

LAKE WORTH LAGOON DRIFT CARD STUDY: NOVEMBER 2023 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). In November 2023, the *Lagoon Drift* partners were pleased to execute the 10th experiment in this long-term study.

PARTNERS

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

- Beach Bucket Foundation
- Friends of Manatee Lagoon
- Friends of Palm Beach
- Great Charity Challenge
- Keep Palm Beach County Beautiful, Inc.
- LagoonFest
- Lake Worth Lagoon Initiative
- Lake Worth Waterkeeper
- Manatee Lagoon - An FPL Eco-Discovery Center™
- Palm Beach County - Environmental Resources Management
- Palm Beach Day Academy
- School District of Palm Beach County Sustainable Schools
- Surface 71
- > 260 community members who decorated/released/reported drift cards and/or provided access to drift card release site

EXPERIMENTAL DESIGN

At 12:45 PM on November 15th, 30 *Lagoon Drift* partners and citizen scientists executed the coordinated release of 240 - 4" x 6" eco-friendly, degradable wooden drift cards from docks and vessels at 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 north to south: 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

650+ community members were directly engaged in *Lagoon Drift* educational programming. The experiment also received media coverage from a variety of media outlets including the Palm Beach Daily News, WPBF-TV and Yahoo! News.

Of the 240 cards deployed around the LWL and ICW on November 15th,

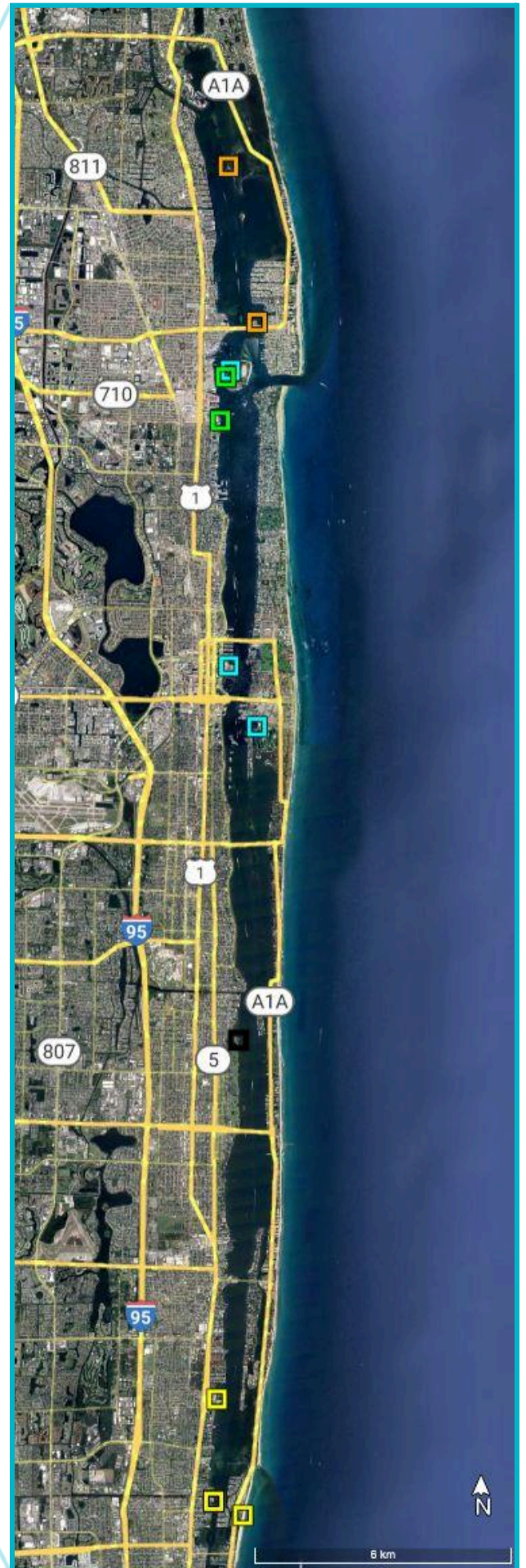
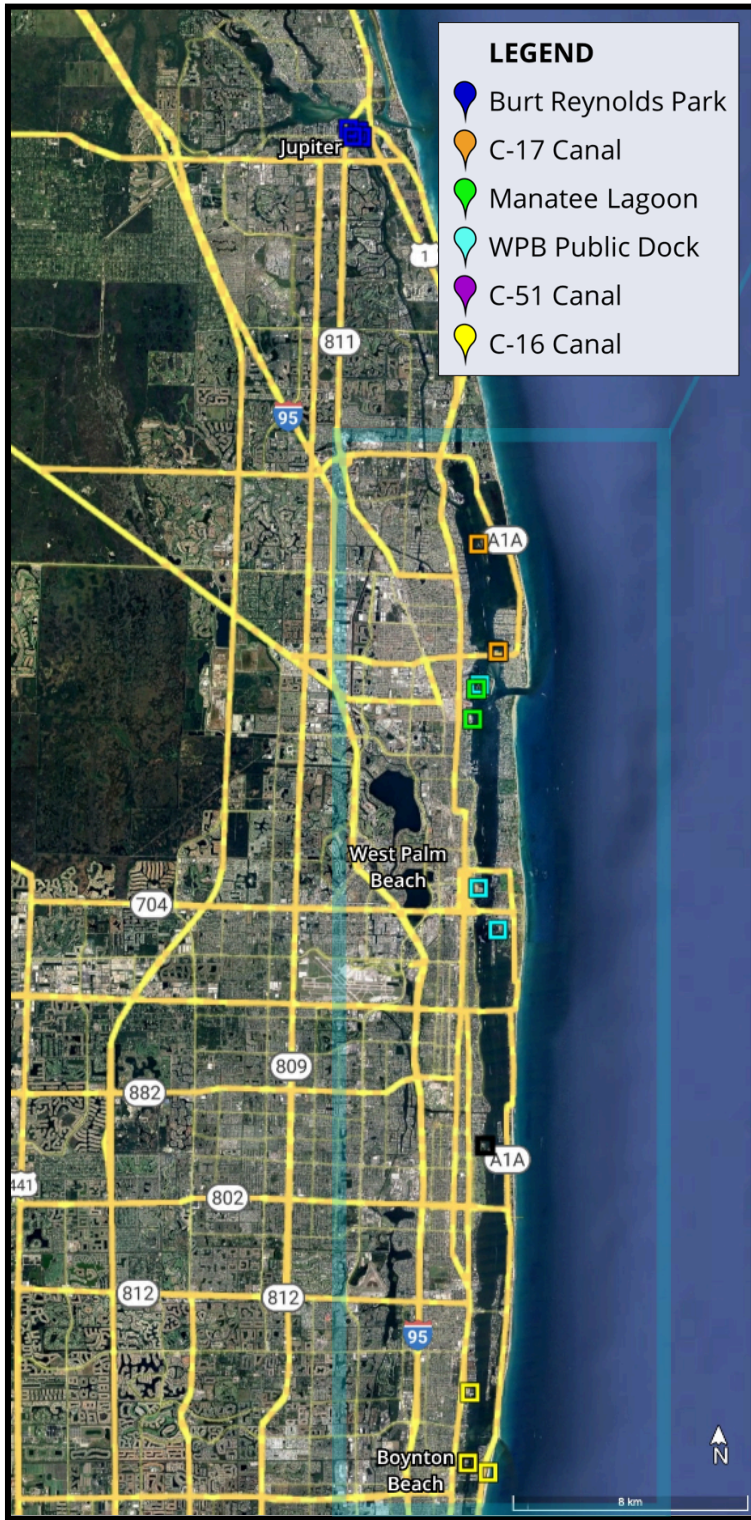
- 25 (10%) were reported recovered by 18 members of the public.
- Cards were reported from 5 of the 6 deployment sites; none of the cards deployed at the C-51 Canal were reported.
- 24 (96%) of the cards reported were recovered within the Lake Worth Lagoon, Intracoastal Waterway or Loxahatchee River. 1 (4%) card was reported found on the Atlantic beach at Ocean Ridge, Florida.
- Reports came from Loxahatchee River in the north to Ocean Ridge in the south, covering a range of ~28 miles.

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:

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



Google Earth images of the Lake Worth Lagoon Drift Card Study area for the November 15th, 2023 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.

For more info on the #LagoonDrift project, visit: angari.org/lagoondrift