & Jeff Smith

Wednesday April 15th, 2026

We are here today as an Earthshot Technology Company having been nominated by Rotary and selected to compete in 2024 and 2025 as an Earthshot contestant. We are building phase one now on Cape Cod.



" And so my fellow Americans: ask not what your country can do for you - ask what you can do for your country. My fellow citizens of the world: ask not what America will do for you, but what together we can do for the freedom of man."

"A man's reach should exceed his grasp, For this is where dreams await and our future lies."



Lewis Bay Research is now an Ocean Guardian Program Partner for our Region



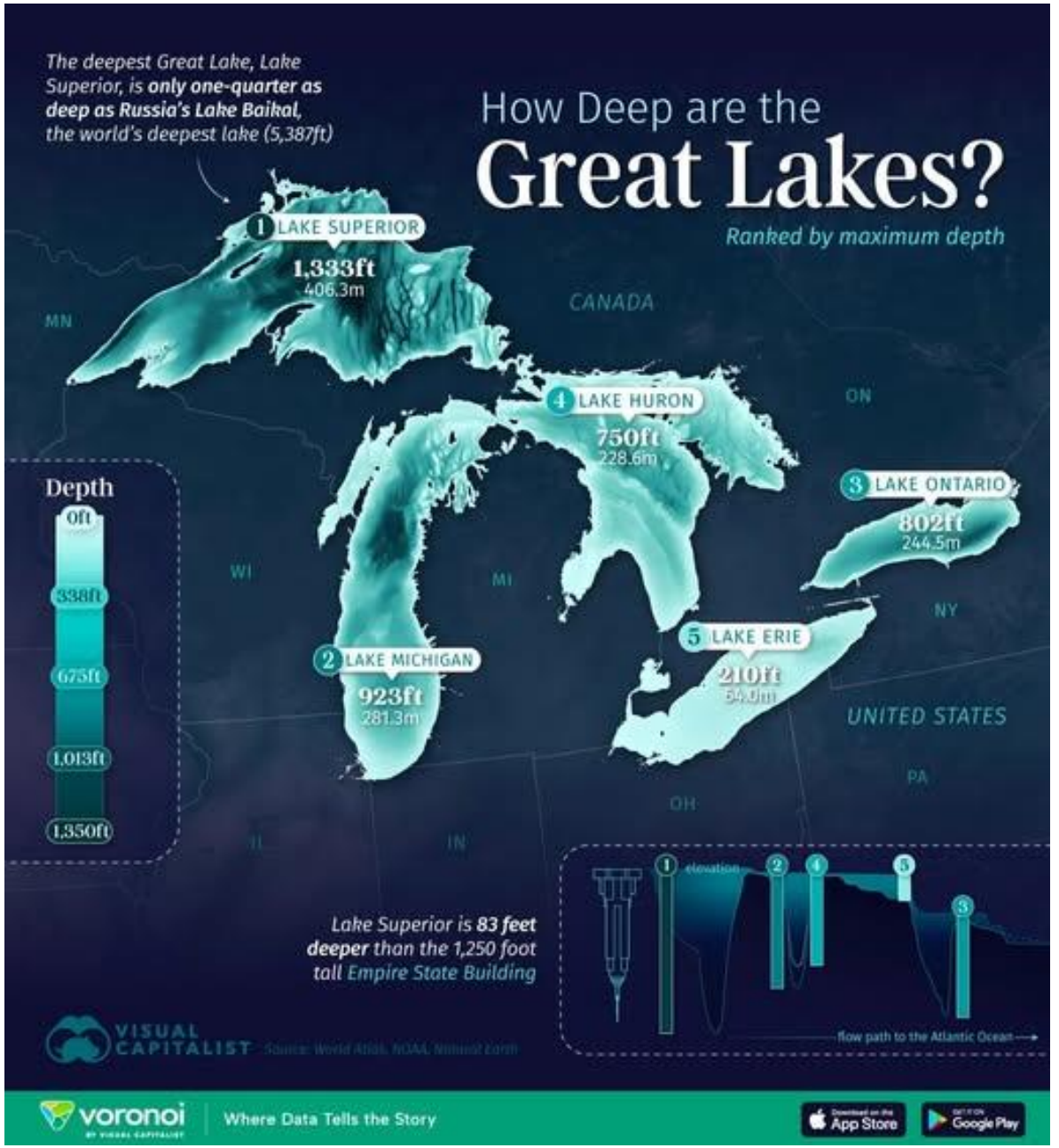
NOAA Network of Ocean Sanctuary sites

We will be supporting Ocean Guardians, Stellwagen Banks and Lake Ontario





Challenger Deep 36,000 ft



National Ocean Conference Participants

1998 National Ocean Conference
June 1998 Monterey, California

Mr. William Ahern
California State Coastal Conservancy

Mr. Robert Alario
Offshore Marine Services Association

Mr. Dan Albert
Mayor of Monterey, California

Mr. Eddie Albert
Actor & Environmentalist

Dr. Vera Alexander
University of Alaska, Fairbanks

Mr. Pete Allen
National Oceanic and Atmospheric Administration

Mr. C. Richard Allen
National Geographic Ventures

Dr. Scott Allen
Law of the Sea Institute

Ms. Jennifer Almquist
Silent Oceans Project

Mr. Dayton Alverson
Natural Resource Consultants

Mr. Lance Alway
Ranier Ballistics

Capt. Bill Amaru
Commercial Fisherman, New England Fishery Management Council

Dr. Donald Anderson
Woods Hole Oceanographic Institute

Mr. Philip Anderson
Washington Department of Fish & Wildlife

Mr. Chris Andreasen
National Imagery and Mapping Agency

Dr. Anders Andren
University of Wisconsin, Madison, Sea Grant Program

Mr. David Armanasco
Armanasco Public Relations

Mr. Michael Armstrong
Federal Emergency Management Agency

Mr. Robert Armstrong
U.S. Department of the Interior

Mr. Richard Arthur
Sippican, Inc.

Ghassem Asrar
National Aeronautics and Space Administration

Mr. John Atkin
Save the Sound

Dr. Jesse Ausubel
Alfred P. Sloan Foundation

Dr. Susan Avery
Cooperative Institute for Research in the Environmental Sciences

Dr. Ivar Babb
National Undersea Research Center, University of Connecticut

The Honorable Bruce Babbitt
U.S. Department of the Interior

Dr. Daniel Baden
University of Miami

Mr. Brian Baird
California Resources Agency

Dr. Ronald Baird
National Oceanic and Atmospheric Administration

The Honorable D. James Baker
U.S. Department of Commerce, National Oceanic and Atmospheric Administration

Ms. Emily Baker
Library of Congress

LCDR Frank Baker

Dr. Jack Bash
University of Rhode Island

Mr. Tom Bates

Ms. Barbara Belding
U.S. Agency for International Development

Mr. Ronald Bell
U.S. Department of Commerce

Mr. C. Jonathan Benner
Eckert Seamans Cherin & Mellot, L.L.C.

Mr. Jeffrey Benoit
National Oceanic and Atmospheric Administration

Mr. Steve Berkely
Oregon State University

Mr. John Berry
U.S. Department of the Interior

Dr. Barbara Best
U.S. Agency for International Development

Mr. Peter Betzer
University of South Florida

Dr. Rosina Bierbaum
Office of Science Technology & Policy

Representative Brian Bilbray
U.S. House of Representatives

Ms. Rachel Binah
Ocean Sanctuary Coordinating Comm.

Mr. Corey Black
Office of the Vice President

Ms. Julia Blackwell
National Oceanic and Atmospheric Administration

Mr. David Blaskovich
Silicon Graphics/Cray Research, Inc.

Mr. Peter Bontadelli
California Department of Fish &Game

Ms. Margaret Booth
National Science Foundation

Mr. Matt Borbash
U.S. Coast Guard

Dr. Joseph Bordongna
National Science Foundation

The Honorable Madeleine Z. Bordallo
Lieutenant Governor of Guam

Mr. J. Bornstein
Bornstein Seafoods

Mr. Peter Borrelli
Center for Coastal Studies

Dr. Robert Bourke
U.S. Navy

Senator Barbara Boxer
U.S Senate

Mr. L. Boydstun
California Department of Fish & Game, Pacific Fishery Management Council

Dr. David Bradley
Pennsylvania State University

Mr. Brian Braginton-Smith
The Conservation Consortium

Mr. Peter Brewer
Monterey Bay Aquarium Research Institute

Mr. Eric Brielman
Office of the Vice President

Dr. Kenneth Brink
Woods Hole Oceanographic Institution

Dr. Mel Briscoe
Office of Naval Research



Cape Cod Chamber Blue Economy 2025 Big Blue Event Keynote Speech: Net-Zero Development for the 22nd Century


Plan-B Watershed Based Net+ Microgrid Powered Resiliency
A Model for our global water-energy-housing crisis
Pamet River
All three sites are now in development
Sandwich Green
Cape Cod
Watershed
Institute

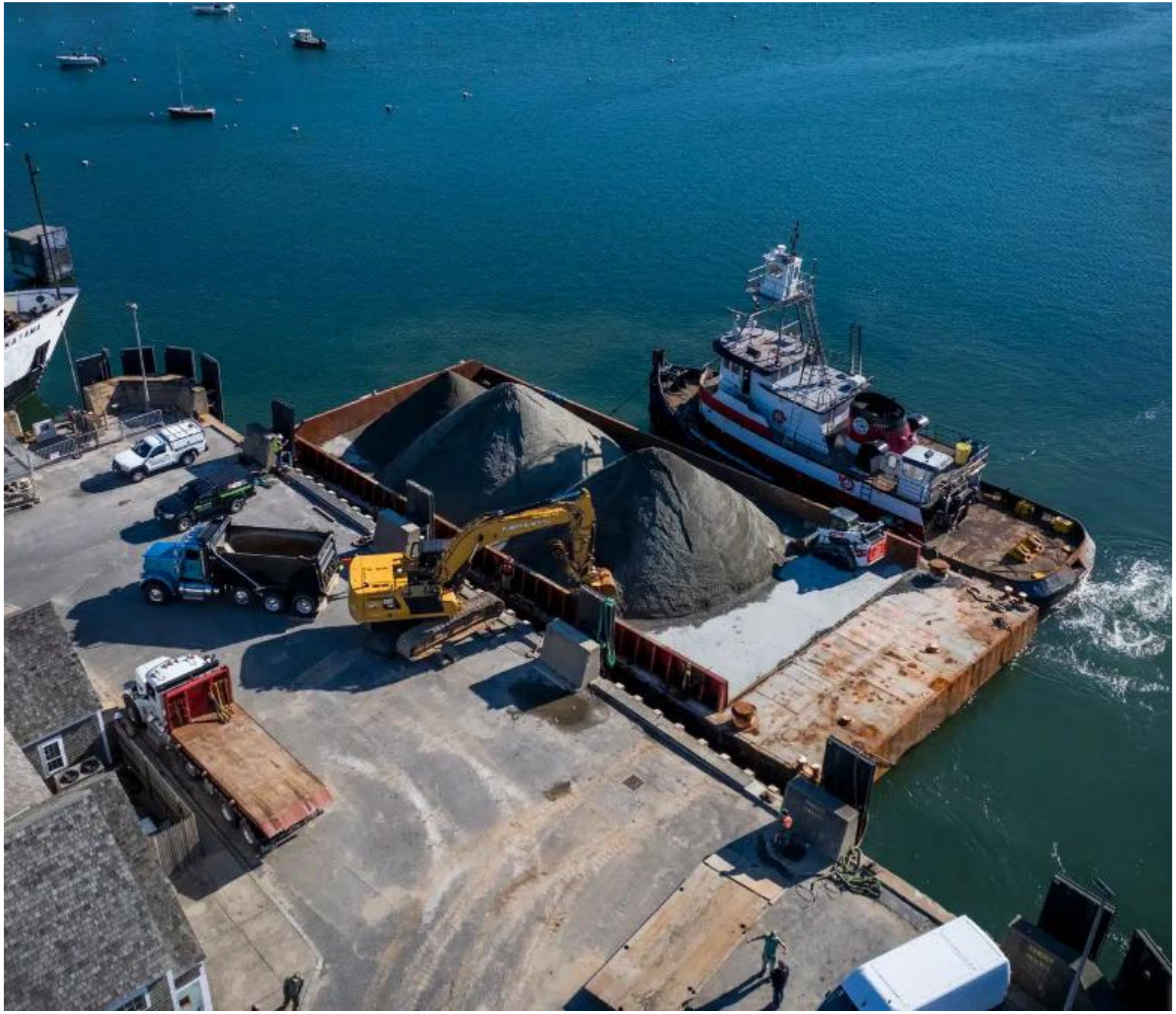
Invasive European Green Crab Devastation



Coastal Erosion due to ocean warming sea level rise and more intense storm impacts



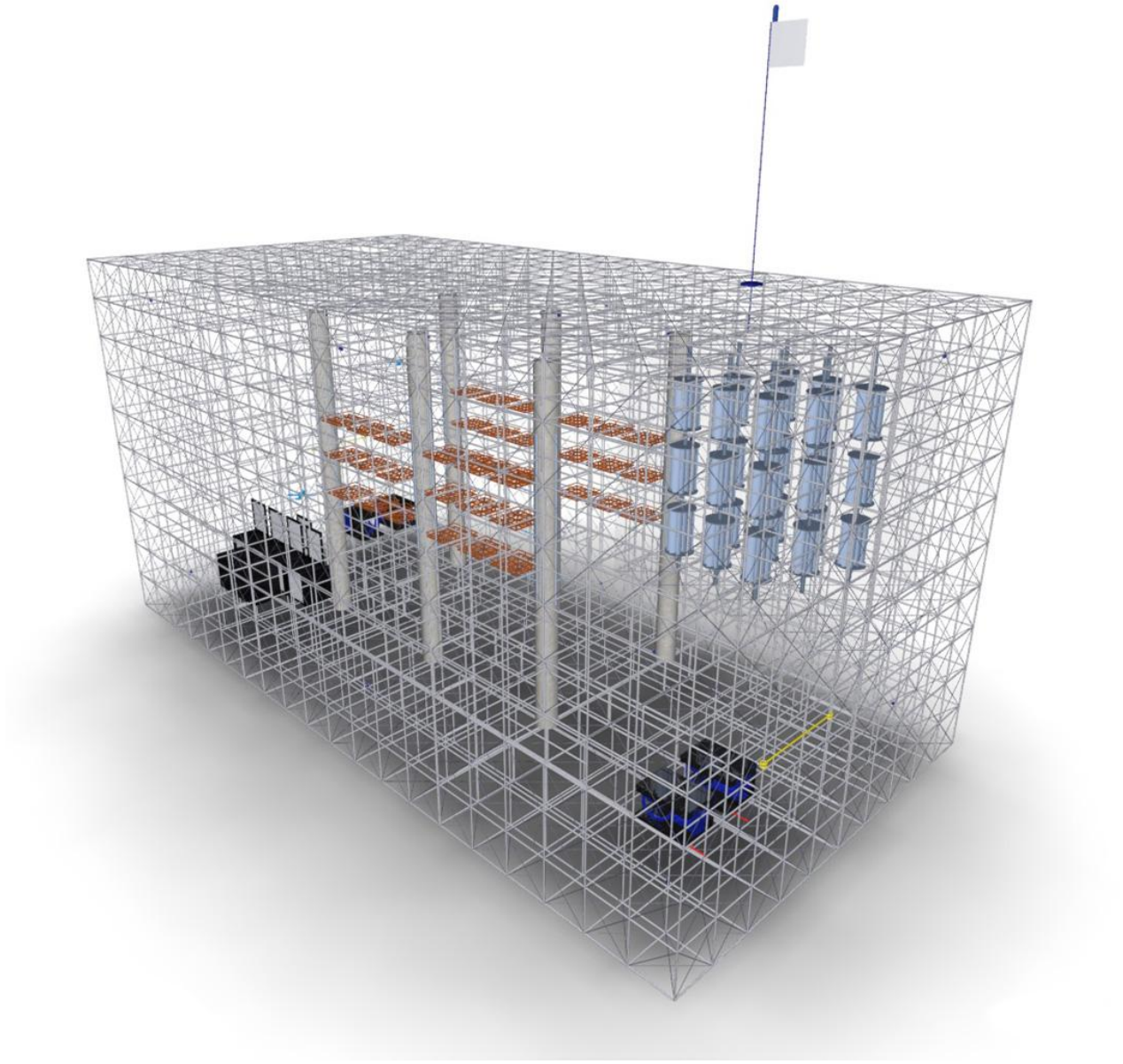
Lewis Bay Research Center, Inc. is now an Innovation Partner with the Robert B. Our Company for Marine and terrestrial solutions for Coastal Communities



Offshore Econcrete Anti-Scour Matts for Reefs that protect coastal Properties from erosion caused by rising seas and more powerful storms. The concrete used in making these will attract and support marine life as an artificial reef structure.



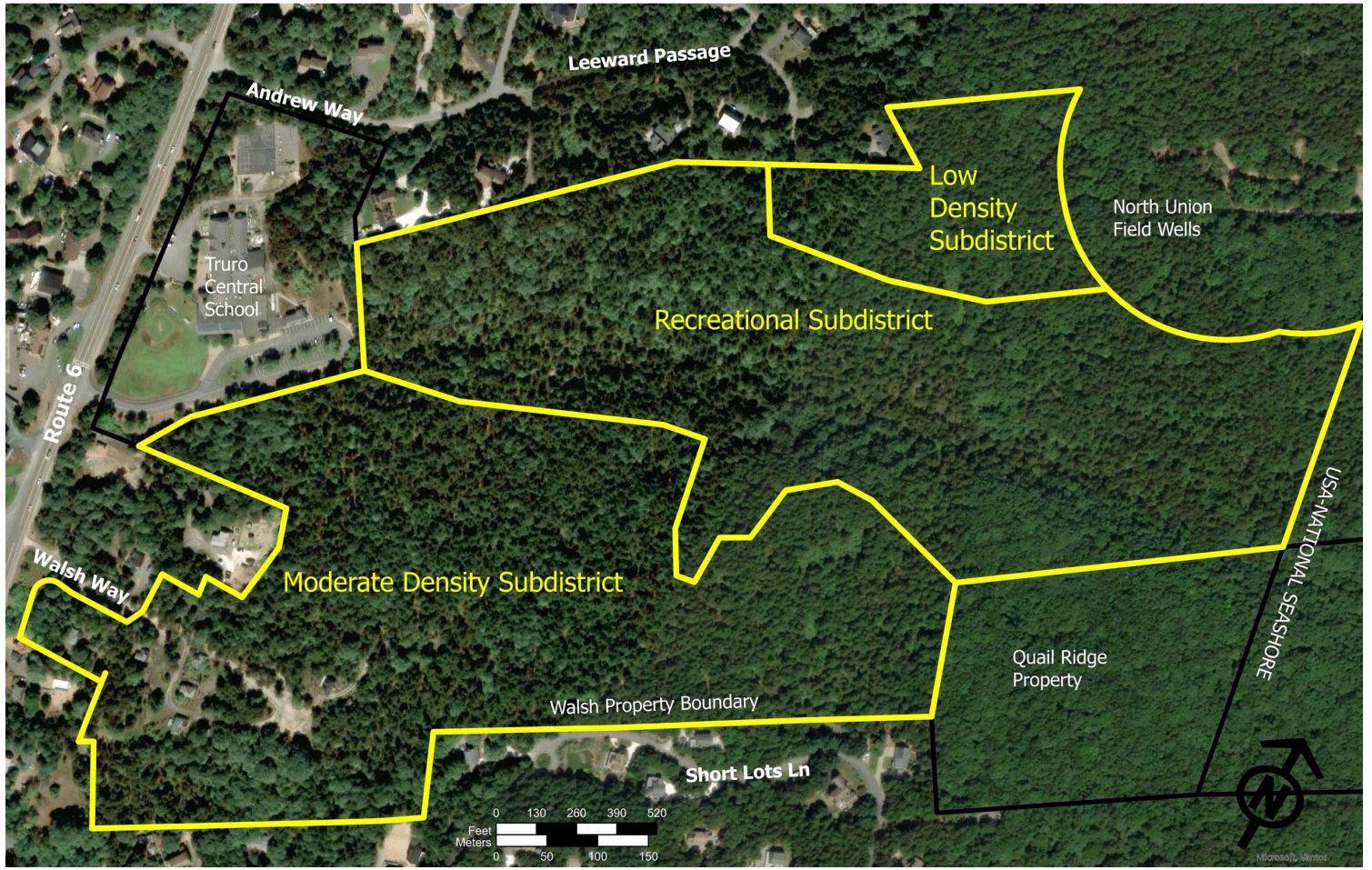
ORSS Project,
Renewable energy
Ocean Cooling
Artificial Reef
Emergency Triage for
Coral Reefs



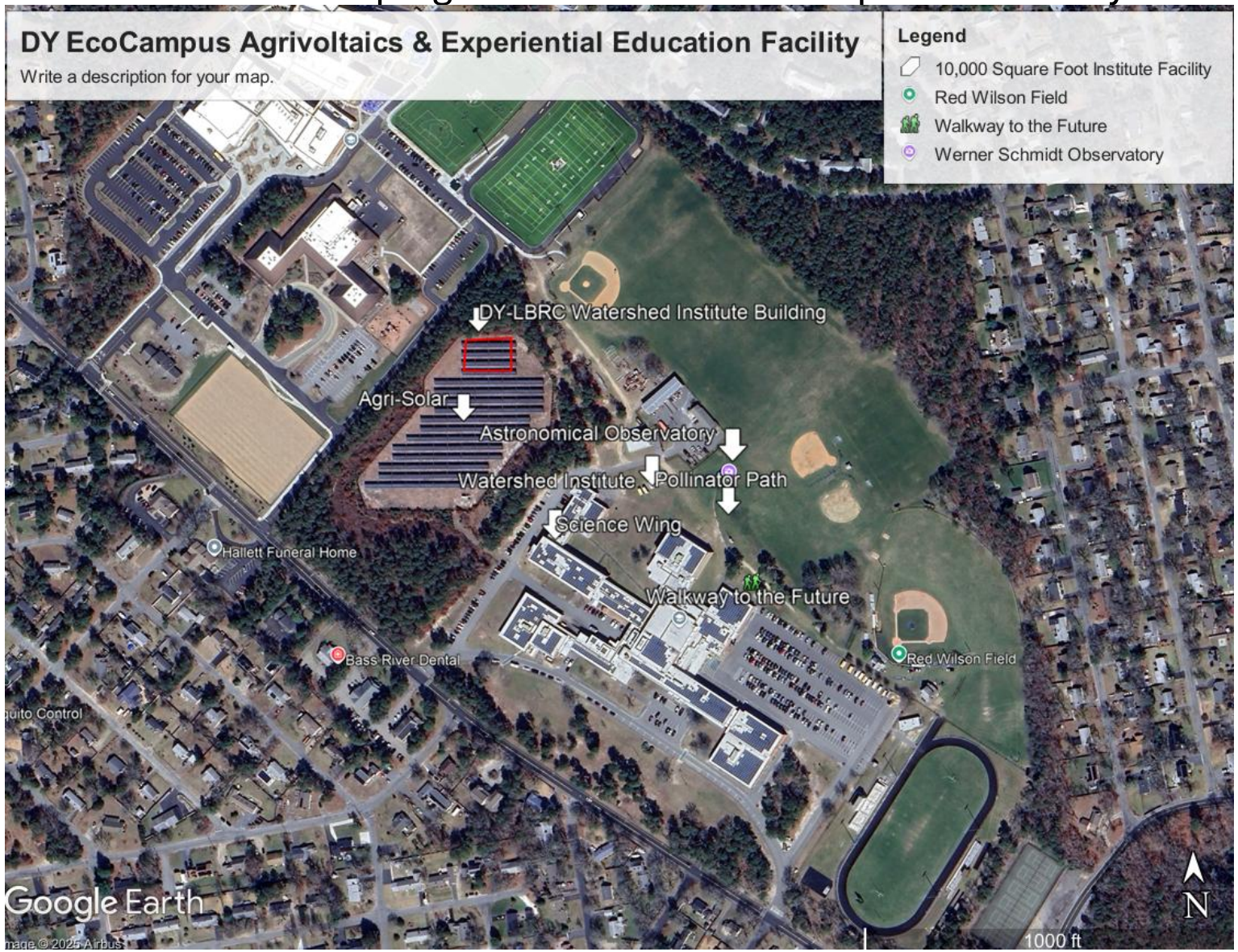
The term Coastal Defense has a whole new meaning today with rising sea levels.



The Truro Central School is an Ocean Guardian School. They are also part of a collaborative agreement with the Dennis-Yarmouth Regional Schools. Both Schools will become experiential learning platforms for Net-Zero community infrastructure and will have a near by bay or river ecosystems to study and protect. This image is a recent plan for a site called the Walsh Property which is planned to be Net Zero in water and energy pollution, while also utilizing the advanced tertiary level water to recharge he local aquafer.



Collaborating with the Cape and Vineyard Electric Collaborative to re-power .85 MW Solar array to include 20,000 square foot Watershed Institute Building & Experiential Learning Agrivoltaics program along with the Lunch to Landfills program for the DY EcoCampus with Rotary International



Earthshot Prize: Regional Partnership With Rotary ESRAG



Cayuga Wetlands Restoration Project

Through Rotary, We have formed a collaborative partnership with The Tier Network and the Susquahanna River Watershed Institute to share all of the project package for the Cape Cod Connected Communities Platform at New Roots Charter Schools, while learning from what they have done. By doing this, we save significantly in project cost and time in the development of a mirror project. This can then serve as a model for global replication for connected Communities everywhere.

Watershed Institute Site Facilities

The Watershed Institute now has sites in Truro, South Yarmouth and Sandwich, MA

Net Zero Technology Education and Workforce Training

- **Phase 1 is now moving forward connecting all elements of the campus with new agriculture facilities and venues. Some funding has been included in the State budget for greenhouse, urban agriculture and pollinator restoration elements.**
- **Initial curriculum elements will be fleshed out with our educational partners**

NEWTON ROOM Advanced STEM Studies

- **The Cape Cod Collaborative**
- **Project Green Schools**
- **DY Regional Schools**
- **Sandwich Schools**
- **New Roots Charter Schools, Ithaca. NY**
- **Susquahanna Watershed River Institute**

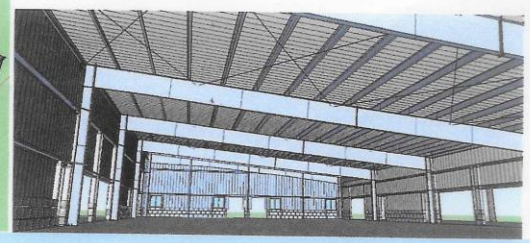


Watershed Institute 10,000 sq.ft. Bldg.



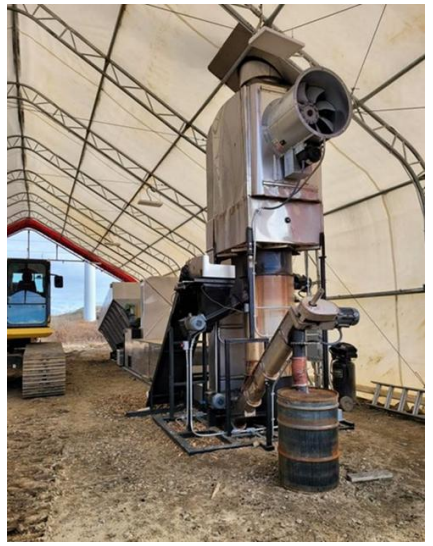
Not To Scale

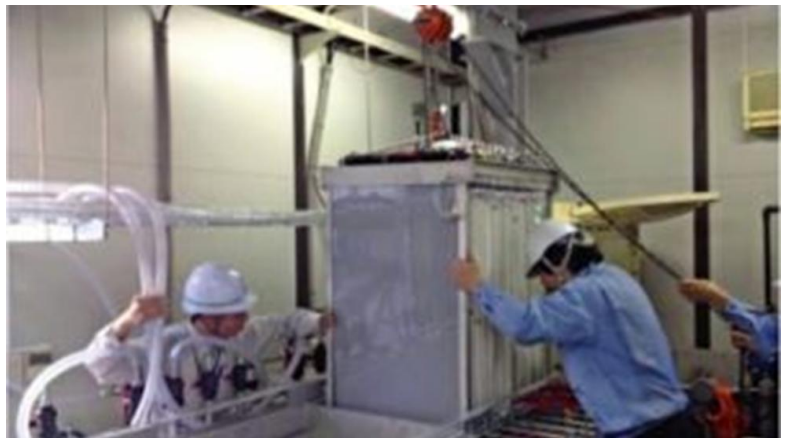










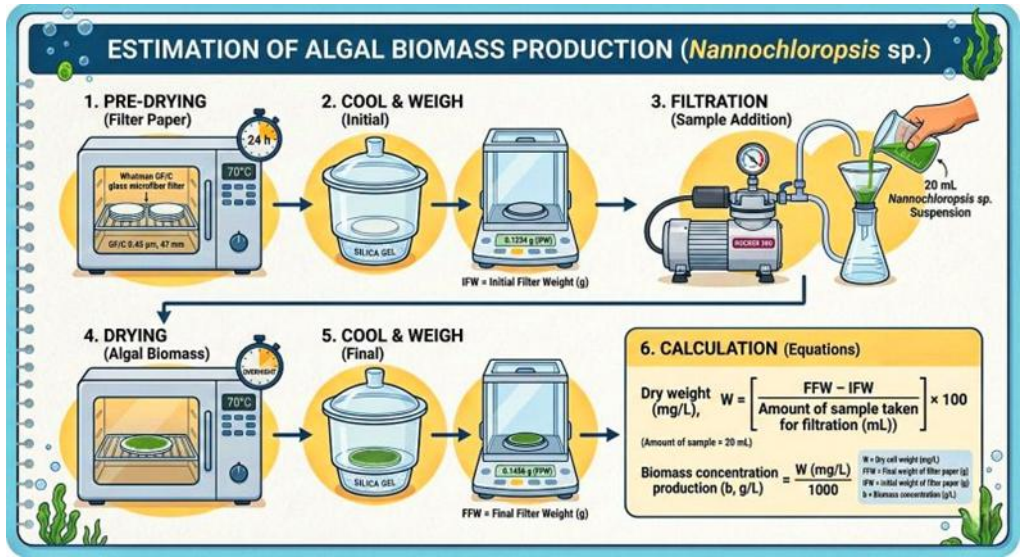


Algae Biotechnology Infrastructure Evolution



In this file photo, Brian Braginton-Smith, executive director of the Lewis Bay Research Center, holds up algae water from a project in 2013 aimed at using algae as a means of cleaning wastewater. Now Braginton-Smith and his team hope to open a living laboratory, in collaboration with the Dennis-Yarmouth Regional School District. *Merrily Cassidy, Cape Cod Times/Merrily Cassidy*

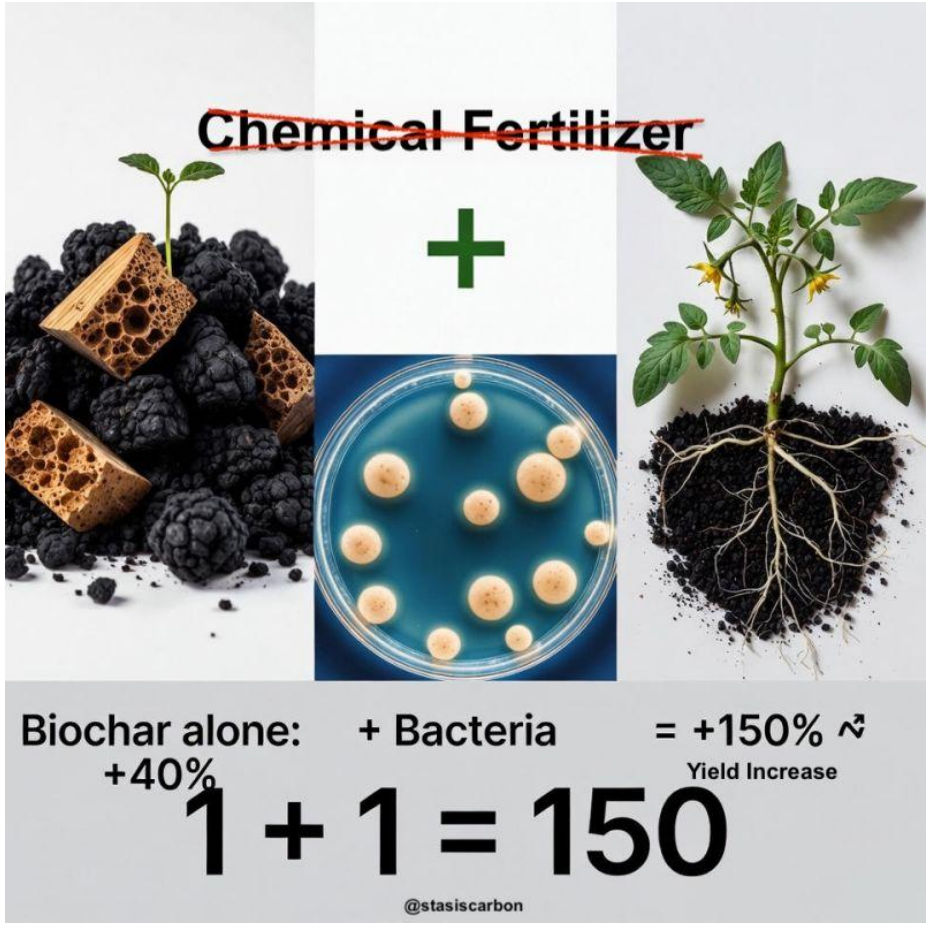




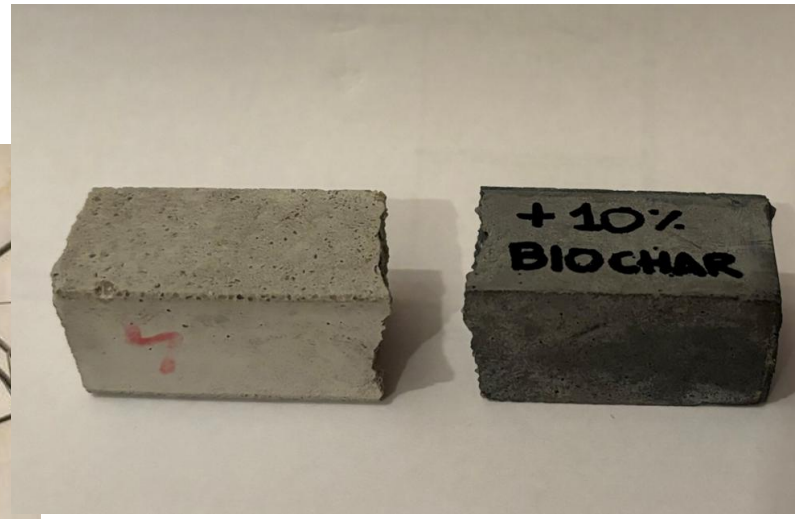
What if your lawn could clean up pollution

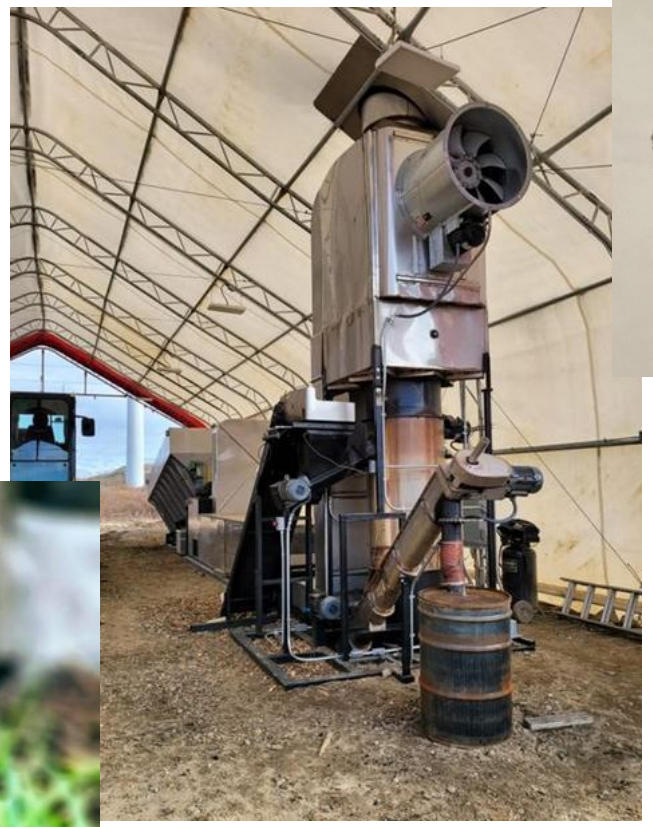


Our developments will utilize mobile carbonizers that will convert the clean wood material from the site clearing directly into biochar for onsite utilization in onsite soil regeneration.



Biochar based applications





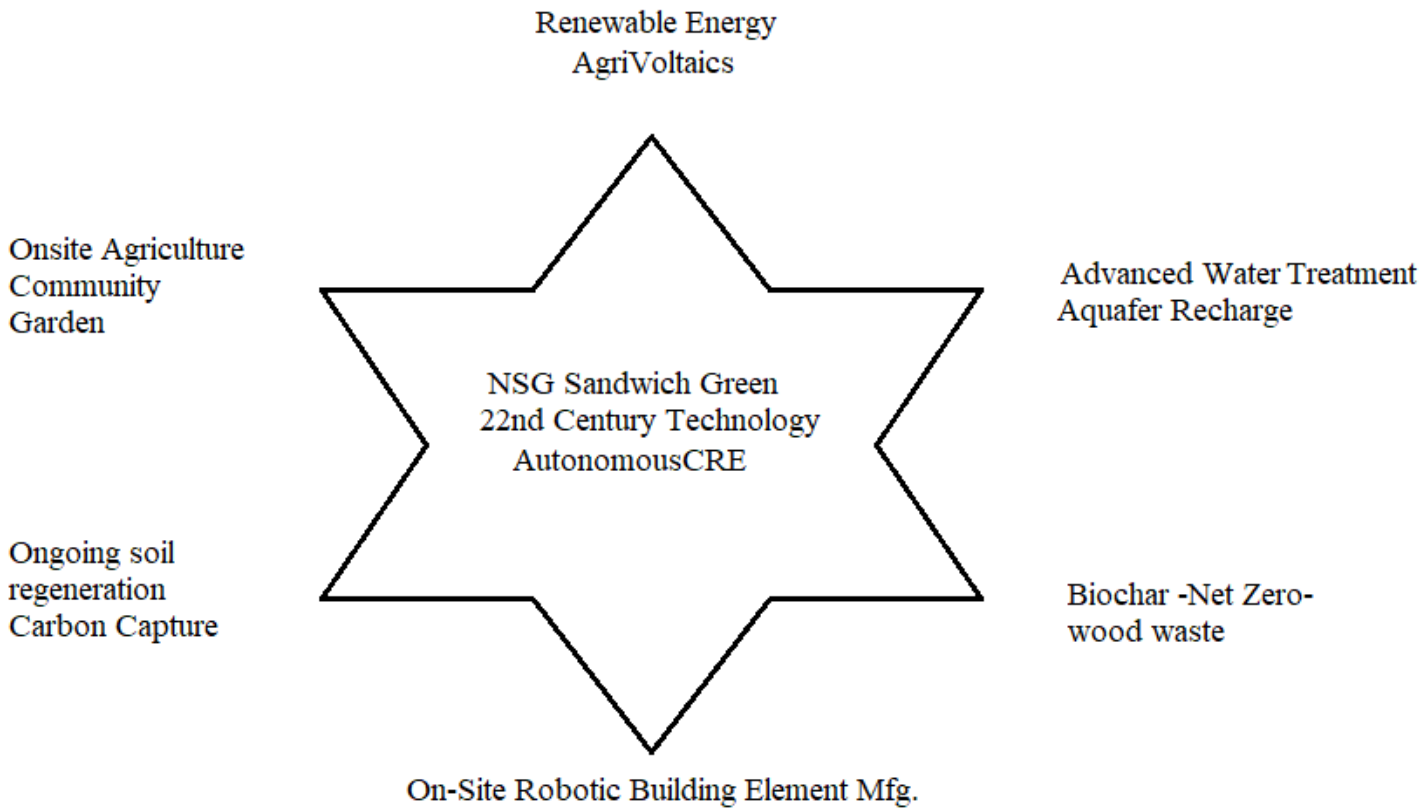


An Economic Opportunity in solving
Our climate challenges and pollution

Biochar and our future



Nantucket Sound Group – AutonomousCRE
Cape Cod Circular Resources and Net-Zero



Robotic Manufacturing based panelized construction systems





DRAWING TITLE	PROJECT TITLE	DATE	NSG VILLAGE GREEN - 1, LLC
KEY PLAN C1.2	VILLAGE GREEN SITE DEVELOPMENT PLAN	MAY 10, 2024 SCALE 1"=100' DRAWN TRT REVISION -	76 ROUTE 130 & 55 PIMLICO POND ROAD SANDWICH BARNSTABLE COUNTY, MA

Merrill Engineers and Land Surveyors
427 COLUMBIA ROAD, HANOVER, MA 02339 / T: (781) 826-8000
26 UNION STREET, PLYMOUTH MA 02360 / T: (508) 746-3060
www.MERRILLINC.COM

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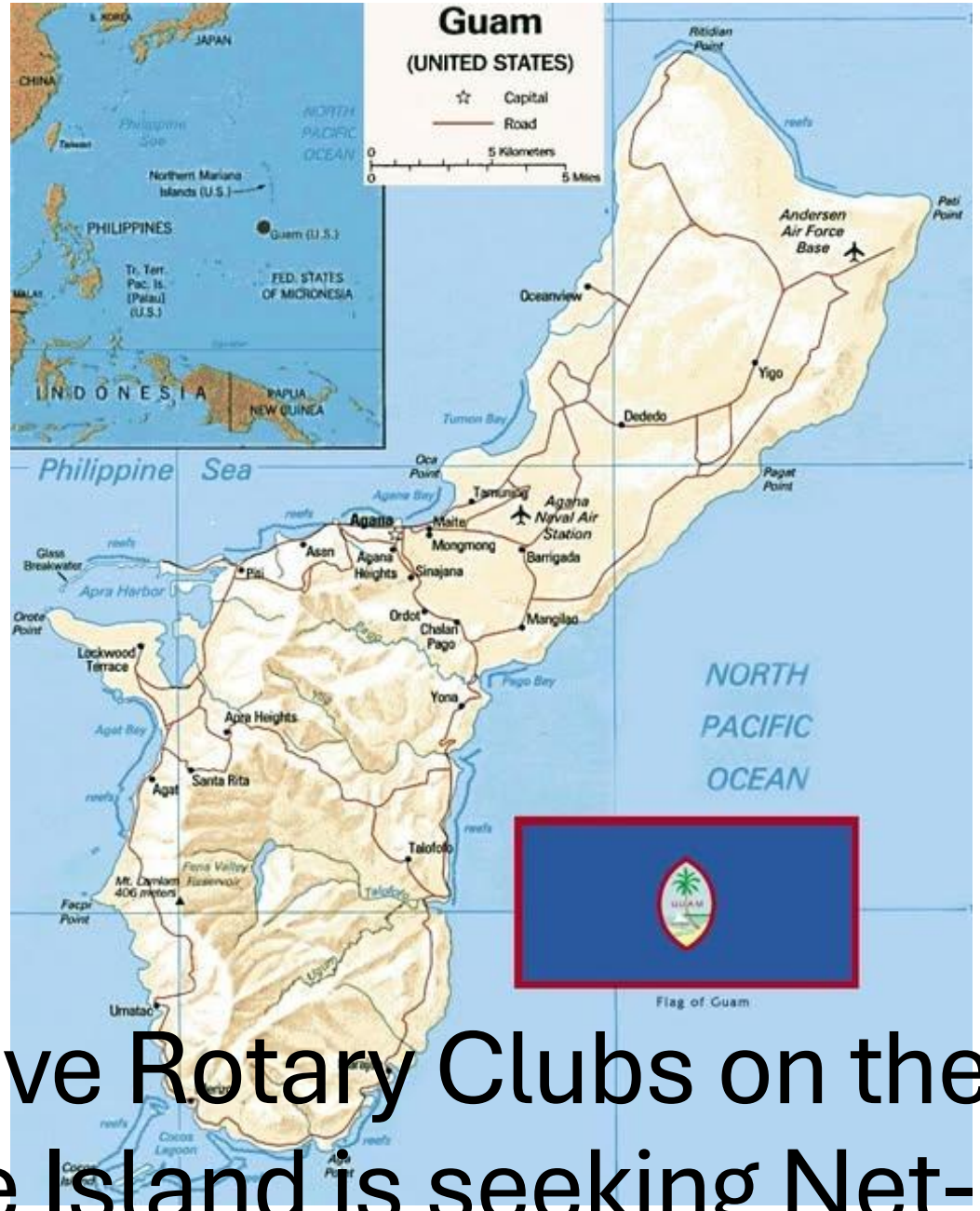
Project funding has been secured for Phase One from our financial partners at the Commonwealth of Massachusetts supporting Net-Zero based Housing Evolution

The Rotary International Equity Opportunity

- How does Rotary International Invest? And Where?
- How do Local, District, Regional and International Clubs
- Can Rotary International join the Commonwealth of Massachusetts (and or New York) as a “Preferred Partner” in the Net-Zero Development evolution in New York and or Massachusetts
- Short or long term equity capital positions offer attractive returns
- Net-Zero Housing satisfies a number of International, National and Local Rotary Priority Areas, Housing, Clean Energy, Water, Education, Economic Development and Our Environment
- Replication of the model economically is inherently circular and vertical in nature, ideally improving with each iteration

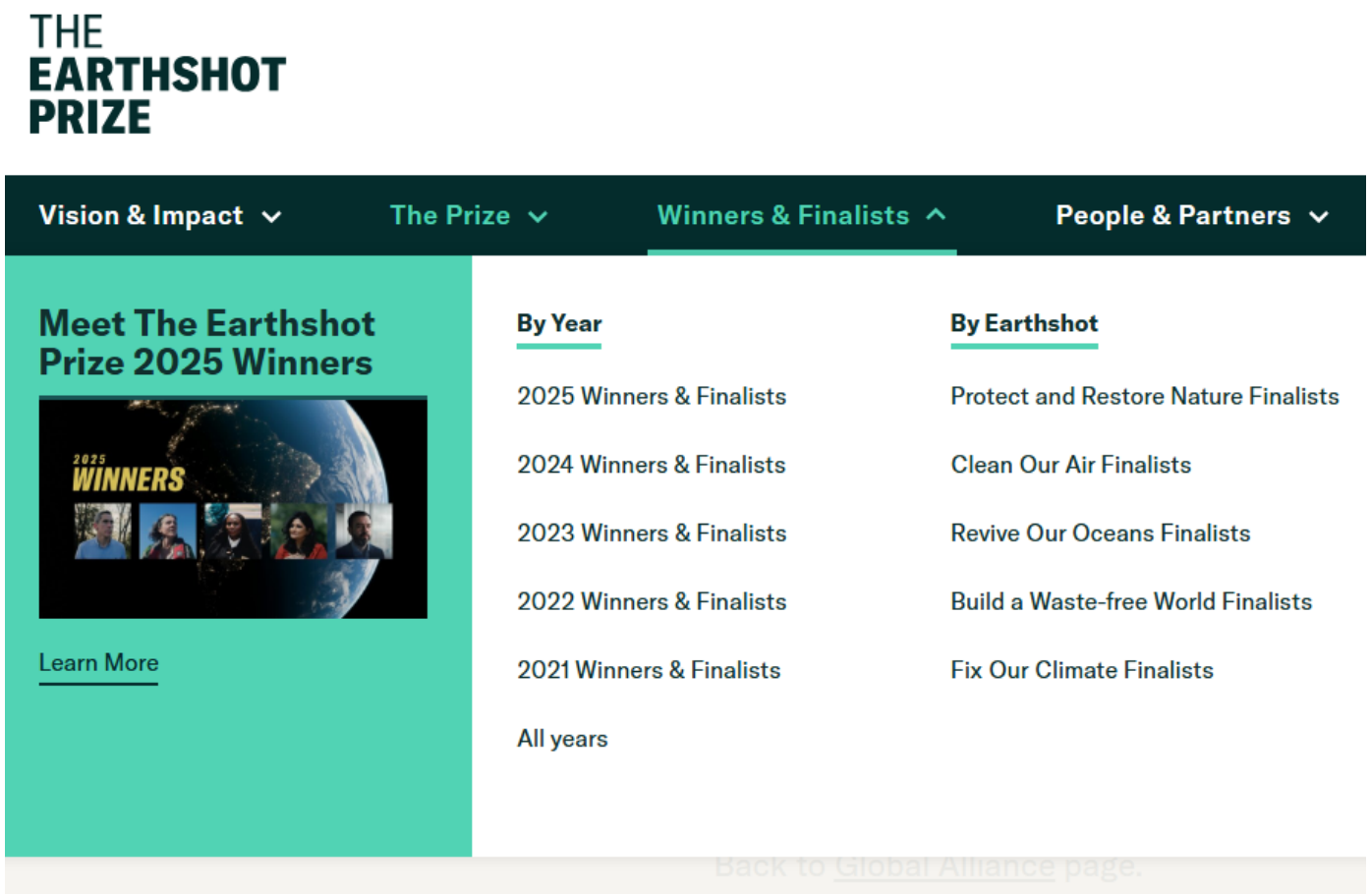
The Connected Communities Consortium

- By perfecting this model in the existing opportunities already underway we can create a menu of solutions available to any coastal or inland community to help deal with the impacts of a warming planet.
- By taking a holistic view we are not just talking about parts we are talking about systems including local ecosystems that will benefit.
- Each of the three watershed sites is a unique ecosystem with some shared threats and unique challenges.



There are five Rotary Clubs on the Island of Guam. The Island is seeking Net-Zero 2050

Our project had been nominated by Rotary and accepted to compete for the Earthshot Prize in 2024 and 2025



Our Connected Communities Nantucket Sound Group Sandwich Green Project competed in both the 2024 and 2025 Earthshot Contests. Our solution includes elements called out in each of the Earthshot Years in one truly Earthshot package.

A working group has formed based upon ESRAG and Earthshot affiliated individuals who believe that this project represents a truly Earthshot level endeavor.

Rotary Philanthropy is only one side of the coin.



Brian Braginton-Smith
Lewis Bay Research Center
April 15th, 2026 Presentation