



LAKE WORTH LAGOON DRIFT CARD STUDY: APRIL 2024 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. 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). April 2024 marked the 11th experiment in this citizen science study.

PARTNERS

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

- Ann Norton Sculpture Gardens
- Beach Bucket Foundation
- Flotilla 54 USCG Auxiliary Delray Boynton Beach
- Friends of Manatee Lagoon
- Friends of Palm Beach
- Great Charity Challenge
- Keep Palm Beach County Beautiful, Inc.
- Lake Worth Lagoon Initiative
- Lake Worth Waterkeeper

- Manatee Lagoon An FPL Eco-Discovery Center™
- Palm Beach County Department of Environmental Resources Management
- Palm Beach Day Academy
- School District of Palm Beach County
- Surface 71
- > 304 community members who decorated/released/ reported drift cards and/or provided access to drift card release site

EXPERIMENTAL DESIGN

At 1:45 PM on April 25th, 50 *Lagoon Drift* partners and citizen scientists executed the coordinated release of 240 - 4" x 6" eco-friendly, degradable wooden drift cards from six sites around Palm Beach County. Forty cards were deployed at each of the six sites.

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

RESULTS

251+ community members were directly engaged in *Lagoon Drift* educational programming. The experiment also received media coverage with circulation/viewership/listenership from a variety of media outlets including ABC WPBF 25 News, CBS WPEC 12 News and Palm Beach Daily News.

Of the 240 cards deployed around the Lake Worth Lagoon (LWL) and Intracoastal Waterway (ICW) on April 25th,

- 84 (35%) were reported recovered by 37 members of the public.
- 71 (85%) of the cards reported were recovered within the LWL, ICW or Loxahatchee River. These included cards released from all 6 of the study sites.
- 13 (15%) of the cards reported were recovered on Atlantic beaches outside the LWL, ICW and Loxahatchee River. These originated from Burt Reynolds Park, Manatee Lagoon and the C-51 and C-16 Canals.
- Reports came from Hutchinson Island in the north to Boynton Beach in the south, spanning >60 miles of coastline.

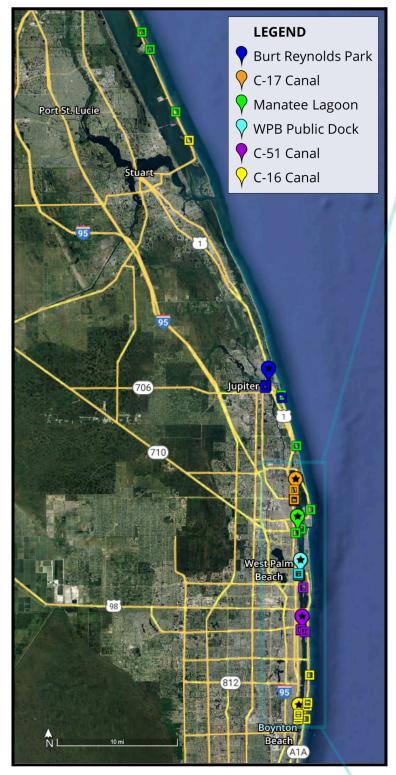
A color-coded summary figure of the study area with drift card deployment and recovery localities is shown on page 2.

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 Lagoon Drift citizen science experiments intended for:

• November 2024

• Spring 2025 (around Earth Day / Great American Cleanup)



Google Earth images of the Lake Worth Lagoon Drift Card Study area for the April 25th, 2024 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 members of the public recovered drift cards.

