

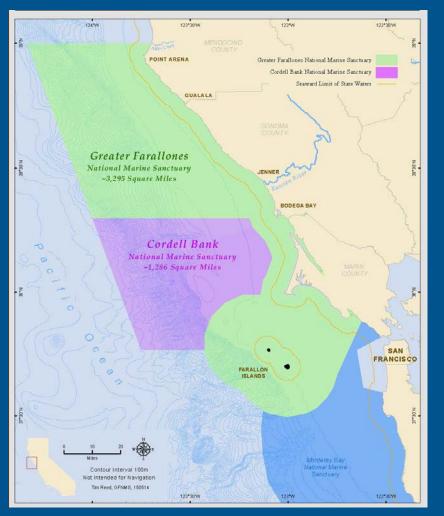
### The Sanctuary Advisory Council: Connecting Marine Sanctuary Managers with the Community to Plan for Climate Change

Sara Hutto Climate Change Coordinator Greater Farallones National Marine Sanctuary

> California Adaptation Forum September 8, 2016



# **Greater Farallones National Marine Sanctuary**



- Office of National Marine Sanctuaries (NOAA)
- 1 of 4 California Sanctuaries
- 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

# The Sanctuary Advisory Council: A Critical Boundary "Organization"

Community-based advisory groups established to provide advice and recommendations to sanctuary superintendents.



Conservation Research Youth TourismEducationFishingBoating/shippingCommunity-at-large

Harbors Recreation Government

Councils are supported by working groups composed of outside experts to tackle specific issues.

# The Sanctuary Advisory Council: A Critical Boundary "Organization"

- Effectively bridging the gap between various community members, including scientific community and the federal government
- Ensuring community voices are heard and represented
- Vector for sharing climate information with diverse audience and management
- Forum for local to federal collaboration
- Leverage regional expertise





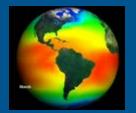
### Mitigation

Green Operations Working Group



#### Mitigation

Green Operations Working Group



#### Science

Climate Impacts
 Working Group



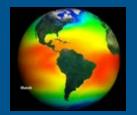
# Mitigation

Green Operations Working Group



#### Monitoring

Climate Indicators Working Group



#### Science

Climate Impacts
Working Group



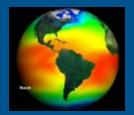
# Mitigation

Green Operations Working Group



### Monitoring

Climate Indicators Working Group





Climate Impacts
 Working Group



#### Adaptation

Climate-Smart Adaptation Working Group

### Case Study: Adaptation Working Group

Develop collaborative, multi-benefit adaptive management actions in response to climate vulnerability assessments by regional experts.



# Science Information: Climate Vulnerabilities

Two Decision-Support Workshops with regional scientists: 1. Define focal resources

2. Assess resource vulnerability



Marine Sanctuaries Conservation Series ONMS (succession number to be added by NMSP personnel)

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

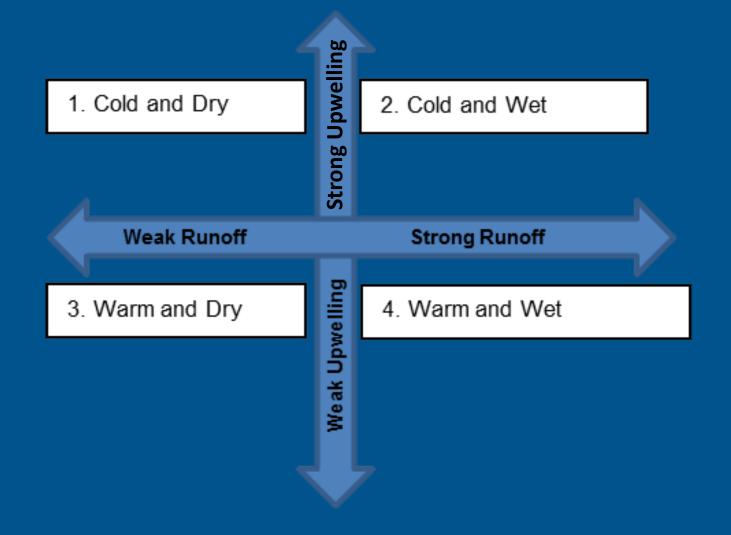


U.S. Department of Commerce National Oceanic and Atmospheric Administration National Ocean Service Office of National Marine Sanctuaries



Insert Month Year

# Science Information: Climate Scenarios



#### **Climate-Smart Adaptation Working Group**

**Federal:** USFWS, CA LCC, National Park Service, GGNRA, NMFS, BLM, USGS

**State:** Coastal Commission, State Parks, State Coastal Conservancy, CDFW

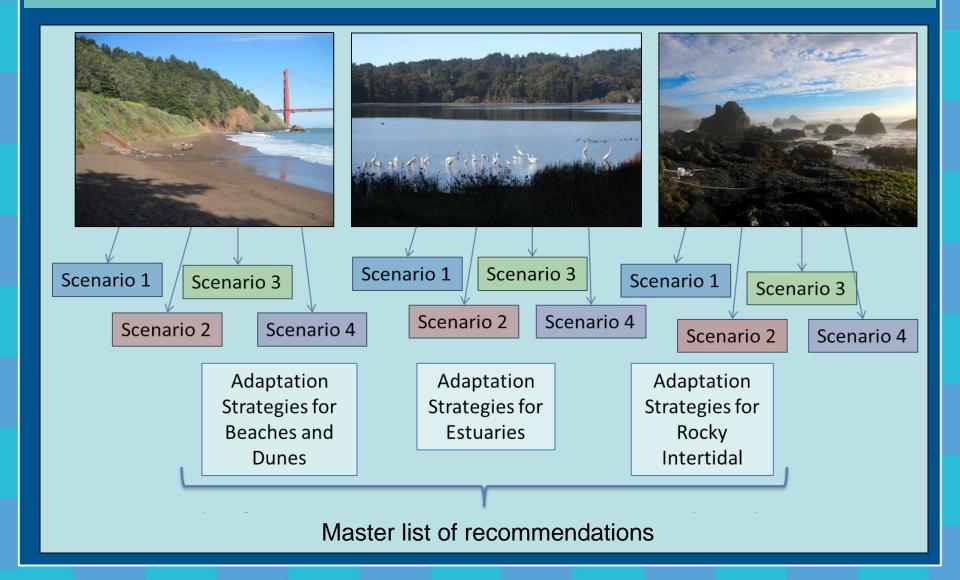
Local: San Mateo and Marin Counties

**NGOs**: Point Blue, BAECCC, Greater Farallones Association

Academia: Bodega Marine Lab, Stanford University



# **Adaptation Options**



#### Climate-Smart Adaptation for North-central California Coastal Habitats

Report of the Climate-Smart Adaptation Working Group of the Greater Farallones National Marine Sanctuary Advisory Council

Editor: Sara Hutto



March 2016

#### **Benefits:**

- More robust outcomes
- Investment and buy-in from partners and community
- Regional expertise

# Challenges:

- External process, staff cannot intervene
- Partners, partners, partners

## Lessons learned:

- Involve as many partners as possible whomever shows up gets the say
- Provide necessary resources

# Thank you!

Contact: Sara.Hutto@noaa.gov 415-970-5253

#### http://farallones.noaa.gov/manage/climate/

