

SIESTA KEY GRAND CANAL REGENERATION PROJECT

FEBRUARY 2021

Create Habitat for Juvenile Sea Life in the SK Grand Canal



Watch for us in the Canal!

The Siesta Key Grand Canal Regeneration (SK GCR) team has started to collect information on species and analyze the Canal's water.

Siesta Key Association's SK GCR project team on the water included Phil Chiochio and David Vozzolo and our partners, David Wolff, Ocean Habitats, Inc. and Armando Ubeda, a FL Sea Grant Agent at UF/IFAS Extension.

The Grand Canal is 9-miles long. The plan is to install Mini Reefs in all the docks in the Canal. Mini Reefs attract oysters and the oysters clean the water and create oxygen to attract and support new sea life. Our Canal, Island and County will benefit from the creation of new sea life.



Mini Reefs are tested for durability and are created with marine grade materials. Mini Reefs have been shown to have an estimated 500-year lifespan and filter 30,000 gallons of water per day. They are akin to 'nature's kidneys' as they attract bivalves that clean the water while creating oxygen, and they provide a habitat for juvenile sea life. Once established, scientists report reefs will support some 300 fish and 200 crabs per year.



Help us Regenerate the Grand Canal, tell your friends and dock owner neighbors that orders for mini reef can be made now (cost is \$300 and includes installation), contact **SiestaKeyAssoc1947@gmail.com**. Call **941-313-0559**

Check out our SKA'S Website Project (Grand Canal Regeneration) page for more information. Installations are being planned for February 15-16. <https://siestakeyassociation.com/grand-canal-regeneration/>



David Wolff II and David Wolff installing Mini Reefs in December 2020. David is partnering with SKA. His business, Ocean Habitats, Inc., is a Florida based Oceanographic non-profit. David builds and sells the reefs. He said it took him more than 100 configurations to come up with the 'right solution.'

"These reefs are made of polypropylene, the material extensively and almost exclusively used to wrap-supports for marinas, ports and docks. It holds up to ultraviolet radiation and salt-water and doesn't shed micro-plastics for an estimated 75 years. And these reefs are recyclable."

Question: Is their action on the removal of the shoal at the mouth of the Grand Canal? Answer: Water flow is inhibited at the entrance to the Grand Canal. The depth is 8 ft on the left and 3.5 ft deep on the right, as shown on the graphic.

In 2019, SKA and Sarasota Environmental Protection presented to West Coast Inland Navigation District (WCIND) and requested help with removing the shoal to improve water quality. The WCIND provides funds to address these issues in Sarasota waters. We understand the response received was not as expected. We need to set up a plan to meet with WCIND to understand the objections or issues on the shoal removal.

In the meantime, we found evidence that this problem was recognized in the 1985 Grand Canal Mote study. One of the findings in the study stated, "Deepening of Palm Island, Siesta Isles, or other segments probably would aggravate water quality problems, but the removal of shoals near the canal mouth may improve circulation." This study's findings and our project work could help make our case for the WCIND or other organizations to assist.



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The team has started the science and terrain data collection, e.g., water testing, species identification, identifying springs, etc. The Canal's 9-mile territory has been divided into sections, as shown on the map, to support collecting and reporting results.

The section designations (*Grand Canal*, *Ocean Beach/Sarasands*, *Palm Island*, and *Siesta Isles*) allow us to share data with other organizations without disclosing any specific address location.

Data sharing organizations include The Center of Anna Maria Island, Univ. of FL and FL Water Watch.

We are working on developing a plan to enter the Gulf Coast Community Foundation 'Playbook' program.



Featured Crew Members



Phil Chiochio

SKA's Co-Partner for the Grand Canal Project. Phil has knowledge and experience with Mini Reef operation and installations.

He provides project videos and connections to the County, Environmental Groups, and others such as Mote to help with species identification. Phil has supported several Communities with their installs.



Dave Vozzolo

Dave is an SKA member and a Grand Canal Mini Reef owner.

He manages the Project's data collection and tracking, and mapping the installed Mini Reefs and Canal features.

With help from Phil and Armando, Dave is taking the lead on collecting the data for science side of the Project.



Armando Ubeda

Armando is a Florida Sea Agent with the University of FL IFAS Extension and FL Water Watch.

He is our team's scientist. Armando provides the process and tools for collecting water samples. He is actively involved in training others, collecting, and analyzing samples.

Armando will be sharing our data with the State of Florida. The website for Florida Water Watch is <https://waterwatch.ifas.ufl.edu/>

Questions and Answers

1) How many reefs should I install?

Most docks can handle several Mini Reefs without interfering with any navigation.

For the juvenile fishery, more structure is better. The water depth for the Mini Reef should be at least 24". You do want the unit to float and the fish to swim around the reef. There are smaller sized Mini Reefs that will work in 18" deep water.

Some areas are shallow or have low tides. If it sits on the bottom for a little while, exposing the oysters, they won't mind. They'll spit water. The juvenile stone crabs and fish will adapt as the tide goes out and returns. The Mini Reef becomes their food supply and safe home.

2) If they sit on the bottom, will the silt build up? If water flow is impeded in shallow areas with a "reef," wouldn't that encourage sediment to increase in those shallow areas?

It will just sit on the bottom if there's not enough depth to float.

Water flows through the reef to feed the animals growing on it and around it. The small amount of flow in a canal system is not affected by a Mini Reef, and the Mini Reef should not encourage sediment to build up.

Siesta Key Association (SKA) is having its Annual Membership drive.

Consider signing up for membership. For \$35 a year, you will be informed on what is happening on the Key (the Hotels Projects) as well as our Grand Canal Regeneration Project. Go to the SKA website to Join.

<https://siestakeyassociation.com/>

Thank You for Making the SK Grand Canal Regeneration Project a Success