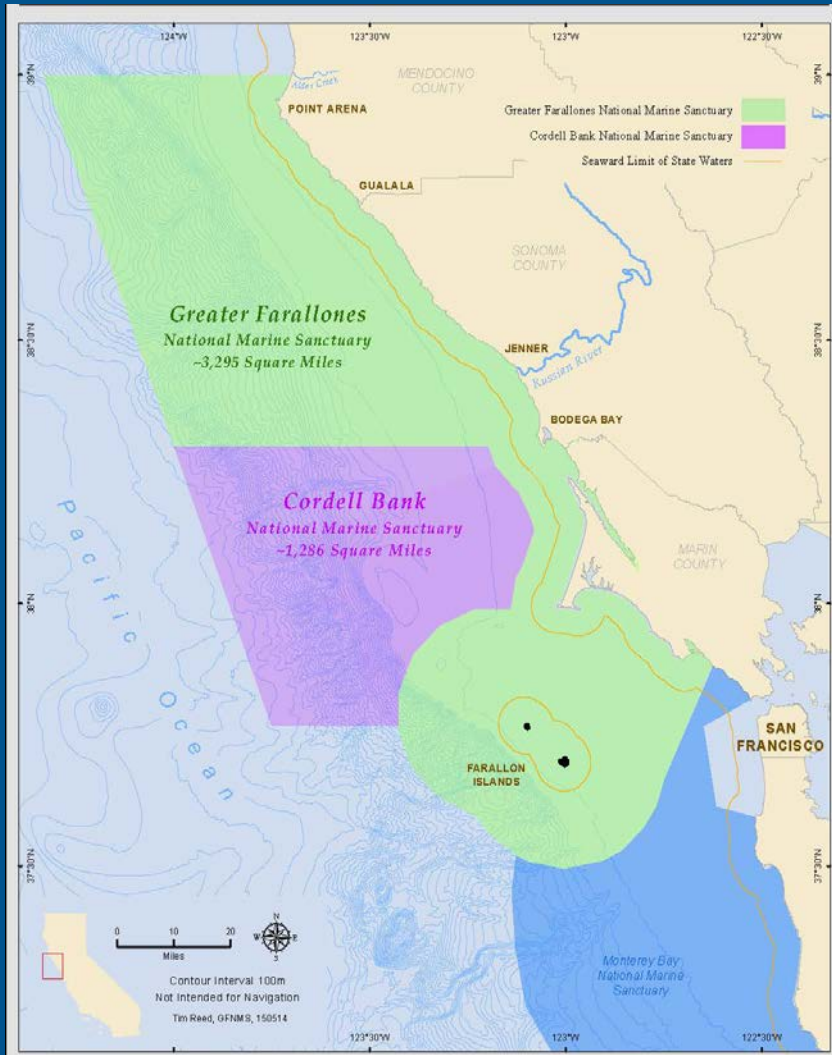


Taking a Habitat Focus to Address Climate Impacts to Greater Farallones National Marine Sanctuary

Sara Hutto
Conservation and Climate Program
Coordinator
Greater Farallones Association



Greater Farallones National Marine Sanctuary



- Office of National Marine Sanctuaries (NOAA)
- Designated in 1981
- 3,295 square miles
- Open ocean, tidal flats, rocky intertidal, estuarine wetlands, subtidal reefs, and beaches
- Breeding/feeding grounds for:
 - 25 E&T species
 - 36 marine mammal species
 - > 1/4 million breeding seabirds
 - Significant white shark population

Two Big Questions...

- 1) How vulnerable to climate change are the resources that we manage?
- 2) What can we do to limit or reduce vulnerability?



Climate Change Vulnerability Assessment for the North-central California Coast and Ocean



U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service
Office of National Marine Sanctuaries



May 2015

Back to our Objectives

1) How vulnerable to climate change are the resources that we manage?

2) What can we do to limit or reduce vulnerability?

→ Protect/Restore at the level of the habitat

Climate Adaptation Plan

GREATER FARALLONES NATIONAL MARINE SANCTUARY



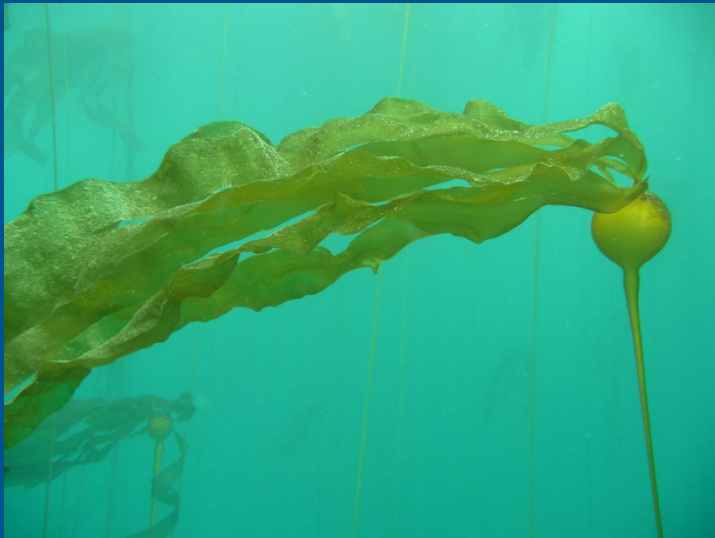
Climate Adaptation Plan

November 2016

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
NATIONAL MARINE SANCTUARY PROGRAM



Climate Adaptation Priorities



Climate Program Storymap: outreach tool for partners, public, funders

Ocean Climate Program

From Learning about the Impacts to Implementing Actions

rogram   



About

Action Areas

Milestones

Capacity Building

D.I.Y.

Action Areas: Impacts to Action

Map Details

The data presented in this map is a sampling of information used in determining where to focus climate adaptation efforts. Science-based, multi-year collaborative processes have informed the determination of action areas. In the [List of Action Areas](#), click on each area to zoom the map to the specific location. A pop-up window with project details will display.

Coastal Dune Vulnerability Index at 5ft Sea Level Rise



Lower Vulnerability (0 < 1)

Habitat Vulnerability Index developed by The Nature Conservancy (2018).

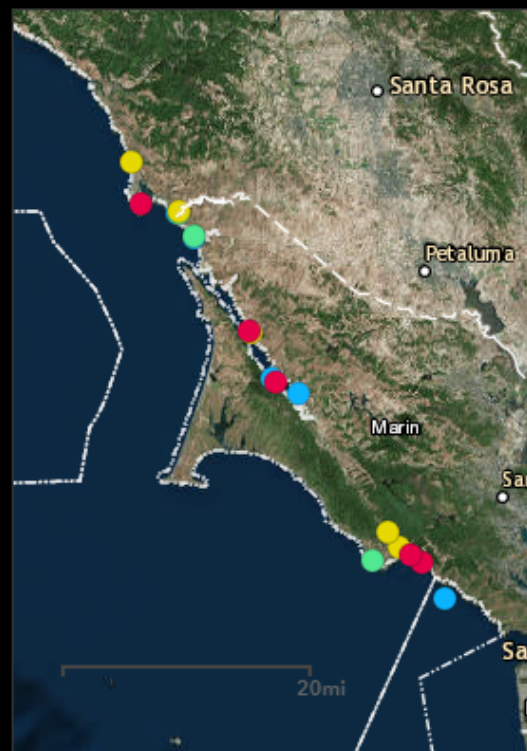
Coastal Dune

List of Action Areas

Community Engagement
Estero Americano
Project Phase: Concept

Community Engagement
Estero de San Antonio
Project Phase: Concept

Community Engagement
Duxbury Reef
Project Phase: Concept



Legend

Climate Adaptation Action Areas

- Community Engagement
- Living Shoreline
- Research
- Restoration
- Sediment Management

National Marine

Thank you!

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