

# LAKE WORTH LAGOON DRIFT CARD STUDY: NOVEMBER 2022 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 (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 Palm Beach County (PBC). After a year and a half hiatus in response to the COVID-19 pandemic, *Lagoon Drift* partners were pleased to re-commence the drift card experiments in November 2021 and executed their 8<sup>th</sup> regional citizen science experiment in November 2022.

## PARTNERS

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

- Clearwater Marine Aquarium Research Institute
- Friends of Manatee Lagoon
- Friends of Palm Beach
- Keep Palm Beach County Beautiful, Inc.
- LagoonFest
- Lake Worth Lagoon Initiative
- Lake Worth Lagoon Science Symposium
- Lake Worth Waterkeeper
- Manatee Lagoon - An FPL Eco-Discover Center™
- Norman Gitzen Gallery
- Palm Beach County - Environmental Resources Management
- Palm Beach Day Academy
- Roosevelt Community Middle School
- Surface 71
- > 280 community members who decorated/released/reported drift cards and/or provided access to drift card release sites

## EXPERIMENTAL DESIGN

At 1 PM on November 11<sup>th</sup>, ~42 *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 PBC. 40 cards were deployed from each of the 6 sites.

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

## RESULTS

13,000+ community members were reached through educational programming, press coverage and social media.

Of the 240 cards deployed around the LWL and ICW on November 11<sup>th</sup>,

- 65 (27%) were reported by 67 members of the public; these included cards released from all 6 of the study sites.
- 9 of the 40 cards released from the C-17 Canal were recovered in the NW corner of John D. MacArthur Beach State Park.
- 18 (28%) 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 Jupiter Island in the north to Briny Breezes 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:

WPBF 25 - <https://www.wpbf.com/article/florida-drift-card-lake-worth/41939221>

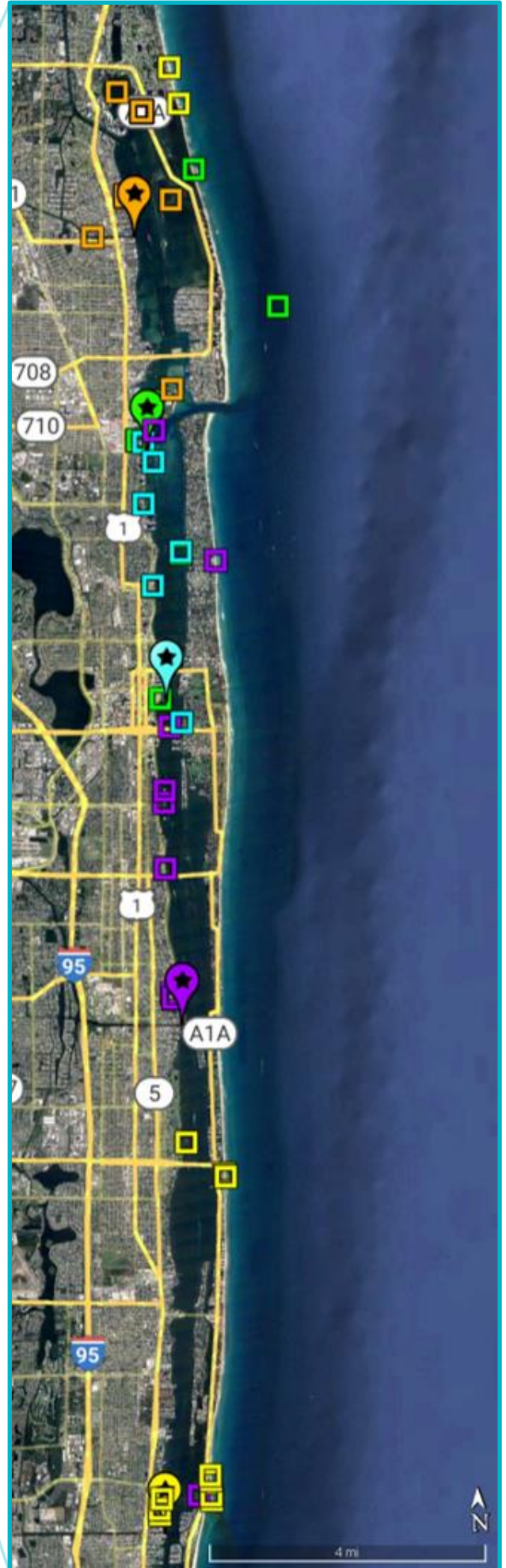
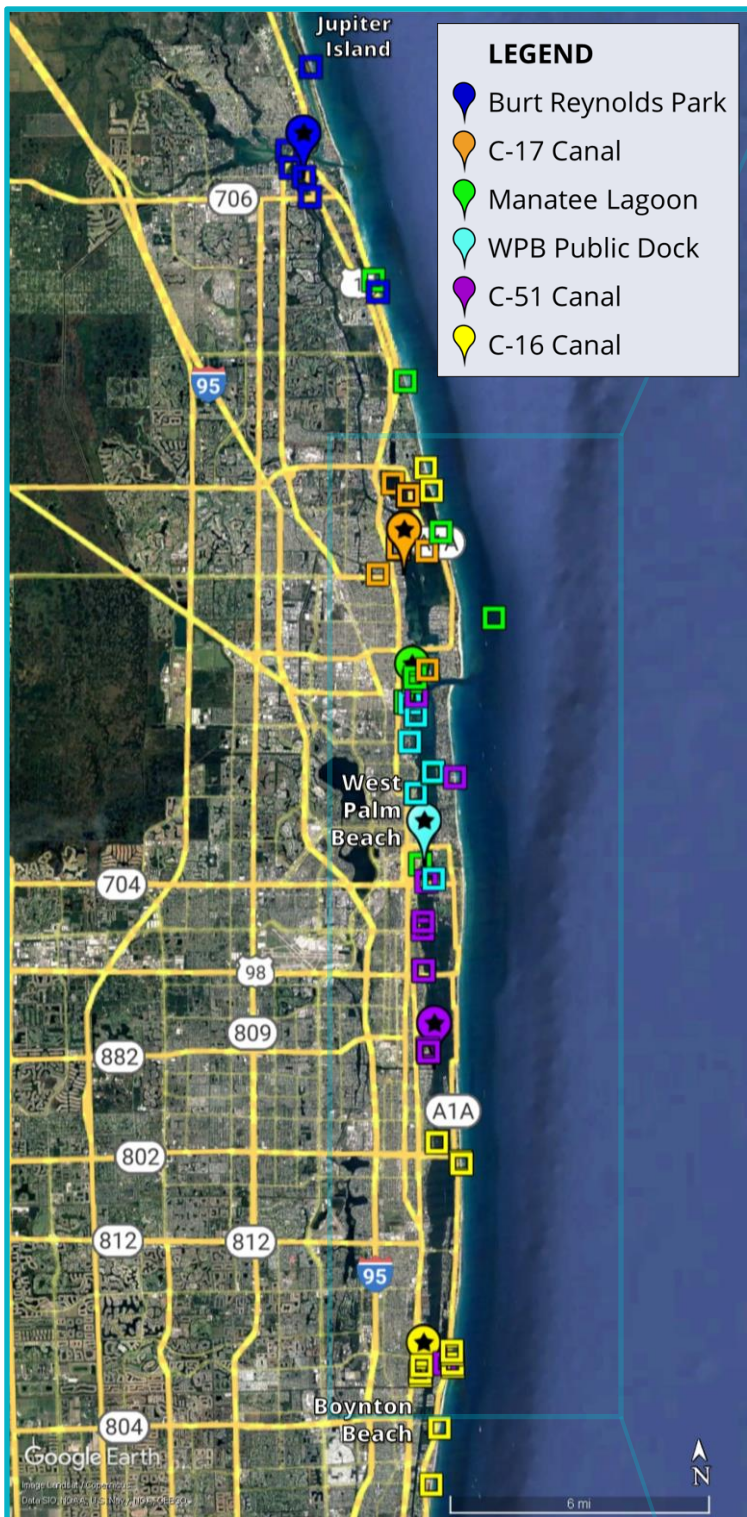
Palm Beach Daily News - <https://www.palmbeachdailynews.com/story/news/2022/11/13/palm-beach-students-participate-lake-worth-lagoon-study/10668981002/>

## 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:

- Fall 2023
- Spring 2024 (around Earth Day / Great American Cleanup)

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



Google Earth images of the Lake Worth Lagoon Drift Card Study area for the November 11<sup>th</sup>, 2022 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 drift cards were recovered by members of the public.

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