

NCCOS's Key Species and Bioinformatics Branch – assessing the ecological impacts of marine stressors through key biological indicator species

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Fate & Effects of Contaminants Program Review, Sept 15-17, 2020

NOAA Trust Resources

Health/Environmental Evaluations

Chemical Contaminants
Biological Contaminants
Physical Contaminants
Physical Conditions

Actionable Science





NOAA

SCIENCE. SERVICE. STEWARDSHIP.



NCCOS

NATIONAL CENTERS FOR
COASTAL OCEAN SCIENCE

Key Species and Bioinformatics Branch

Branch Chief: Jeff Guyon, PhD (University of Notre Dame/Harvard Medical School)

Coral Health and Disease (CH&D) Program

Program Lead: Cheryl Woodley, PhD (Medical University of South Carolina)

Federal Staff: Laura Webster, BS (College of Charleston), BS (MUSC)

Contractors: Lisa May, MS (Austin Peay State University)

Carl Miller, BS (Purdue University)

Zac Moffitt, BS (University of South Carolina)

Elizabeth Duselis, PhD (University of Virginia)

Ron Kothera, MS (Clemson University)

Environmental Genetics (EG) Program

Program Lead: Thomas Greig, PhD (University of South Carolina)

Quantitative Ecology (QE) Program

Program Lead: Len Balthis, PhD (Medical University of South Carolina)

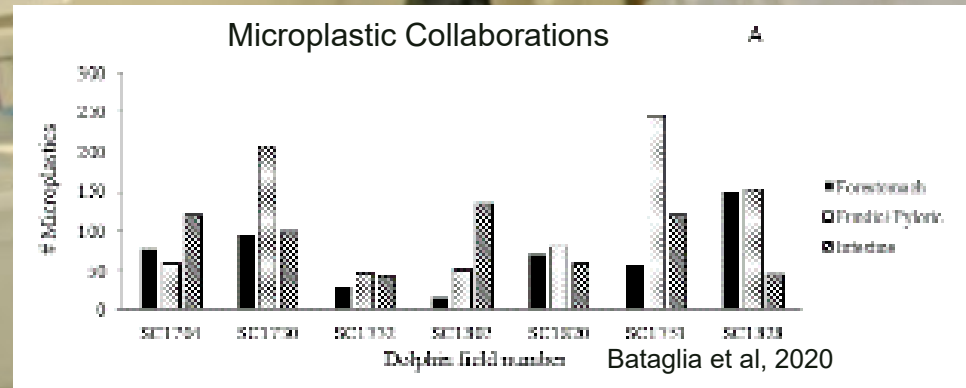
Coastal Marine Mammal Assessment (CMMA) Program

Program Lead: Wayne McFee, MS (Northeastern University)

Part-time Contractor: Tessa Pfeiffer, MS (College of Charleston)

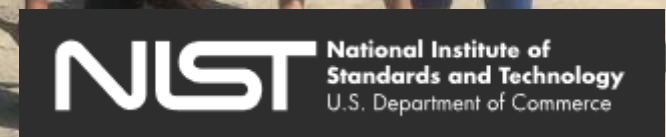
Coastal Marine Mammal Assessment Program

River otters as a model for chemical contamination



Fin tagging collaboration (oil)

Partnerships



Coral Health and Disease Program

Stressor Detection & Biological Effects in
Coral Reef Environments

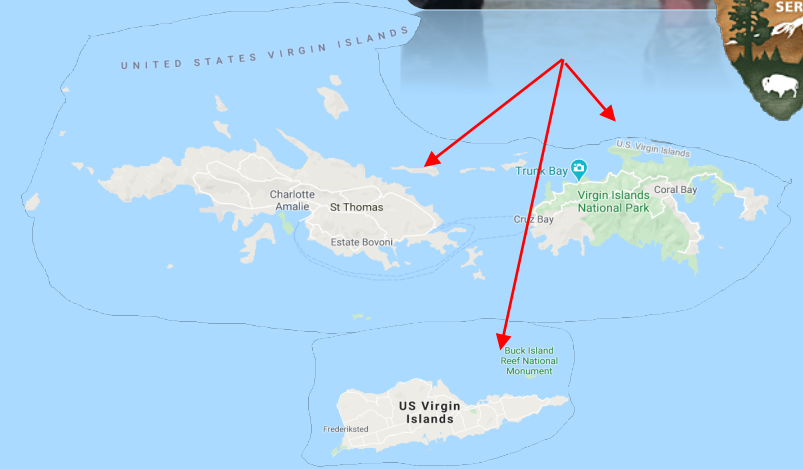
- Chemical
- Physical
- Biological



Coral Reefs: Field Investigations & Training

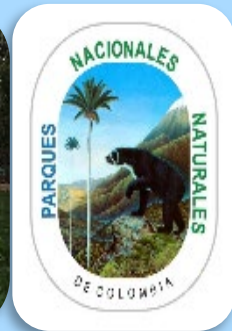


NATIONAL MARINE SANCTUARIES
FLORIDA KEYS



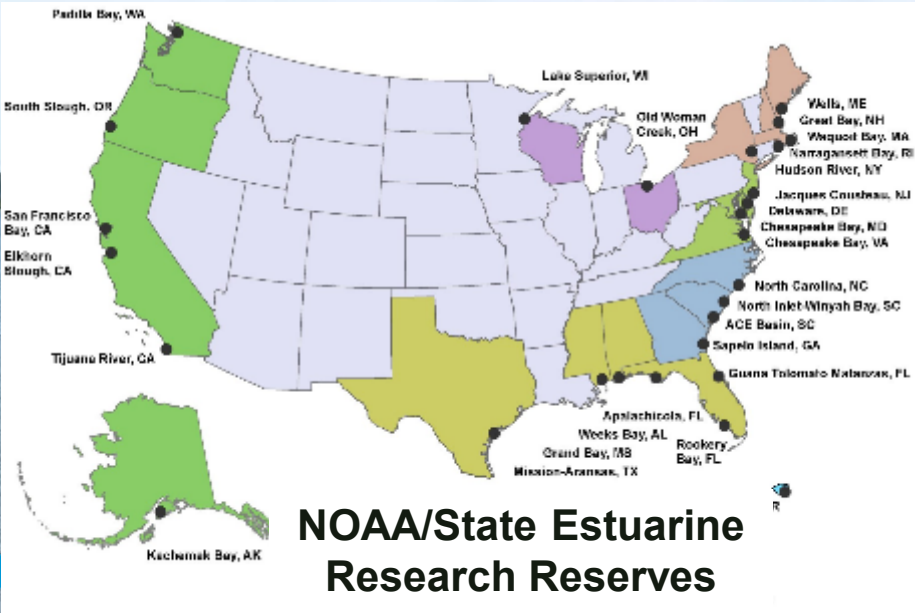
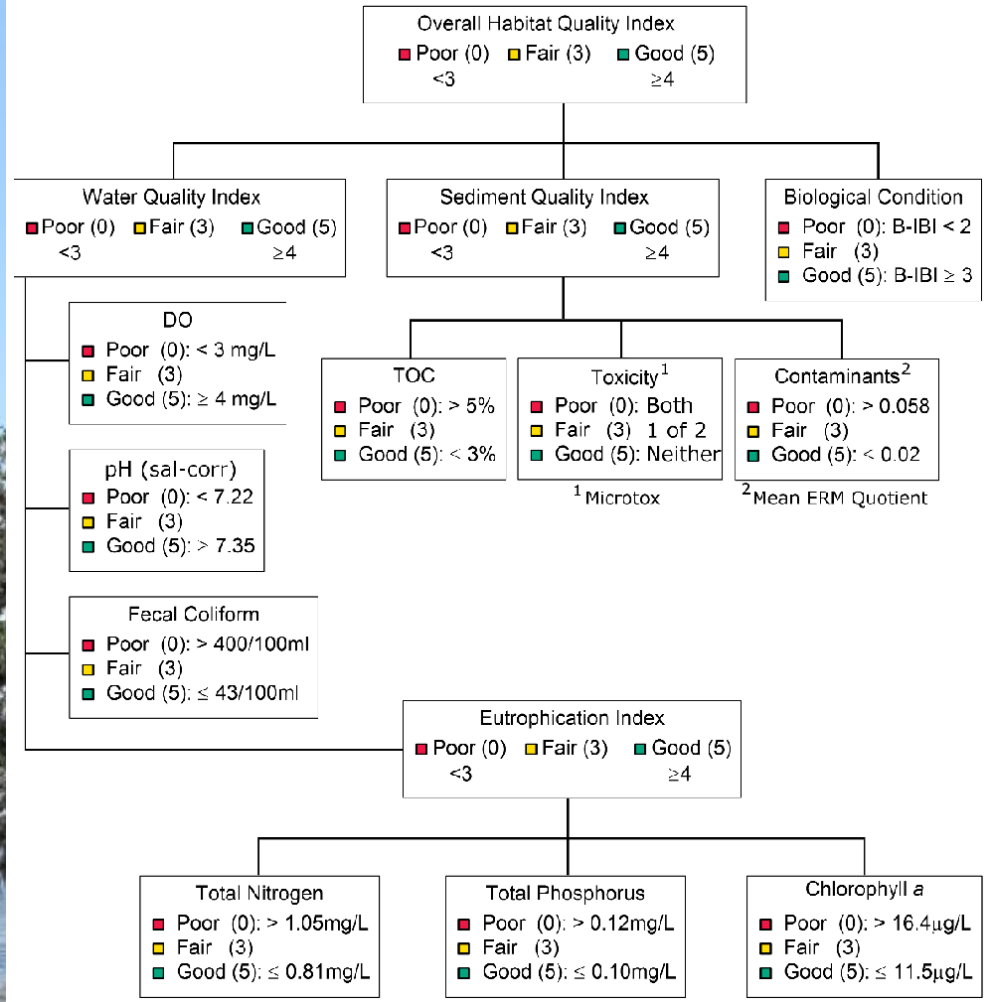
American Samoa

NATIONAL MARINE SANCTUARIES
AMERICAN SAMOA



Quantitative Ecology (QE) Program

NOAA/NOS Physical Trust Resources

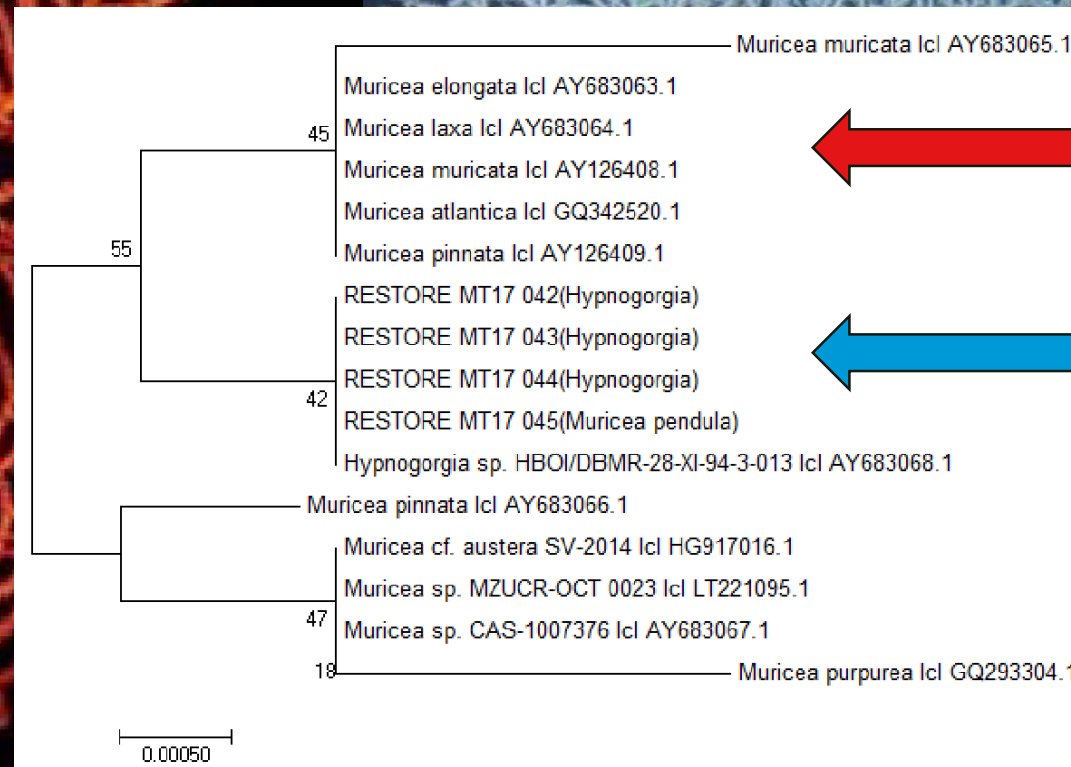


Sampling indicators and scoring criteria used to derive indices of water quality, sediment quality, biological (benthic) condition, and overall habitat quality

Environmental Genetics Program

For an accurate damage assessment, what species may be impacted?

Muricea pendula



Hypnogorgia

Role of the Key Species and Bioinformatics Branch

actionable science supporting NOAA trust resources

