

## NOAA Coral Reef Conservation Program

FY21-23 Jurisdictional Management Priority Activities

The following activities were identified as priorities for coral reef conservation activities in fiscal years 2021-2023 by the NOAA CRCP and local management agencies during 2019 workshops to align jurisdictional needs with the <u>NOAA CRCP Strategic Plan</u>.

### I.Threat Reduction to Priority Reef Sites

#### Establish Water Quality Targets:

- Assist with development of territorial standards for stormwater BMPs; and/or training on near real-time water quality sampling equipment and methods (American Samoa)
- Provide scientific and technical assistance to support state and territorial management agencies establish water quality targets for sediments and/or nutrients appropriate for healthy coral reef habitats. (American Samoa, Florida, Guam and Puerto Rico)

#### Reduce land-based pollution inputs to coral reef tracts:

- Training and technical assistance on green/gray infrastructure (including permitting); knowledge exchanges and/or technical assistance for stormwater compliance monitoring and enforcement (American Samoa, CNMI, Guam, Florida)
- Consistent site-specific analyses of water quality and the efficacy of watershed restoration actions (CNMI, Guam, Hawaii, Puerto Rico)
- Baseline monitoring of water quality and benthic community composition near watershed restoration sites (Manell-Geus, Guam and Achugao, CNMI).
- Implementation of existing watershed management plans that meet the U.S. Environmental Protection Agency nine elements for a watershed management plan (Hawaii; Puerto Rico; and USVI)

#### Increase fish stocks of key species along priority reef tracts:

- Support data sharing, calibration, integration, gap analysis, and/or analysis of existing fisheries-relevant data (American Samoa, CNMI, Guam, Hawaii, Puerto Rico, USVI)
- Evaluations of existing monitoring protocols and/or new designs for measuring effective implementation and effects of management actions (e.g. SCUBA spearfishing ban); Preliminary and followup creel surveys to evaluate management actions (Hawaii)
- Training and/or analyses of effective fisheries enforcement options (CNMI, Florida, Hawaii, Puerto Rico)
- Ecosystem assessments to determine fish biomass thresholds and guide development of fisheries indicators for coral health (Puerto Rico)

## **II.** Coral Reef Restoration

#### Increase Capacity for Coral Restoration at Scale:

- Training and certification for local aquarists in coral husbandry and propagation; and/or action plans for replicating and scaling up s established lab larval propagation techniques (Florida, Hawaii)
- Development of guidance documents to test established restoration techniques and identify cost effective methods (Puerto Rico)

#### Support Out-planting Success:

- Implementation of pilot projects for innovative restoration interventions based on best-available science (Hawaii)
- Data analyses of existing state-sponsored coral restoration efforts to review performance and identify lessons learned in the context of disease; and assessments of settlement suitability of crustose coralline algae (CCA) substrate and their status on priority reefs (Florida)
- Site selection processes to identify key restoration sites (small scale) (Puerto Rico)
- Strategies/pathways for local in-water community members to engage in active restoration methods (Hawaii)
- Community driven out-planting activities for priority sites (Guam)
- Evaluate effectiveness of rescue and rehabilitation back to the reef for highly-susceptible reef builders; Development for probiotics or other prophylactic treatments for corals prior to or during outplanting for increased resistance or resilience to coral disease (USVI)

# III. Increase Management Capacity in Coral Conservation

- Incorporation of alternative approaches into reef restoration activities to restore the viability of coral communities (e.g. through seagrass and mangrove restoration, herbivore propagation and replenishment, and removal of invasive and/or nuisance species) (Guam, USVI)
- Research on the transmission of SCTLD at local and regional scales (Florida, Puerto Rico and USVI)
- Beach and sand budget management analyses or models to ensure renourished beaches don't impact nearby corals (USVI)
- Support capacity-building to shift towards ecosystem based management, including improved communication approaches and tools, such as social media, to convey the benefits of coral reef management and the value of an ecosystem approach to coral reef reef management (All U.S. coral jurisdictions)

For specific questions regarding these priorities please contact the relevant NOAA Coral Reef Conservation Program Management Liaison listed below. The liaison will cannot comment or assist with development of proposal ideas but may provide additional background information:

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