



# NOAA's National Coral Reef Conservation Program

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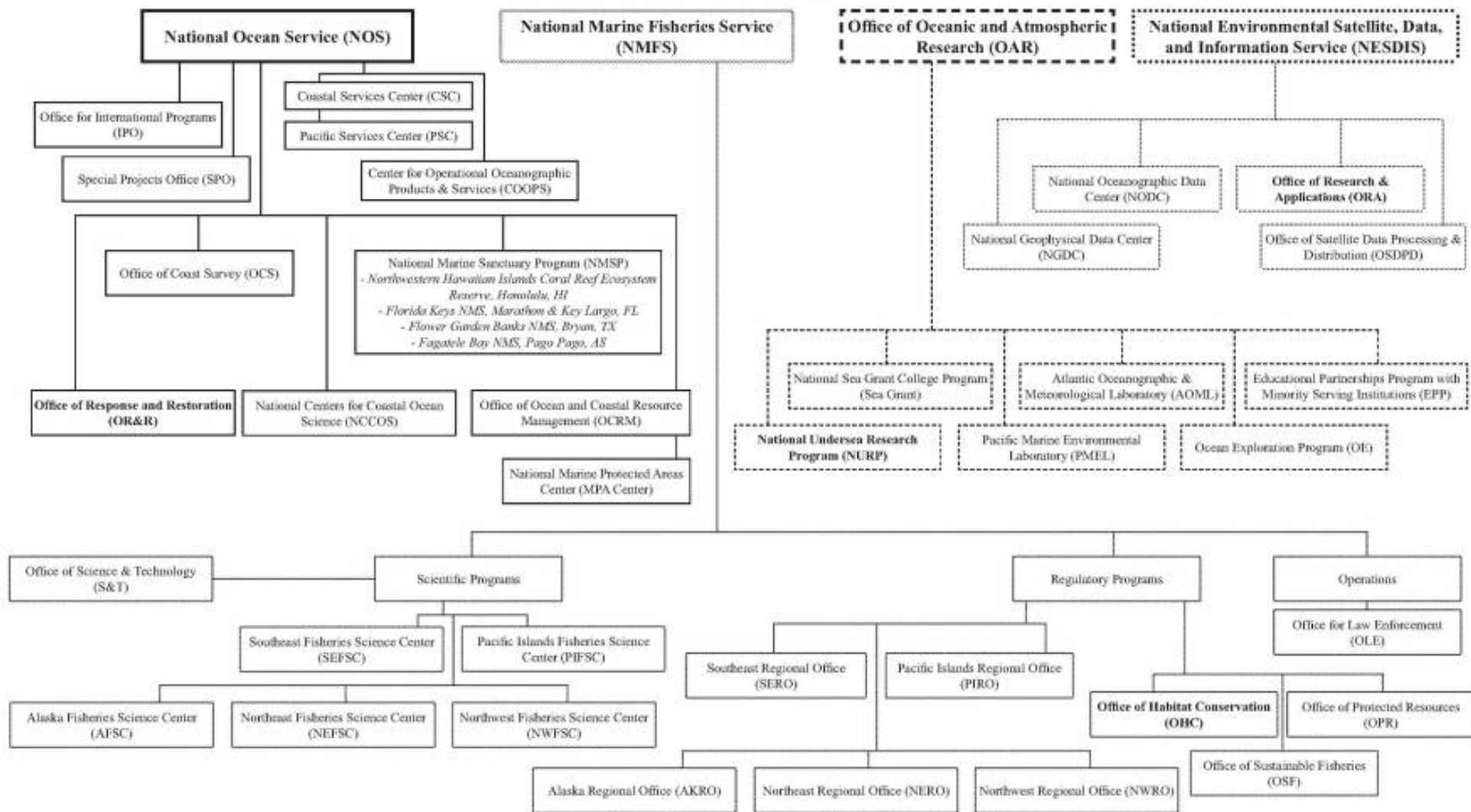


Coordinated Activities









Joint Spend Plans, Outyear Plans, Performance Tracking








# NOAA Coral Reef Conservation Program: Participating Offices







# NOAA-CRCP Leveraged Activities

-  Federal fisheries management in coral reef ecosystems
-  ESA mandates for coral reef species
-  Sanctuaries and MPA development
-  Enforcement
-  Coral Disease and Health Consortium
-  Damage assessment and restoration
-  Oversight of Coral Reef Institute  
Cooperative Agreements
-  Activities of other USCRTP agencies







# CRCA (2000) Purposes

-  To preserve coral reef ecosystems
-  To promote wise use and sustainable management
-  To develop sound scientific information on the condition of ecosystems and the threats
-  To assist preservation of coral reefs by supporting conservation programs
-  To provide financial resources for programs and projects

# All CRCA (2000) Legal Mandates

-  Within 180 days, submit National Coral Reef Action Strategy
-  NOAA shall provide grants (consistent with certain other requirements)
-  Within 3 years, submit report on effectiveness of grants program
-  Within 2 years and every two years thereafter, submit report on implementation of the National Coral Reef Action Strategy

# CRCP National Responsibilities

-  Program and grants administration
-  Be responsive to Congress and NOAA leadership
-  Partnership development
-  National outreach, communications and education
-  International program development
-  Be able to answer the question "How are the reefs doing?" via basin-wide monitoring, mapping, assessment and data analysis

# CREIOS Overview

- To effectively manage and conserve coral reefs, local, regional, and national resource managers and policy makers need to know:
  - where the reefs are (mapping)
  - what reef resources are there (assessment)
  - how the reef resources change over time (monitoring)
  - why the reef resources change over time (environmental and human dimension monitoring)
- In an ideal world, CRCP could support a national program to map, assess, monitor, understand, and conserve all U.S. coral reef ecosystems

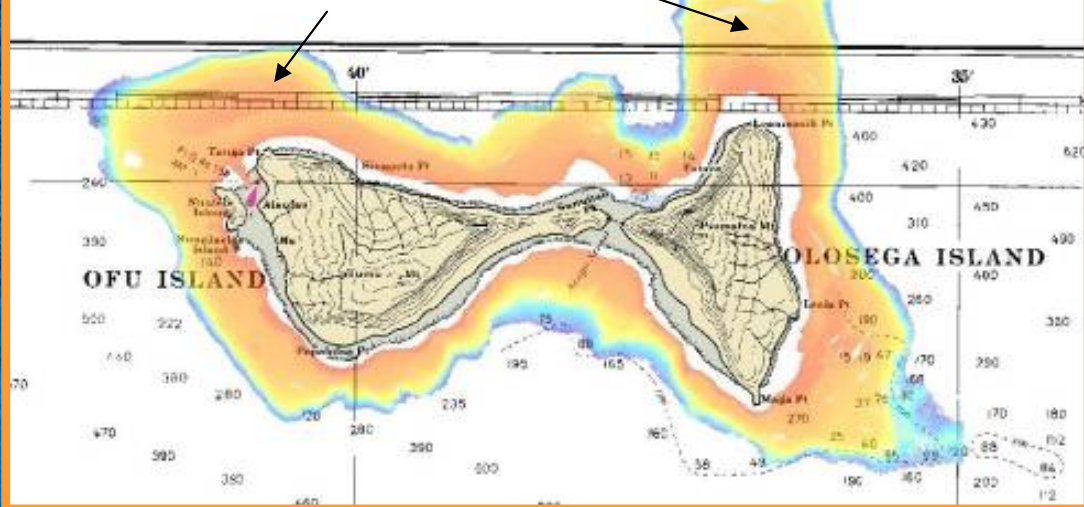


# Vision Statement

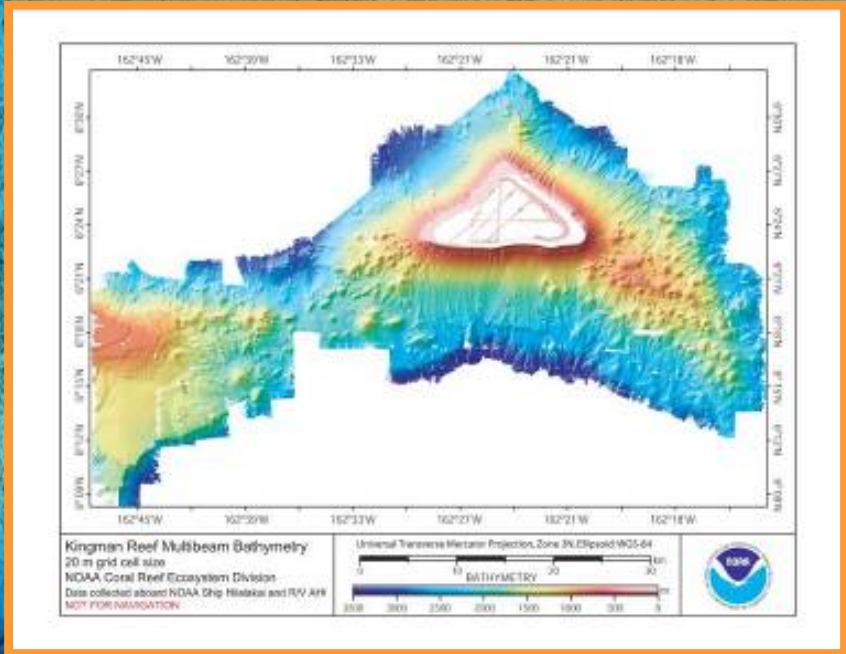
CREIOS provides a diverse suite of long-term ecological and environmental observations and information products over a broad range of spatial and temporal scales. The CREIOS goal is to understand the condition and health of and processes influencing coral reef ecosystems to assist stakeholders in making improved and timely ecosystem-based management decisions to conserve coral reefs.

# Habitat Mapping: Where's the Reef?

Shallow banks north of Ofu/Olosega completely uncharted.



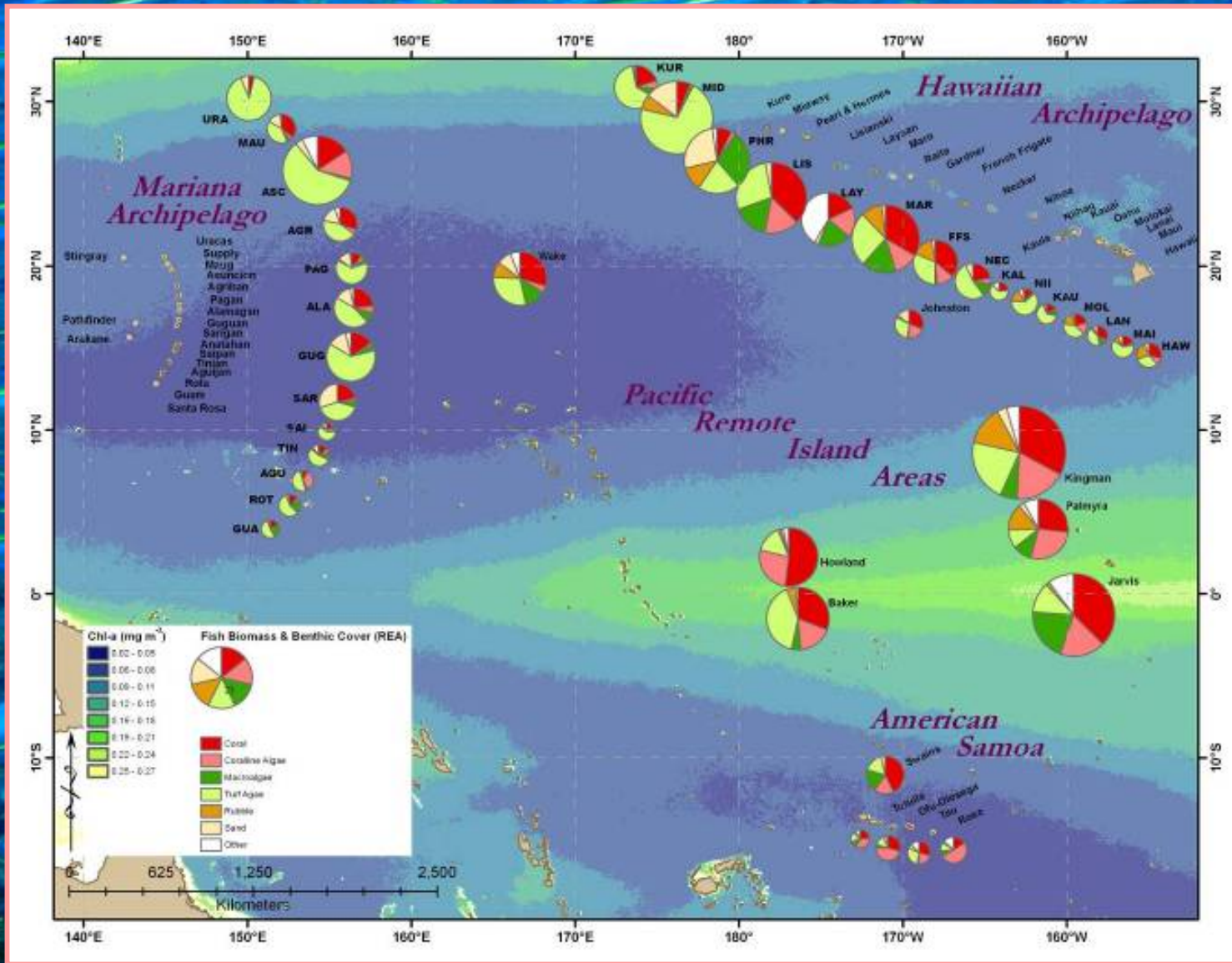
Size of Kingman Reef was off by a factor of 10 and location was 2 km off!



# Mapping Applications

- Produce and disseminate a comprehensive suite of digital benthic habitat mapping products for U.S. shallow and moderate-depth coral reefs to support conservation:
  - establish MPAs,
  - structure monitoring,
  - assess damage to resources,
  - plan coastal development and mitigation activities,
  - prioritize conservation efforts

# Assessment: What Are the Reef Resources?

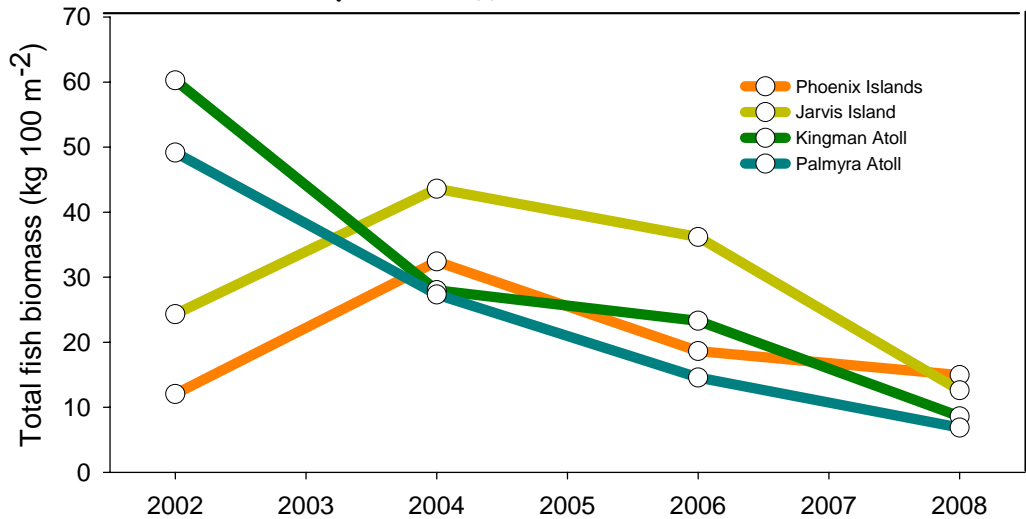


Use of consistent methods allows comparison across Biogeographic, environmental, and human use gradients

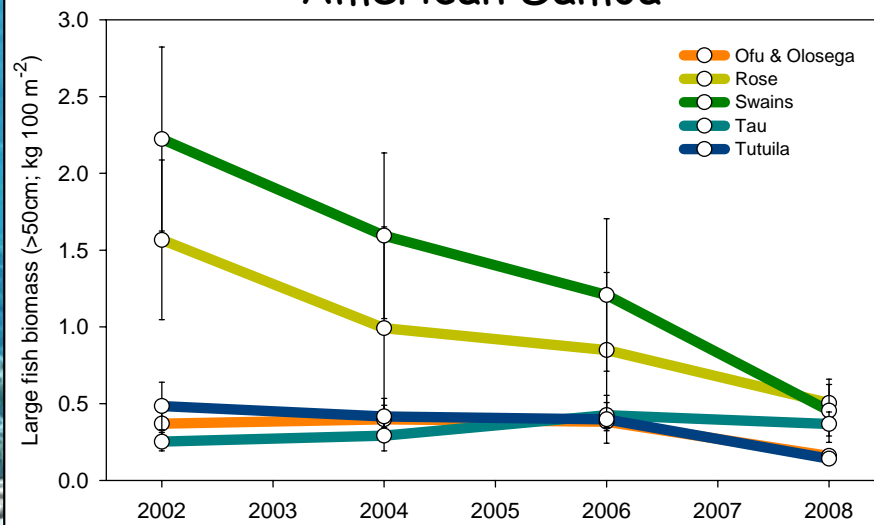


# Monitoring Changes Over Time

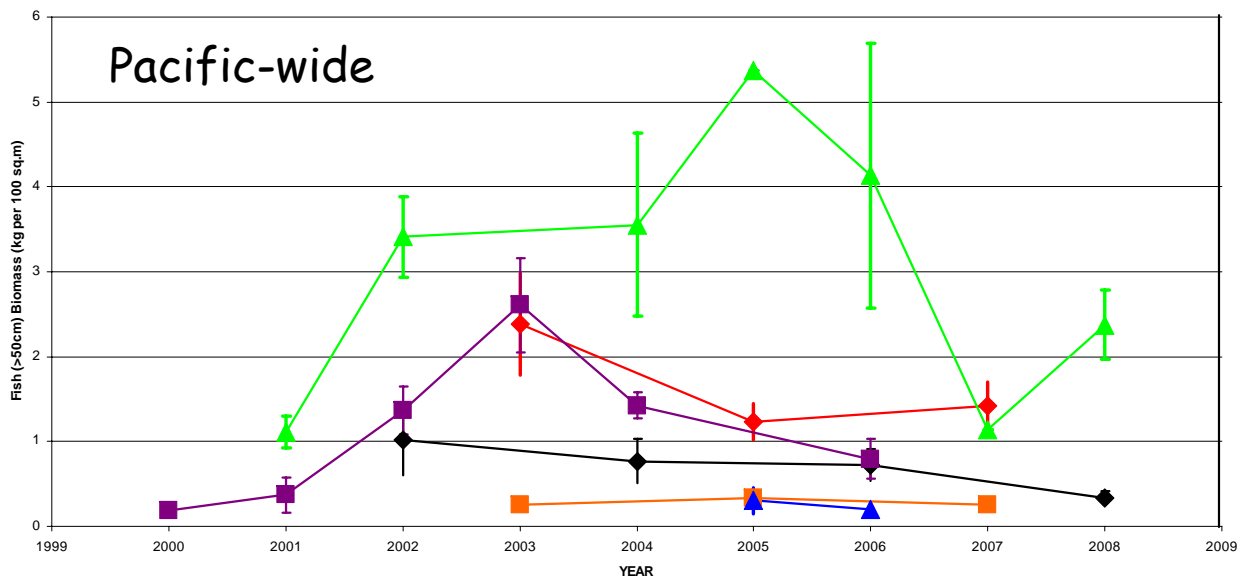
## Pacific Remote Island Areas



## American Samoa

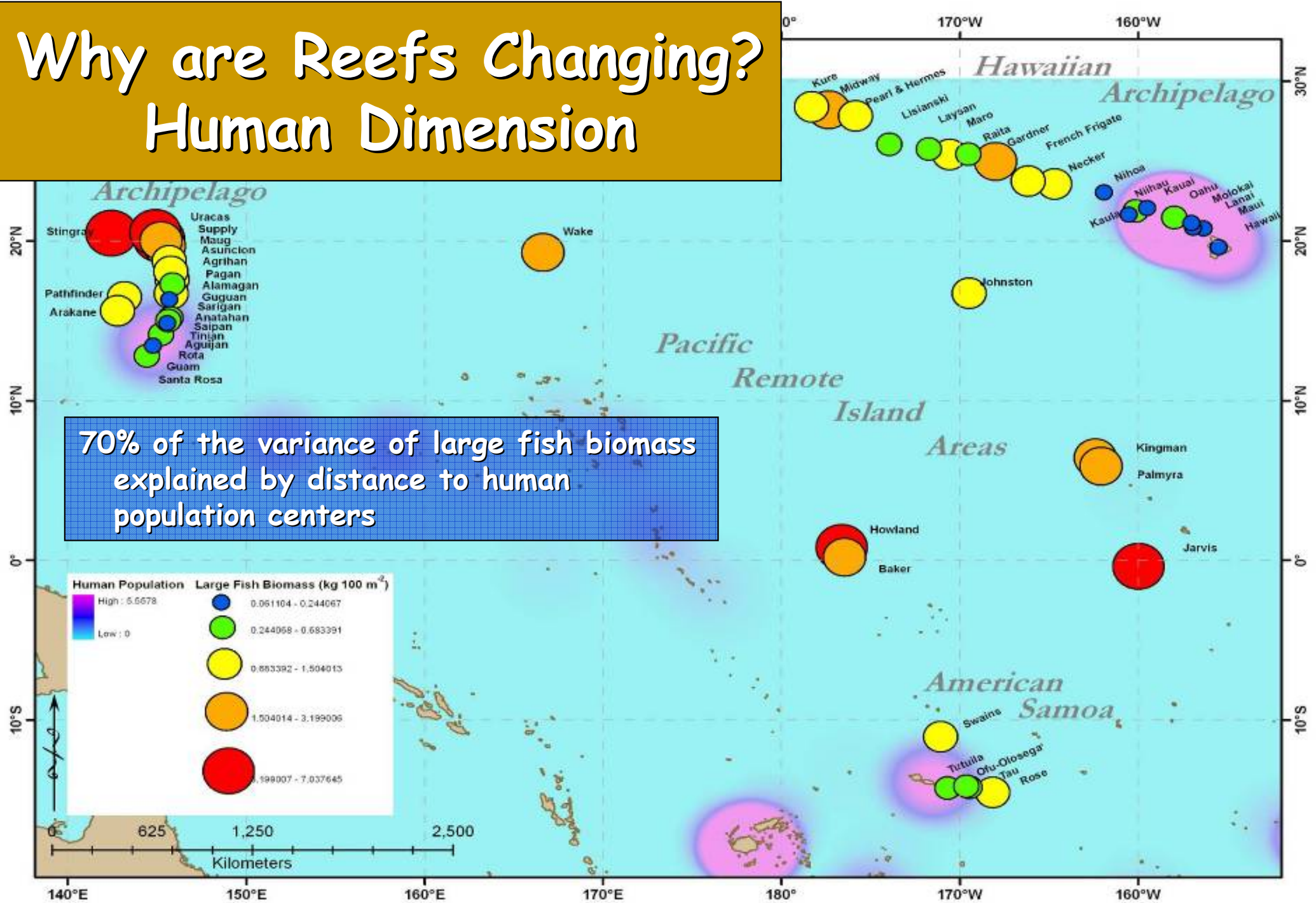


## Pacific-wide











# Why are Reefs Changing? Human Dimension



# Benefits of National Program

-  Achieve a greater economy of scale for activities - federal investment in research vessels, satellites, data collection instruments
-  Consistency in data collection, analysis and dissemination
-  Demonstrate status and trends in coral reef ecosystems across wide geographic range
-  Compare changes across jurisdictions
-  Increases ability to forecast ecosystem events, e.g. bleaching
-  Broad education, outreach and communication potential with general public, Congress and international partners

# Discussion Questions





# National Program Activities

- Do you agree that NOAA should:
  - Perform basin-wide monitoring?
  - Show status and trends across wide geographic range?
  - Forecast ecosystem events, e.g. bleaching?
  - Conduct national education and outreach?
- What should the balance of CRCP activities be between conserving remote areas versus reefs closer to people?
- What do you think NOAA's role should be in analyzing mapping/monitoring data to provide policy recommendations?

# “State of the Reefs” Report and Monitoring Grants

- “State of the Reefs” Report:
  - How often should we produce a State of the Reefs Report?
  - How can we improve the process for contributing to the Report?
  - How can we improve the Report to better meet management needs?
- Monitoring grants – How can we better integrate monitoring grant efforts with national activities?

# Meeting Management Needs

- **Accountability:** How can we ensure CRCPC products are meeting management needs?
- **Relative Importance:** Is lack of mapping, monitoring, and assessment information your greatest unmet need?
- **Building Capacity:** Should NOAA put federal staff in the jurisdictions? If so, on detail or permanently?
- **Improving Analysis:** What additional analyses or data products are most needed to support management decisions?