

# ROBERT'S BAY REVITALIZATION INITIATIVES



# Robert's Bay Revitalization Initiatives



- Organization was created based upon a commitment of two individuals, Former Mayor, John Holic and Past Commodore Melinda Short- Environmental Chairperson, Venice Yacht Club.
- Goals:
  - Promote coastal stewardship and environmental aid to the City of Venice
  - Keep our waterways clean and support life using environmentally friendly solutions
  - Reduce the human impact on our waterways
  - Educate our community and to increase awareness among the community about the importance of protecting our waterways
  - Be an advocate by delivering unbiased information to help form public policy
  - Strive for better environmental standards for our waterway and bays

# Robert's Bay Revitalization Initiatives



- 1<sup>st</sup> Project – Roberts Bay Artificial Reef Project (RBARP)- Pilot Project
  - Requesting \$5000 to install 12 artificial mini reefs around Roberts Bay
    - SunCoast Reef Rovers will provide free of charge installation as well as an annual maintenance check to the city or private homeowner.
    - Training on installation by Ocean Habitat (vendor).
  - Suggesting a pilot program that is a combination of both city docks and private docks
  - Business Agreement has been developed and in review by our lawyers
  - Project will be monitor by the Robert's Bay Revitalization Initiatives BOD.
  - Documentation will be provided with the results of this pilot program.
    - Water testing, photos before and after



# Robert's Bay Revitalization Initiatives

- Partnerships:
  - Venice Yacht Club
  - Sarasota Bay Watch
  - SunCoast Reef Rovers
  - Oyster Boys Conservation
- Similar Projects:
  - Bird Key Yacht Club along with Anna Maria Island Community – 200 units in August 2020
  - Siesta Key Association – 150 mini reefs – 2020 and 2021
  - Venice Yacht club – 4 mini reefs installed June 2021
  - County Club Estates, Venice, Florida – 105 mini reefs -2021
  - Pelican Alley in Nokomis - 8 mini reefs - July 2021
  - Manasota Key Docks – 22 mini reefs – February 2021
  - More than 4,000 units are installed in Florida and close to 5,000 elsewhere in the U.S.

# Artificial Reef Information



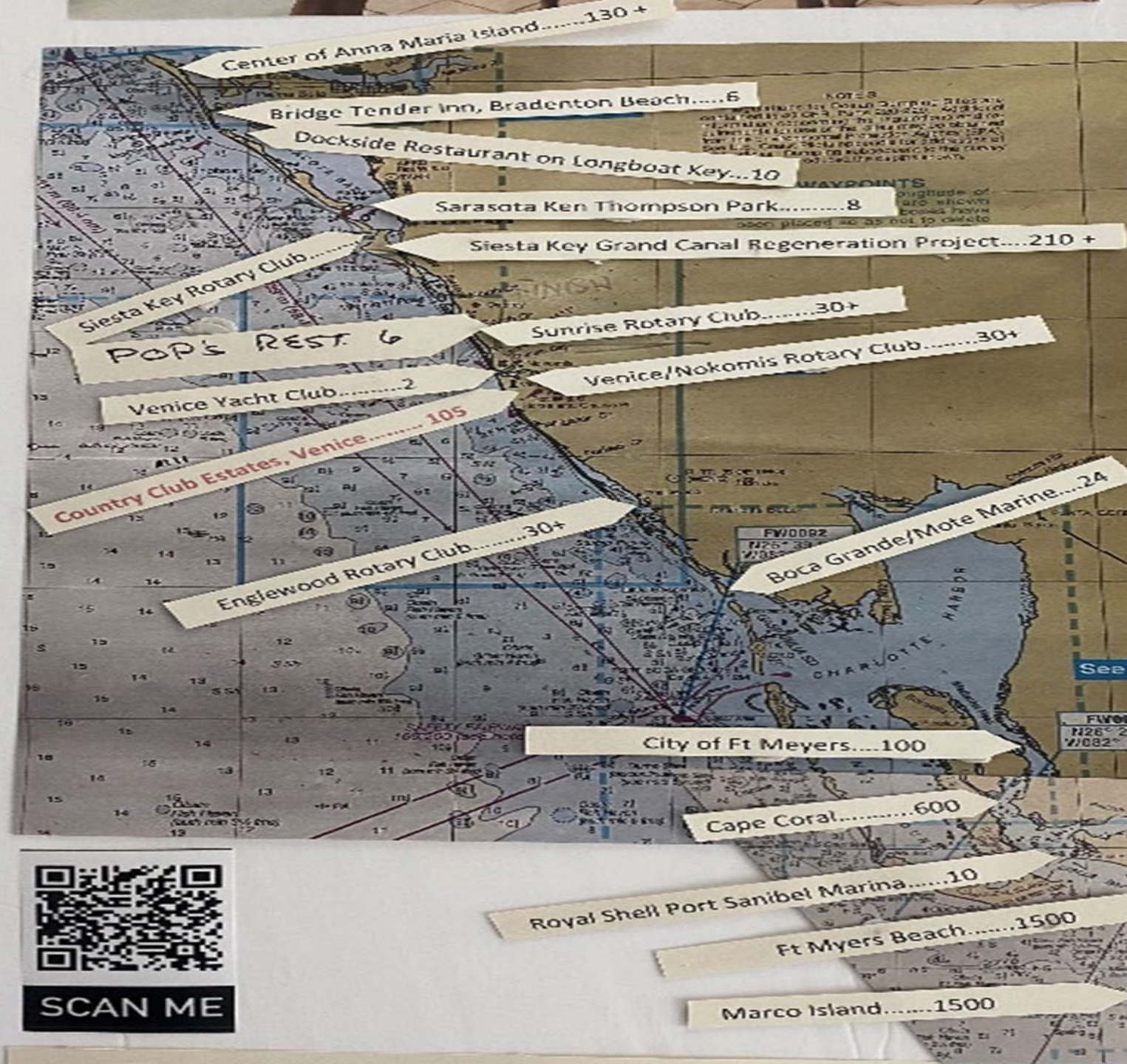
- Filtration System – 30,000 gallons per day
  - Oceanic Habitat conducted studies with experimental and control sides. The use of a marina with a known volume of water was used, mini reefs were placed inside of it and timed on how long it took to clean up the water quality. That gave us how many gallons per day. These experiments were repeated 100 times with different amounts of water.
  - Ocean Habitat scraped all the life off those mini reefs, counted and identified the animals. Filtration rates were used for everything we collected, and the numbers came out within 2% of the timed experiments above.
  - The actual range of filtration is 18,000-120,000 gallons per day depending on what filter feeders are living on the reef. That is determined by the location the reef is in. The average of all the reefs we studied was 30,117 gallons

# Artificial Reef Information



- Design Features – 1<sup>st</sup> mini reef installed - Marco Island in 1992 – 1,000 additional reefs added
- Weights 14 pounds and can grow up to 99 pounds
- Constructed of polypropylene – will outlast the dock
- Layers are spaced for best populations (crabs, oysters, lobsters, and fish)
- Layers are marine grade “Poly” with core allowing sea life to adhere
- 24 inches deep where most marine growth occurs
- PVC pipes are a solid inner piece with outer sleeves for layer spacing
- Hole in middle of layers allows wave forces/energy to flow thru easily. ie. Less action
- Vertical line simulates mangrove roots for barnacle growth
- Top section is filled with closed cell foam. Does not need replacing
- Tied around dock pilings with polypropylene line

# Deployment of Artificial Reefs in Southwest Florida



# Coalition and Partners – supporting Artificial Reefs



- Siesta Key Grand Canal Project
- Center of Anna Maria Island
- Mote Marine Dr. Ryan Schlosser and Dr. Valdes of Eckerd
- Bocilla Island Conservancy
- Venice Environmental Advisory Committee
- Phil Chiocchio, scientist, lecturer
- Eckery College – Dr. Angulo-Valdes, Marine Science Prof
- Ernesto de la Vega, USF marina biologicist and clam man



QUESTIONS  
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