Project Description

The Miami-Dade County Baynanza Bulky Marine Debris Prevention and Removal Program aimed to expand the scope of Miami-Dade County's annual "Baynanza" celebration and facilitate the removal of large, bulky marine debris items. A number of illegal marinas and fish camps within the mangroves of this region produce large and bulky debris that's difficult to remove, such as derelict vessels and fishing gear, and illegally-constructed docks and camps.

Cleanup activities were carried out during the 2008 Baynanza Biscayne Bay Cleanup Event and a newlyformed Card Sound Road (CSR) project. The CSR project was created in response to the large number of illegal fish camps and derelict vessels present off the road and in the Biscayne Bay. As a result of involvement in the 2008 Baynanza Biscayne Bay Cleanup Day, roughly 38.64 tons of debris were removed, while the CSR project removed more than 473.5 tons of debris, excluding debris such as structures and vessels that were removed by responsible parties. Over 7,613 volunteers participated in the NOAA-sponsored 2008 Baynanza Biscayne Bay Cleanup Day, and more than 100 community service program volunteers helped with the CSR project. Due to the efforts of this project, the area surrounding Card Sound Road is now free of structures and derelict vessels for the first time in over 50 years.

Innovative Techniques

The success of this project is directly tied to volunteer involvement generated through the annual Baynanza celebration. In order to ensure that untrained volunteers would be able to remove as much debris as possible, the Miami-Dade County Department of Environmental Resource Management (DERM) flagged derelict fishing gear and other debris for later removal during scheduled events. DERM also allowed those that were charged with illegal dumping off of Card Sound Road to participate in the cleanup efforts as part of their court-ordered service. This ensured that offenders had a close-up look at their impact on the Biscayne Bay environment and had a hand in remedying that impact.

Fan/air boats were used to remove traps and other small debris, while larger vessels with cranes removed large debris items such as structures and abandoned and derelict vessels. When removing large debris, floats were used to keep any additional debris created by the removed items from entering the environment.
Uses & Lessons Learned
Through the use and support of volunteers, DERM has developed methods that allow for even a small number of volunteers to achieve great strides in removing debris. Activities such as the flagging of derelict fishing gear and other debris could be replicated for similar projects that require the use of many untrained hands in a short amount of time.

The use of fan/air boats can be especially important in areas with highly sensitive habitats, like the Biscayne Bay. By using a vessel without a propeller in the water, DERM was able to make minimal to no impact on vegetation during the removal of small debris items.

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