

LAKE WORTH LAGOON DRIFT CARD STUDY: NOVEMBER 2019 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 to 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. The November experiment was the fifth in the study since it commenced in 2017 and also included a pilot *Lagoon Drift* experiment in the Indian River Lagoon in conjunction with Florida Department of Environmental Protection (FDEP) – Indian River Lagoon Aquatic Preserves and their partners.

PARTNERS

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

- Clearwater Marine Aquarium Research Institute
- Friends of Palm Beach
- Keep Palm Beach County Beautiful, Inc.
- LagoonFest
- Lake Worth Lagoon Initiative
- Manatee Lagoon – An FPL Eco-Discovery Center™
- Norman Gitzen Gallery
- Palm Beach County - Environmental Resources Management
- Quest Workspaces
- River Center
- Wellington Landings Middle School – Marine Conservation Club
- > 315 community members who decorated/released/reported drift cards, provided access to drift card release sites and/or reported on the study

EXPERIMENTAL DESIGN

At 3 PM on November 2nd, ~70 *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 outreach events, media, and social media.

Of the 240 cards deployed around the LWL and ICW on November 2nd

- 58 (24%) were reported by 52 members of the public; these included cards released from 6 of the 6 sites.
- While there were multiple recoveries from certain areas, no mass card accumulations were reported.
- 27 (47%) of cards reported were recovered outside the LWL and Loxahatchee River and these originated from Burt Reynolds Park, the C-17 Canal, Manatee Lagoon, and the C-16 Canal.
- Drift card reports came from Jupiter in the north (~1 mile traveled) to Delray Beach (~6 miles traveled) 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.

Media Coverage: Targeted social media and email campaigns by partner organizations.

Town Crier - <https://gotowncrier.com/2019/11/marine-conservation-club-gives-wlms-students-a-hands-on-science-lesson>

Coastal Star - <https://thecoastalstar.com/profiles/blogs/on-the-water-miami-team-releases-eight-saifish-off-boynton-to-wi>

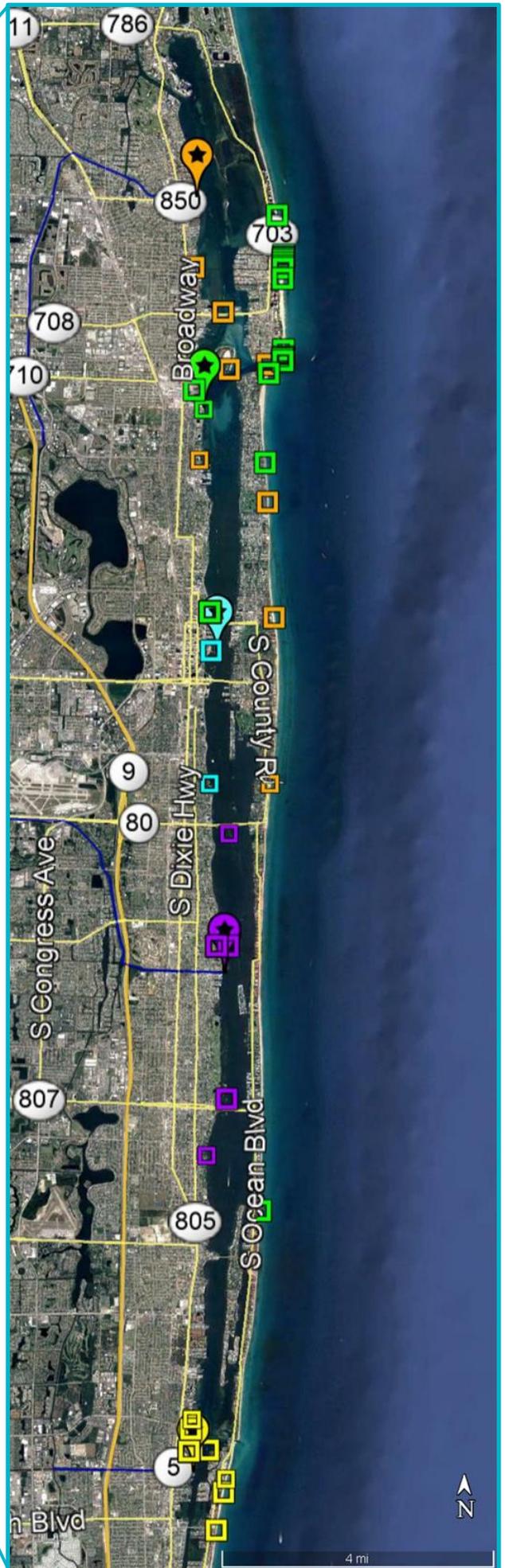
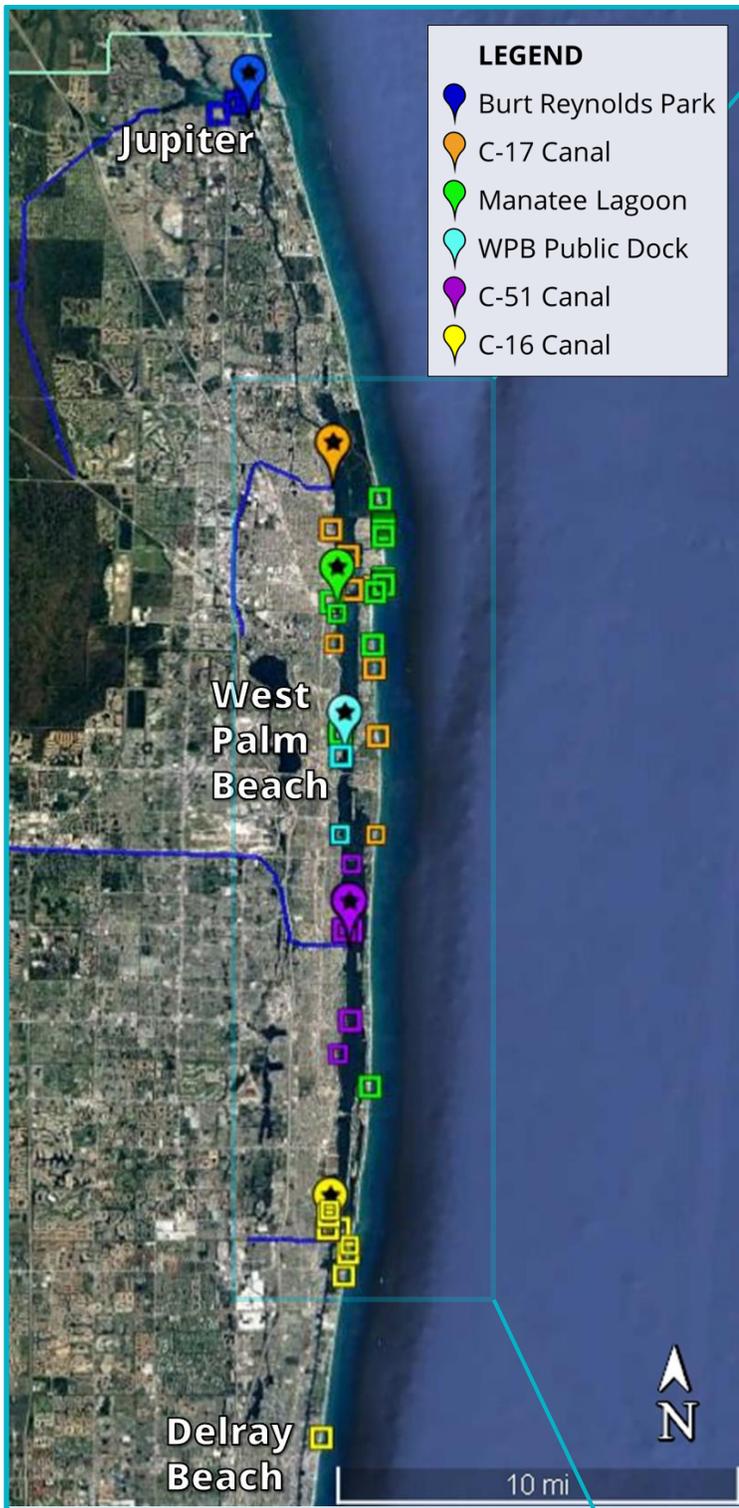
NEXT STEPS

We plan to continue to grow participation, partnerships, and educational programming moving forward, executing *Lagoon Drift* citizen science experiments in:

- April 2020 (postponed due to COVID-19)
- Fall 2020 (pre- International Coastal Clean Up)

****Interested in getting involved with future Lagoon Drift experiments? Please contact LagoonDrift@ANGARI.org****

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



Google Earth images of the Lake Worth Lagoon Drift Card Study area for the Nov. 2nd, 2019 experiment. Left image provides an overview of full coverage area while right image focuses on the LWL where the majority of 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.