LAKE WORTH *LAGOON DRIFT* CARD STUDY: MAY 2022 AFTER-ACTION REPORT

PROJECT SUMMARY

The Lake Worth Lagoon Drift Card Study, or *Lagoon Drift*, is a community-oriented citizen science experiment designed to add new observational data to existing models and give South Florida a better sense of how localized currents affect the way particles, including marine debris and pollutants, move in and around the Lake Worth Lagoon (LWL). This experiment is an extension of the Biscayne Bay Drift Card Study (*Bay Drift*), led by the University of Miami's Consortium for Advanced Research on Transport of Hydrocarbon in the Environment (CARTHE) and the first of its kind in Palm Beach County (PBC). After a year and a half hiatus in response to the COVID-19 pandemic, *Lagoon Drift* partners were pleased to re-commence the drift card experiments in November 2021 and executed their 7th regional citizen science experiment in May 2022.

PARTNERS

The Palm Beach County based experiment was executed by ANGARI Foundation in conjunction with local partners:

- Clearwater Marine Aquarium Research Institute
- Eco Scouts at Kids Conservation Club
- Friends of Manatee Lagoon
- Friends of Palm Beach
- Keep Palm Beach County Beautiful, Inc.
- Lake Worth Lagoon Initiative
- Lake Worth Waterkeeper
- Manatee Lagoon - An FPL Eco-Discovery Center™

- Norman Gitzen Gallery
- Palm Beach Atlantic University
- Palm Beach County - Environmental Resources Management
- Palm Beach Day Academy
- Quest Workspaces
- Sea Turtle Day at Gumbo Limbo Nature Center
- Surface 71
- > 290 community members who decorated/released/reported drift cards and/or provided access to drift card release sites

EXPERIMENTAL DESIGN

At 10 AM on May 27th, ~55 *Lagoon Drift* partners and members of the public coordinated to release 240 - 4" x 6" eco-friendly, degradable wooden drift cards from docks and vessels at 6 sites around PBC. 40 cards were deployed from each of the 6 sites.

Site selection was based on regional history, partner recommendation and accessibility. They were, from N to S: Burt Reynolds Park, C-17 Canal, Manatee Lagoon – An FPL Eco-Discovery Center™, West Palm Beach Center Public Dock, C-51 Canal & C-16 Canal.

RESULTS

Thousands of community members were reached through social media, outreach events and educational programming.

Of the 240 cards deployed around the LWL and ICW on May 27th,

- 73 (30%) were reported by 71 members of the public; these included cards released from all 6 of the study sites.
- Multiple cards were recovered in several areas throughout the region. 5 of the 72 cards released from the mouth of the C-16 Canal were recovered in front of Manatee Bay Apartments in Boynton Beach.
- 20 (27%) of the cards reported were recovered on Atlantic beaches outside the LWL, ICW and Loxahatchee River. These originated from Burt Reynolds Park, Manatee Lagoon, the West Palm Beach Public Dock, and the C-51 and C-16 Canals.
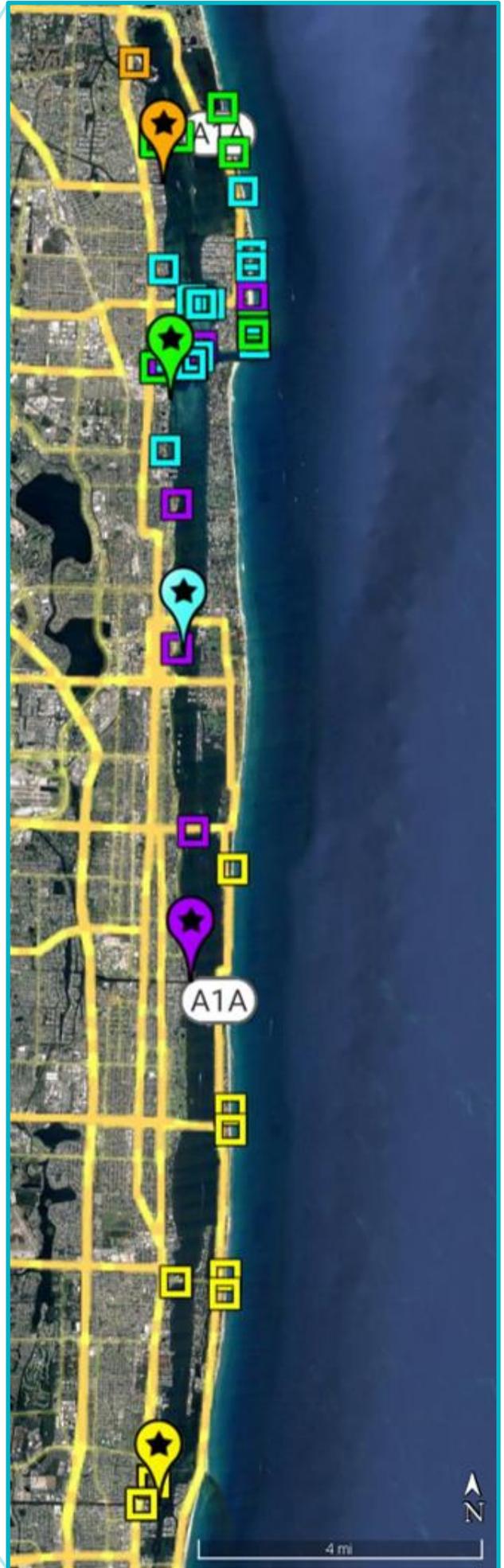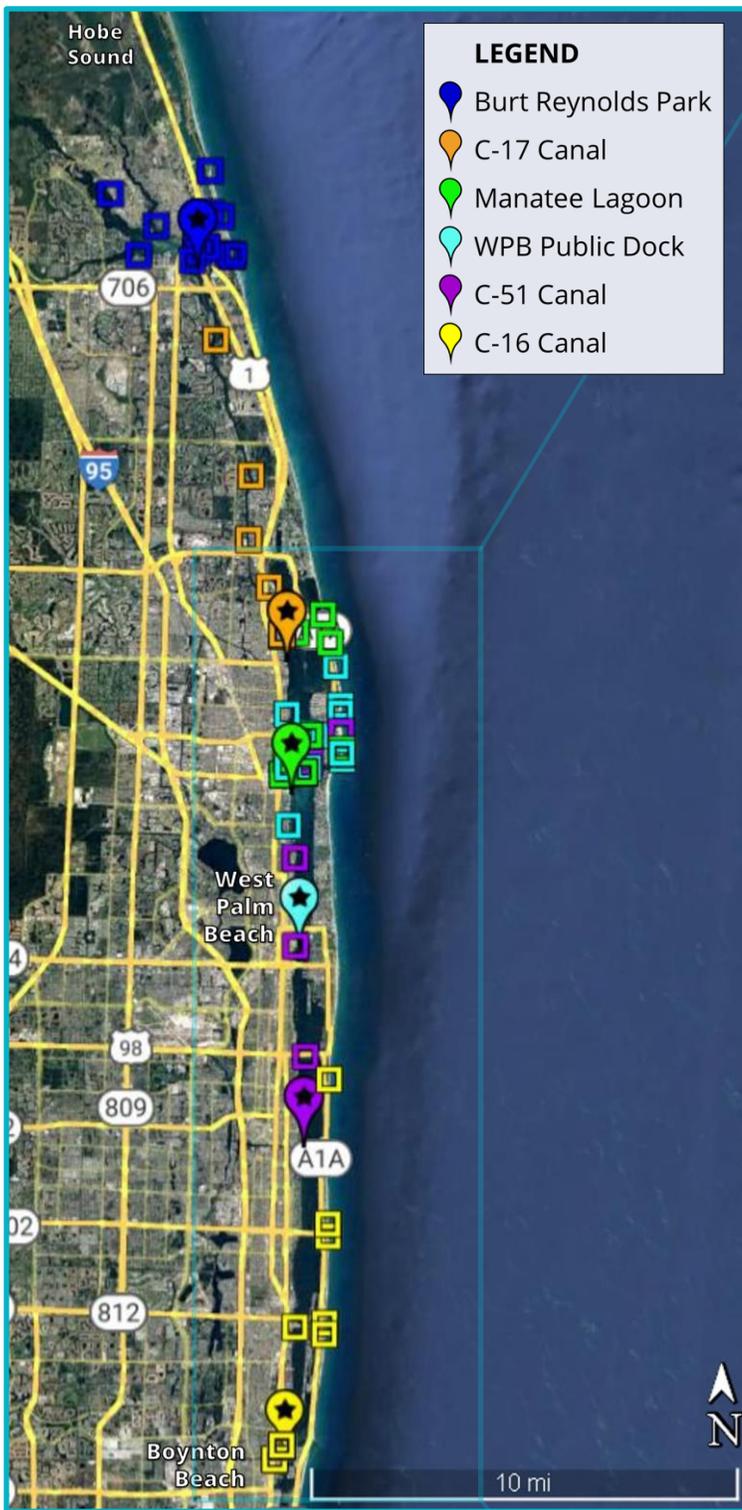- Reports came from Jupiter Island in the north to Boynton Beach in the south.

A color-coded summary figure of the study area with drift card deployment and recovery localities can be found on Page 2.

NEXT STEPS

ANGARI Foundation and program partners plan to continue to grow participation, collaboration and educational offerings associated with the program in the future, including Lake Worth & Indian River *Lagoon Drift* citizen science experiments intended for:

- Fall 2022 (release scheduled for November 11)
- Spring 2023

For more info on the #LagoonDrift project, visit: angari.org/lagoondrift

LEGEND
- Burt Reynolds Park
- C-17 Canal
- Manatee Lagoon
- WPB Public Dock
- C-51 Canal
- C-16 Canal

Google Earth images of the
Lake Worth Lagoon Drift Card Study area
for the May 27th, 2022 experimental release.
Left image provides an overview of full coverage
area, while right image focuses on the LWL where
most of the study activity occurred.

Color-coded marker bubbles indicate drift card release
sites and open squares show locations where drift cards
were recovered by members of the public.