Response to Physical Impacts on Coral Reefs in Puerto Rico and the USVI

2016 Report

US reefs are impacted by 3 - 4 large groundings and hundreds of small incidents annually. In the aftermath of groundings, impacted corals are often broken, dislodged, or flipped over. These fragments are subject to abrasion, scour, and sedimentation, which ultimately result in death. Unchecked, these damages can result in additional reef loss and instability. However, if dislodged fragments can be collected and stabilized shortly after physical impacts then the probability of survival increases substantially (>90%). In 2016, the RC was notified of 57 groundings in PR and the USVI. Emergency restoration was conducted at 5 of these sites saving approximately 8,122 corals. Since 2009, the RC has performed restoration at 44 sites in PR and the USVI and has reattached over 26,000 corals (Table 1).

Response to physical impacts is a Jurisdictional Priority in both PR/USVI, an identified capacity gap in both jurisdictions, and a priority element of the draft Acropora recovery plan. Puerto Rico and the USVI have acknowledged that because of internal limitations and the need for quick and flexible response that more robust action on the part of NOAA was necessary to help stem the unchecked and unnecessary coral losses that were occurring after physical impacts.

In 2009, an emergency response support contract with a local firm was set up. This in combination with the RC's on-the-ground presence in the region has enabled NOAA to address the numerous impacts that were occurring annually. The support contract provides NOAA, PR DNER, and USVI DPNR support to have a functional emergency restoration. A notification network along with a form to report grounding incidents (Appendix 1) has been set up with the US Coast Guard, salvers, and the local communities so