

## LAKE WORTH LAGOON DRIFT CARD STUDY: 2017 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.

### PARTNERS

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

- Lake Worth Lagoon Initiative
- Friends of Palm Beach
- Conniston Middle School
- LagoonFest
- Sea to Shore Alliance
- Palm Beach County – Environmental Resources Management
- Manatee Lagoon – An FPL Eco-Discovery Center™
- Wellington Landings Middle School – Marine Conservation Club
- Keep Palm Beach County Beautiful, Inc.
- >190 community members who decorated/released/reported drift cards and/or provided access to drift card release sites.

### EXPERIMENTAL DESIGN

At noon On November 5th, ~40 Lagoon Drift partners and members of the public worked together to release 40 - 4" x 6" eco-friendly, biodegradable wooden drift cards from docks/seawalls at each of 4 sites around the north end of the Lake Worth Lagoon.

Release sites were selected based on regional history, partner recommendation, and accessibility. They included (from N to S): The C-17 Canal, Manatee Lagoon – An FPL Eco-Discovery Center™, West Palm Beach Center Public Dock, and the C-51 Canal.

### RESULTS

Thousands of community members were reached through seminars, outreach events, door-to-door info sessions, and media.

Of the 160 cards deployed into the LWL on November 5th,

- 48 (30%) were reported found by 23 members of the public; these included cards deployed from all 4 sites.
- 13 (8%) were found together in Berth 16 at the Port of Palm Beach; this was the only large accumulation reported.
- 5 (3%) released from the C-17 Canal and Manatee Lagoon were found outside the LWL; reporting locations ranged from ~10 miles north in Juno Beach to ~40 miles south at the Hillsboro Lighthouse.

A color-coded summary figure of the study area with deployment sites (open squares) and localities where drift cards were recovered (bubbles) can be found on Page 2.

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

[Palmbeachcivic.org/news/top-stories/1976-drift-cards-on-local-beaches-part-of-citizen-science-study](http://Palmbeachcivic.org/news/top-stories/1976-drift-cards-on-local-beaches-part-of-citizen-science-study)

### NEXT STEPS

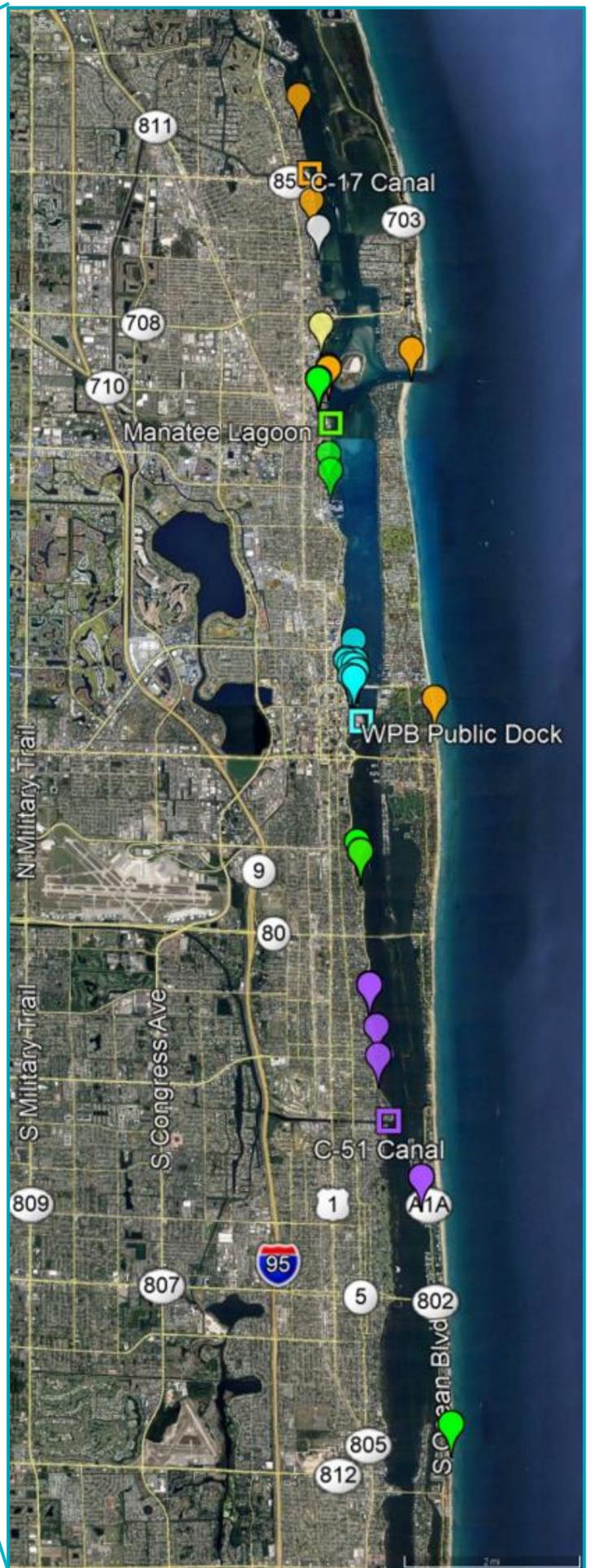
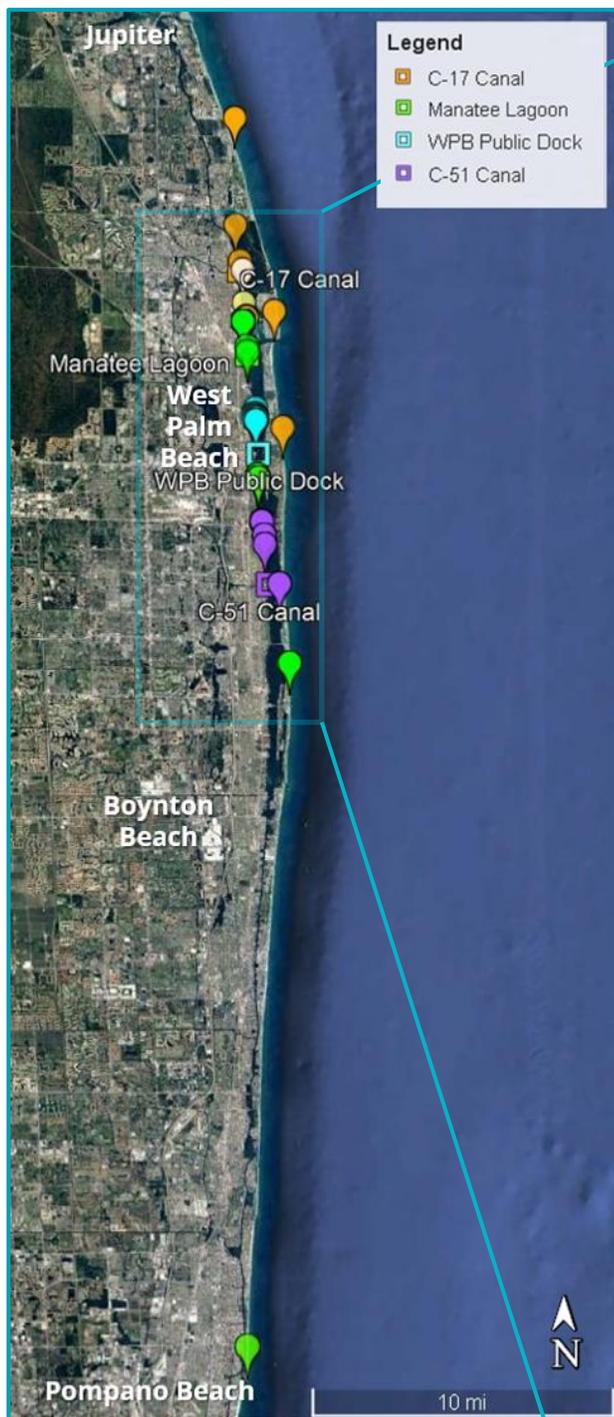
We plan to execute 2 Lagoon Drift card release experiments during the 2018 calendar year. These will include:

- April 7 (pre- Earth Day & Great American Clean Ups)
- Early Sept. (pre- International Coastal Clean Ups)

In addition to growing participation, partnerships, and educational programming in 2018, we intend to expand our LWL coverage area by adding 2-4 additional sites over the course of the year.

**\*\*Interested in getting involved with future Lagoon Drift experiments? Please contact [LagoonDrift@ANGARI.org](mailto:LagoonDrift@ANGARI.org)\*\***

For more info on the #LagoonDrift project, visit: [angari.org/lagoondrift/](http://angari.org/lagoondrift/)



Google Earth maps of Lake Worth Lagoon Drift Card Study area from the Nov. 5<sup>th</sup>, 2017 release event. Left image provides an overview of full coverage area while right image focuses on the north end of the LWL where the majority of the study activity occurred.

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

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