

## LAKE WORTH LAGOON DRIFT CARD STUDY: APRIL 2025 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 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, and the first of its kind in Palm Beach County. April 2025 marked the 13<sup>th</sup> experiment in the Lake Worth Lagoon citizen science study. Drift cards were also deployed into the Indian River Lagoon by partners in conjunction with this experiment.

### PARTNERS

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

- Beach Bucket Foundation
- Conniston Community Middle School
- Friends of Manatee Lagoon
- Friends of Palm Beach
- Independence Middle School SciQuest Academy
- Keep Palm Beach County Beautiful, Inc.
- Lake Worth Lagoon Initiative
- Lake Worth Waterkeeper
- Manatee Lagoon - An FPL Eco-Discovery Center™
- Nature Fest
- Palm Beach County Department of Environmental Resources Management
- Palm Beach Day Academy
- Surface 71
- The Benjamin School
- The Loxahatchee River Center
- United States Coast Guard Auxiliary Flotilla 5-4
- >380 individuals who decorated/released/reported drift cards and/or provided access to release sites

### EXPERIMENTAL DESIGN

At 12:45 PM on April 14th, 109 *Lagoon Drift* partners and citizen scientists executed the coordinated release of 280 eco-friendly, 4" x 6" degradable wooden drift cards from seven sites around Palm Beach County. Forty cards were deployed at each of the seven sites.

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

### RESULTS

In addition to citizen scientists directly contributing to this *Lagoon Drift* experiment, 100+ additional community members were engaged in related educational programming. The experiment also received media coverage from a variety of outlets including ABC WPBF 25 News, WFLX Fox 29 News and WPTV.

Of the 280 cards deployed around the Lake Worth Lagoon (LWL) and Intracoastal Waterway (ICW) on April 14th,

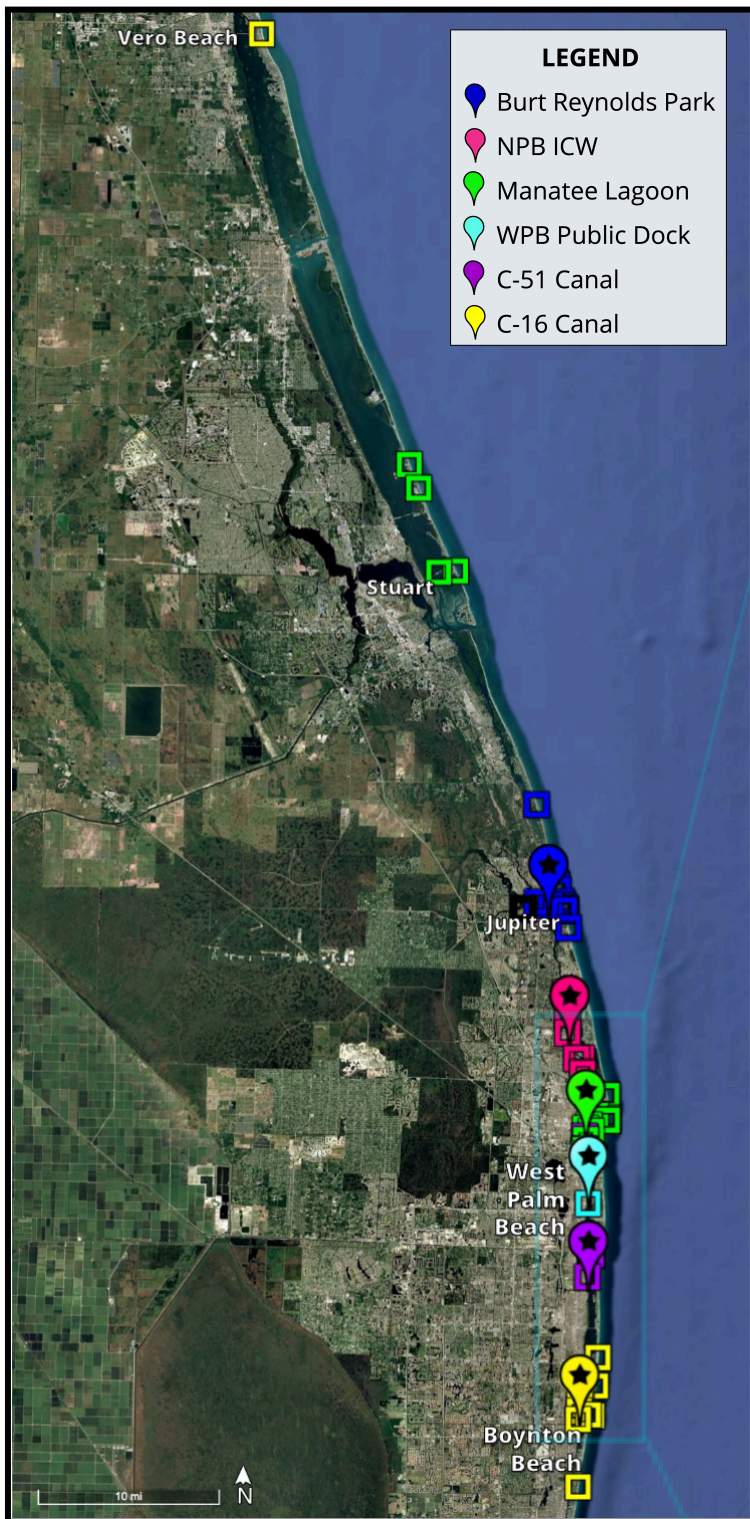
- 73 (26%) were reported and recovered by 61 members of the public.
- 48 (66%) of the cards reported were recovered within the LWL, ICW or Loxahatchee River. These originated from Burt Reynolds Park, North Palm Beach ICW, Manatee Lagoon, West Palm Beach Public Dock, C-51 Canal and C-16 Canal.
- 24 (33%) 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-16 Canal.
- Found cards were reported from Vero Beach in the north to Delray Beach in the south, spanning >82 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 *Lagoon Drift* citizen science experiments intended for:

- November 2025
- Spring 2026 (around Earth Day / Great American Cleanup)



Google Earth images of the Lake Worth Lagoon Drift Card Study area and data for the April 14<sup>th</sup>, 2025 experimental release. Left image provides an overview of full coverage area, while right image focuses on the Lake Worth Lagoon 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.

