



LAKE WORTH LAGOON DRIFT CARD STUDY: SEPT 2018 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 September deployment marked the 3rd experiment of the study.

PARTNERS

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

- Conniston Middle School
- Cub Scouts Pack 141 Webelos
- Forest Glen Middle School
- Friends of Palm Beach
- Keep Palm Beach County Beautiful, Inc.
- Lake Worth Lagoon Initiative
- Manatee Lagoon An FPL Eco-Discovery Center™
- NOAA AOML's Advanced Manufacturing & Design Lab
- Norman Gitzen Gallery
- Palm Beach County- Environmental Resources Management
- Quest Workspaces
- Sea to Shore Alliance
- Surface 71
- >185 community members who decorated/released/reported drift cards and/or provided access to drift card release sites

EXPERIMENTAL DESIGN

At 11 AM on September 9^{th} , ~30 Lagoon Drift partners and members of the public coordinated to release 240 - 4" x 6" eco-friendly, biodegradable wooden drift cards from docks/seawalls 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: North LWL, C-17 Canal, Manatee Lagoon – An FPL Eco-Discovery Center™, West Palm Beach Center Public Dock, C-51 Canal, and C-16 Canal.

RESULTS

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

Of the 240 cards deployed into the LWL on September 9th,

- 35 (15%) were reported by 28 members of the public; these included cards deployed from 6 of the 6 sites.
- While there were multiple recoveries from certain areas, no mass card accumulations were reported.
- 7 (3%) were recovered outside the Lake Worth Lagoon. These cards originated from North LWL, Manatee Lagoon & the C-16 Canal; reports came from Coral Cove in the north (~18 miles traveled) to South Ocean Blvd (~7 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.

wptv.com/news/region-c-palm-beach-county/west-palm-beach/want-to-take-part-in-a-citizen-science-experiment

NEXT STEPS

We plan to continue to grow participation, partnerships, and educational programming moving forward, executing 2 Lagoon Drift card release experiments each year. The next 2 will occur:

- Apr. 2019 (pre- Earth Day & Great American Clean Ups)
- Sept. 2019 (pre- International Coastal Clean Ups)

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



Google Earth map of Lake Worth Lagoon Drift Card Study area from the Sept. 9th, 2018 release event.

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