

LAKE WORTH LAGOON DRIFT CARD STUDY: APRIL 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 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 the Lake Worth Lagoon region. The April experiment was the fourth in the study since it commenced in 2017.

PARTNERS

The experiment was executed by ANGARI Foundation in conjunction with local partners:

- Friends of Palm Beach
- Keep Palm Beach County Beautiful, Inc.
- LagoonFest
- Lake Worth Lagoon Initiative
- ManateeFest
- Manatee Lagoon – An FPL Eco-Discovery Center™
- Norman Gitzen Gallery
- Palm Beach County - Environmental Resources Management
- Sea to Shore Alliance
- Conniston Middle School, including Surface 71
- > 315 community members who decorated/released/reported drift cards and/or provided access to drift card release sites

EXPERIMENTAL DESIGN

At 3 PM on April 11th, ~60 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 the LWL. 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: C-17 Canal, Lake Worth Inlet, Manatee Lagoon – An FPL Eco-Discovery Center™, West Palm Beach Center Public Dock, C-51 Canal, and Boynton Inlet.

RESULTS

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

Of the 240 cards deployed into the LWL on April 11th

- 78 (33%) were reported by 48 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.
- 7 (3%) were recovered from canal and Intracoastal Waterway locations upstream of their C-17 and C-51 release sites.
- 41 (17%) were recovered outside the LWL; these cards originated from Manatee Lagoon and the Lake Worth and Boynton Inlets; reports came from Hobe Sound in the north (~28 miles traveled) to Boynton Inlet (~0 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.

Palm Beach Post - [palmbeachpost.com/news/20190412/new-why-240-bright-pink-wooden-cards-were-dumped-in-lake-worth-lagoon](https://www.palmbeachpost.com/news/20190412/new-why-240-bright-pink-wooden-cards-were-dumped-in-lake-worth-lagoon)

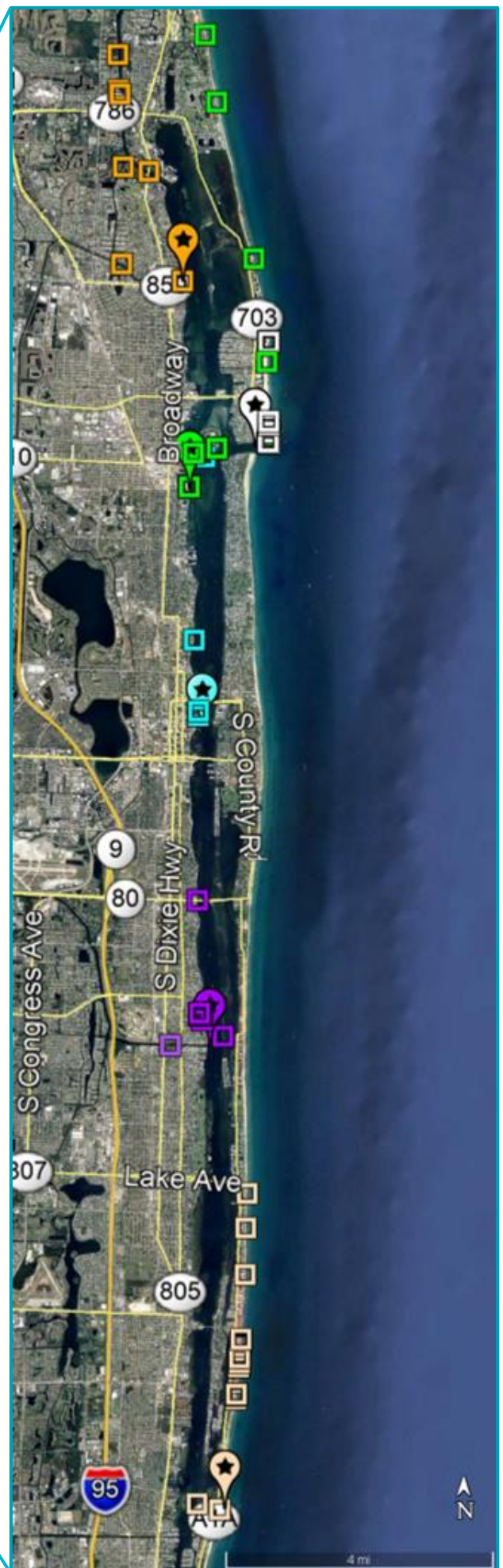
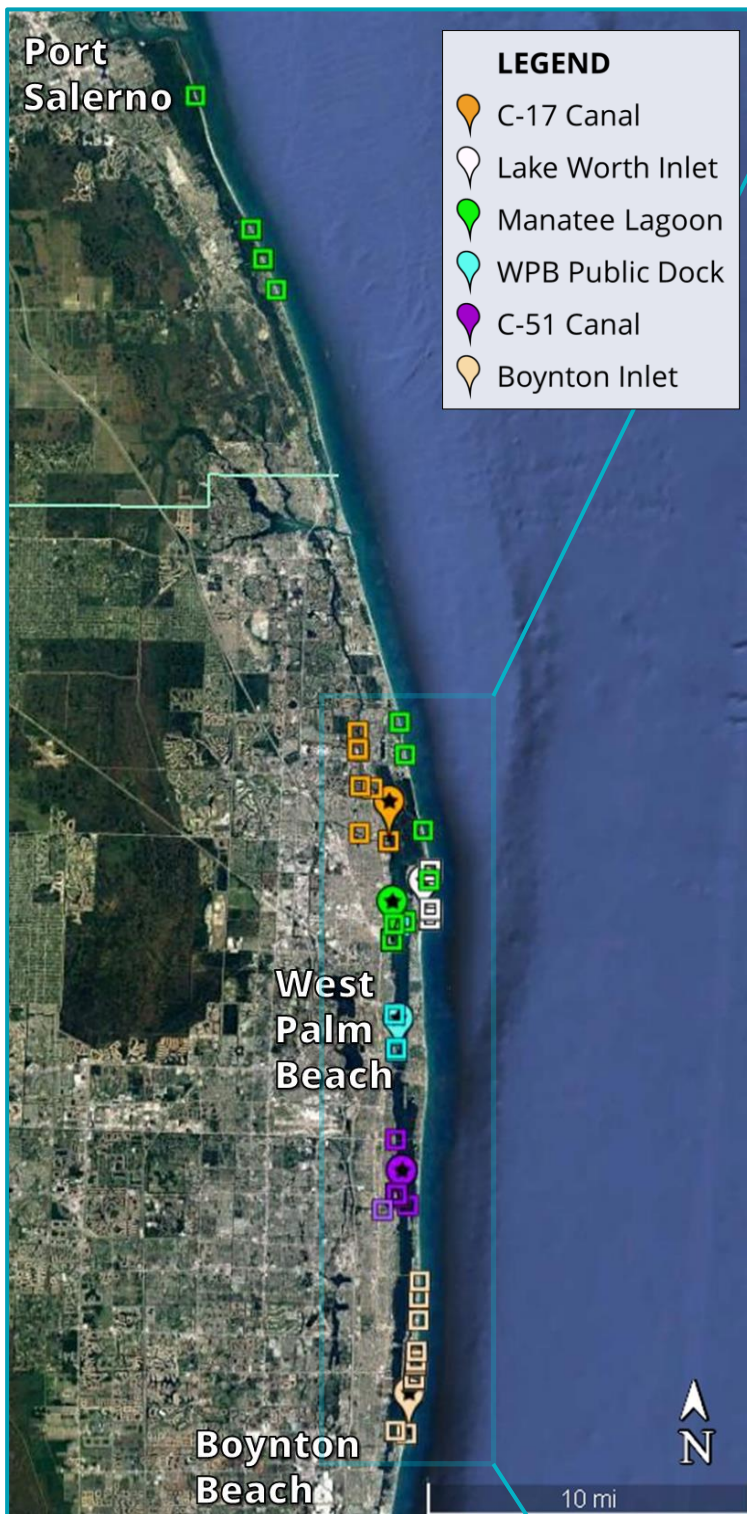
NEXT STEPS

We plan to continue to grow participation, partnerships, and educational programming moving forward, executing 2 Lagoon Drift citizen science experiments each year. The next 2 are slated for:

- Nov. 2019 (in conjunction with LagoonFest event)
- Apr. 2020 (pre- Earth Day & Great American Clean Ups)

*****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 Lake Worth Lagoon Drift Card Study area for the Apr. 11th, 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.

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