



Integrating Place-based Understandings of Well-being in NOAA National Marine Sanctuary Condition Reports

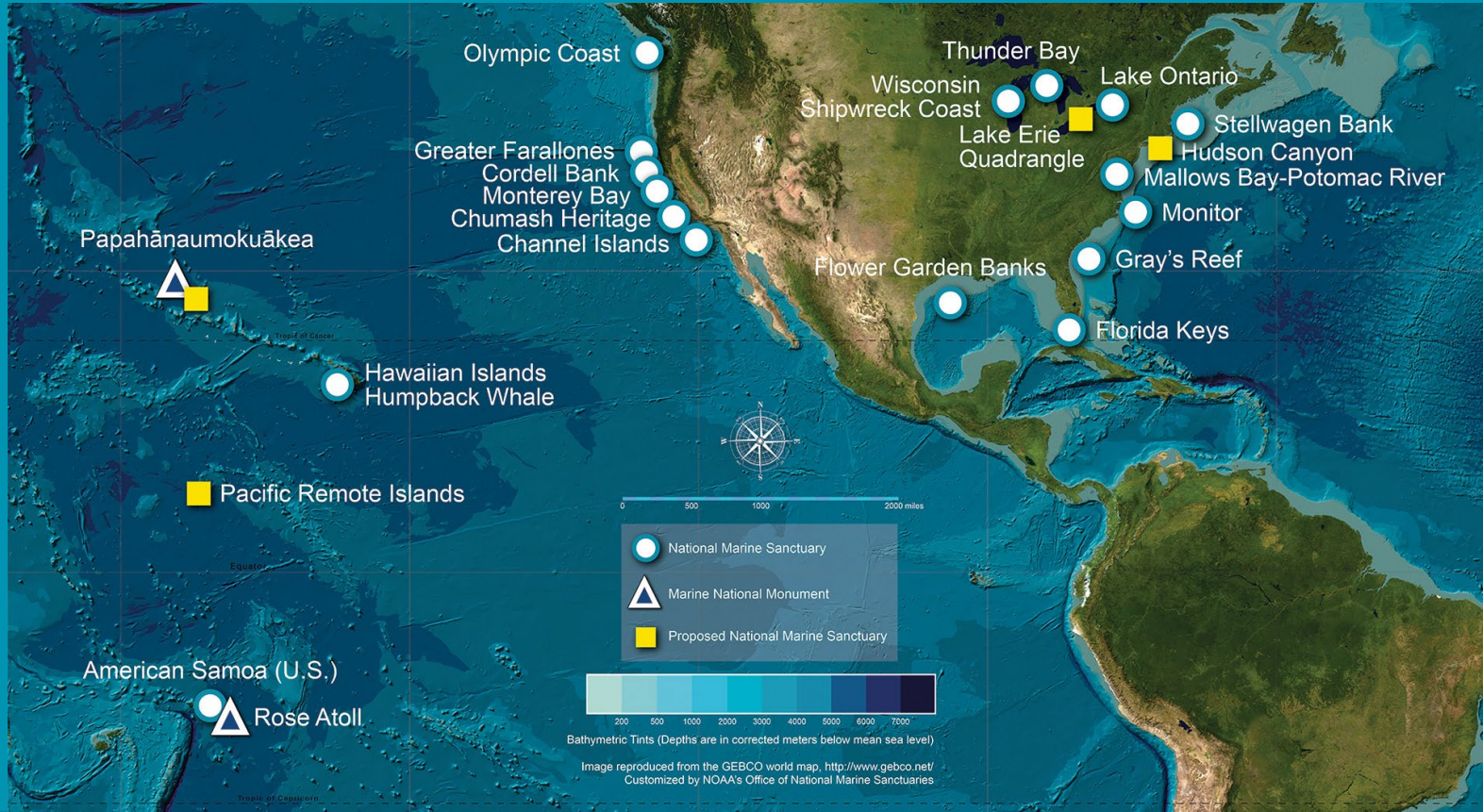
Dr. Giselle Samonte

Economist, Office of National Marine Sanctuaries

A Community of Ecosystem Services

Austin, Texas

9-12 December 2024



Outline of Presentation

1. Overview of Condition Reports
2. Cultural Ecosystem Services
3. Examples

Stellwagen Bank
Greater Farallones
American Samoa

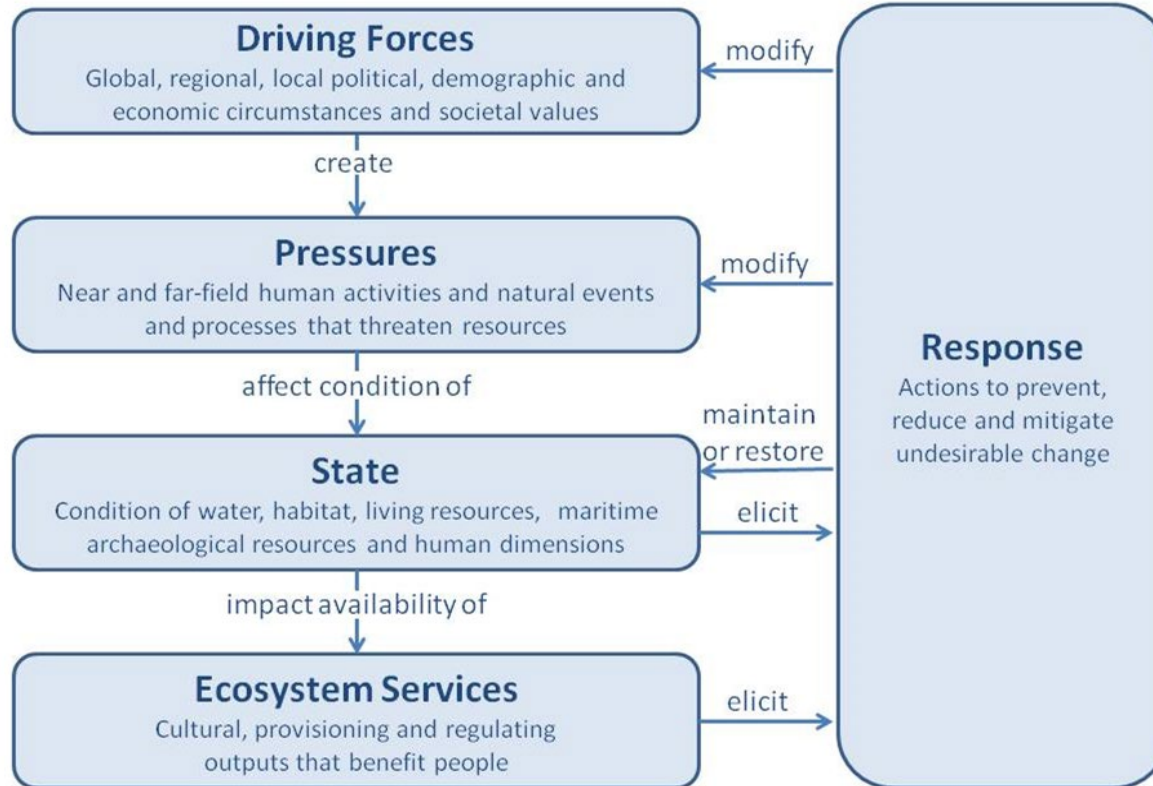
Condition Reports

Assessing the status and trends of sanctuary resources

- Supporting Tool
- Inform & Educate
- Reporting Mechanism



Driving Forces - Pressure - State - Ecosystem Services - Response (DPSER)



Ecosystem Services

Cultural (*non-material benefits*)

- **Sense of place**
- **Non-consumptive recreation**
- **Consumptive recreation**
- **Science**
- **Education**
- **Heritage**

Regulating (*buffers to change*)

- **Coastal Protection**

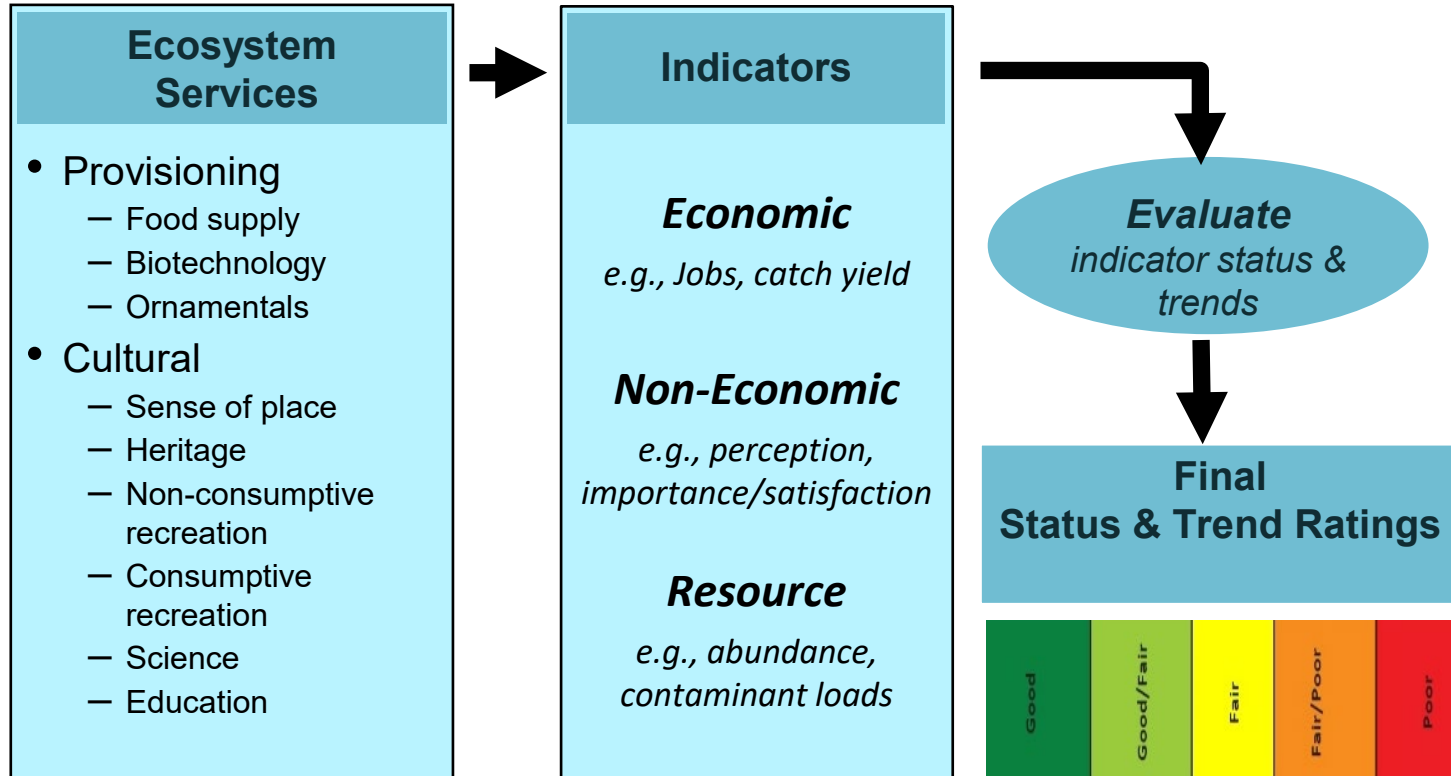
Provisioning (*material benefits*)

- **Biotechnology**
- **Ornamentals**
- **Commercial Harvest**
- **Subsistence Harvest**
- **Water**
- **Energy**

Cultural Ecosystem Services

- **Consumptive recreation** — Recreational activities that result in the removal of or harm to natural or cultural resources
- **Non-consumptive recreation** — Recreational activities that do not result in intentional removal of or harm to natural or cultural resources
- **Science** — The capacity to acquire and contribute information and knowledge
- **Education** — The capacity to acquire and provide intellectual enrichment
- **Heritage** — Recognition of historical and heritage legacy and cultural practices
- **Sense of Place** — Aesthetic attraction, spiritual significance, and location identity

Ecosystem Services Rating Process



Confidence Scores

Step 1: Rate Evidence

Consider three categories of evidence typically used to make status or trend ratings: (1.) data,(2.) published information and(3.) personal experience.

Evidence Scores		
Limited	Medium	Robust
Limited data or published information, and little or no substantive personal experience.	Data available, some peer reviewed published information, or direct personal experience.	Considerable data, extensive record of publication, or extensive personal experience.

Step 2: Rate Agreement

Rate agreement among those participating in determining the status and trend rating, or if possible, within the broader scientific community. Levels of agreement can be characterized as "low," "medium" or "high."

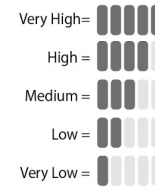
Step 3: Rate Confidence

Using the matrix below, combine ratings for both evidence and agreement to identify a level of confidence. Levels of confidence can be characterized as "very low," "low," "medium," "high" or "very high."

Agreement ↑	"Medium" High agreement Limited evidence	"High" High agreement Medium evidence	"Very High" High agreement Robust evidence
	"Low" Medium Agreement Limited evidence	"Medium" Medium agreement Medium evidence	"High" Medium agreement Robust evidence
	"Very Low" Low agreement Limited evidence	"Low" Low agreement Medium evidence	"Medium" Low agreement Robust evidence

Evidence (type, amount, quality, consistency) →

Confidence Scale:



EXAMPLE:

This symbol indicates the condition was rated "fair" with "medium confidence" and a "worsening" trend with "very high confidence."



Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration
STELLWAGEN BANK NATIONAL MARINE SANCTUARY



2020 CONDITION REPORT
FINDINGS OF STATUS AND TRENDS
2007-2018

STELLWAGEN BANK



Non-consumptive Recreation

Recreational activities that do not result in the removal of or damage to natural resources are considered non-consumptive.

The primary non-consumptive recreational activities include whale watching and other wildlife observation, scuba diving, sailing, and motor boating.

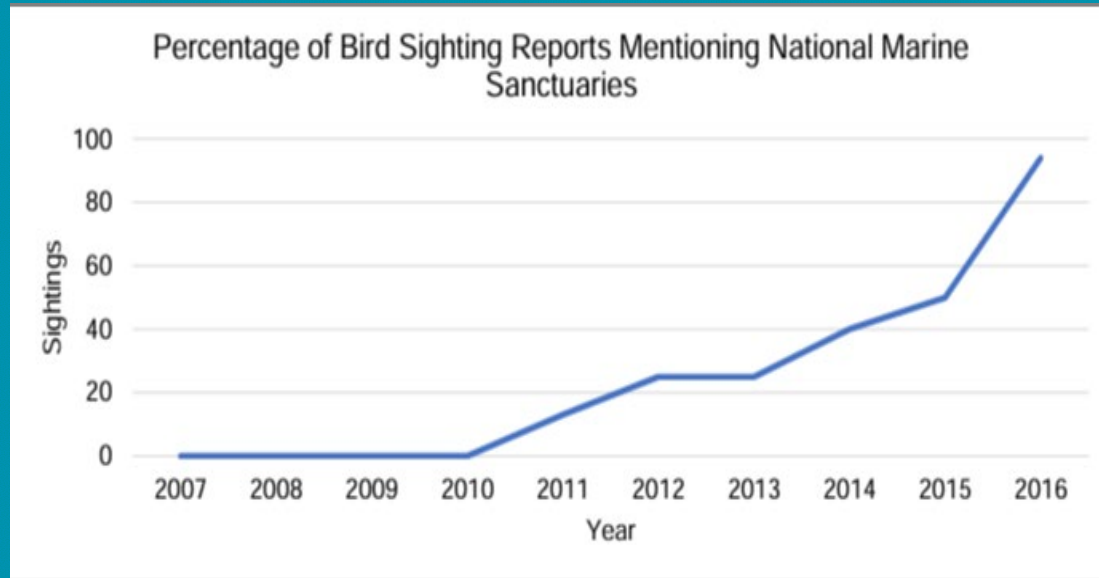
Whale Watching

Over 80% of whale watching in the New England

There are an estimated eight whale/wildlife watching operations



Bird Watching



Status Description

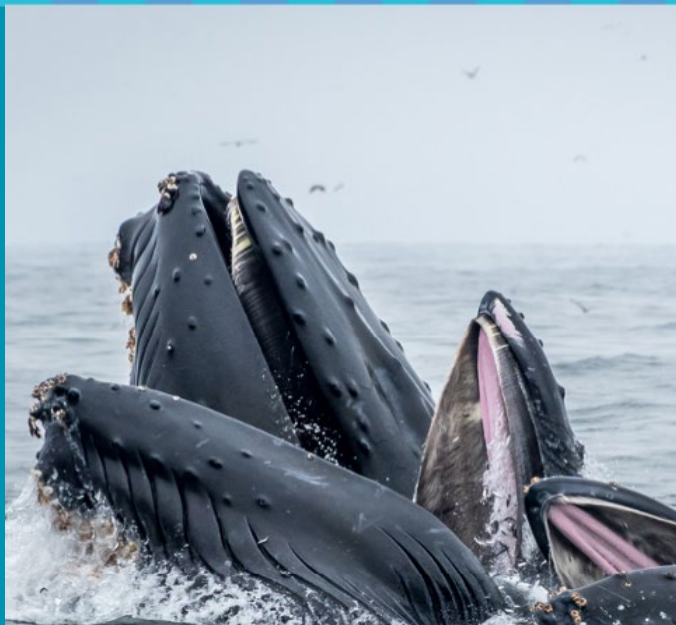
Non-consumptive recreation is “good/fair”

Trend is “improving”

- Demand for whale watching has steadily increased
- Bird sightings has been increasing
- Increased non-consumptive recreational activity in the sanctuary

Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration

GREATER FARALLONES & CORDELL BANK NATIONAL MARINE SANCTUARIES



CONDITION REPORT

2010-2022

GREATER FARALLONES



Education

The capacity to acquire and provide intellectual enrichment.

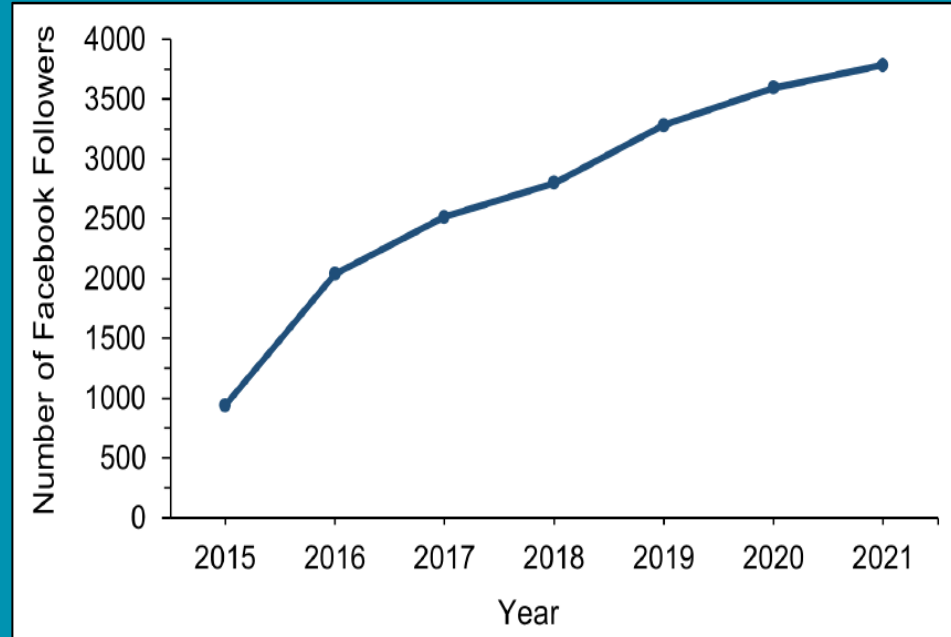
Programs	Category
Fishermen in Classroom	7-12
Visitor Center Field Trips	K-16 school programs
Teacher Workshops	K-16 school programs
Farallones Virtual Academy	K-16 school programs
Oceans After School Program	3-5
B-WET	K-12
Family workshops	Public Programs - families
Excursions	Public Programs - families
Camps - WAVES Seven Teepees	Public Programs - youth
Camps - Marine Explorers	Public Programs - youth
Sharktoberfest	Public Programs - families
Get Into Your Sanctuary Day	Public Programs - all
Ocean Film Festival (partner)	Public Programs - adults
County-based outreach events (partner)	Public Programs - all

Education Indicators

Exhibits



Social Media, Partner Events, and Lectures

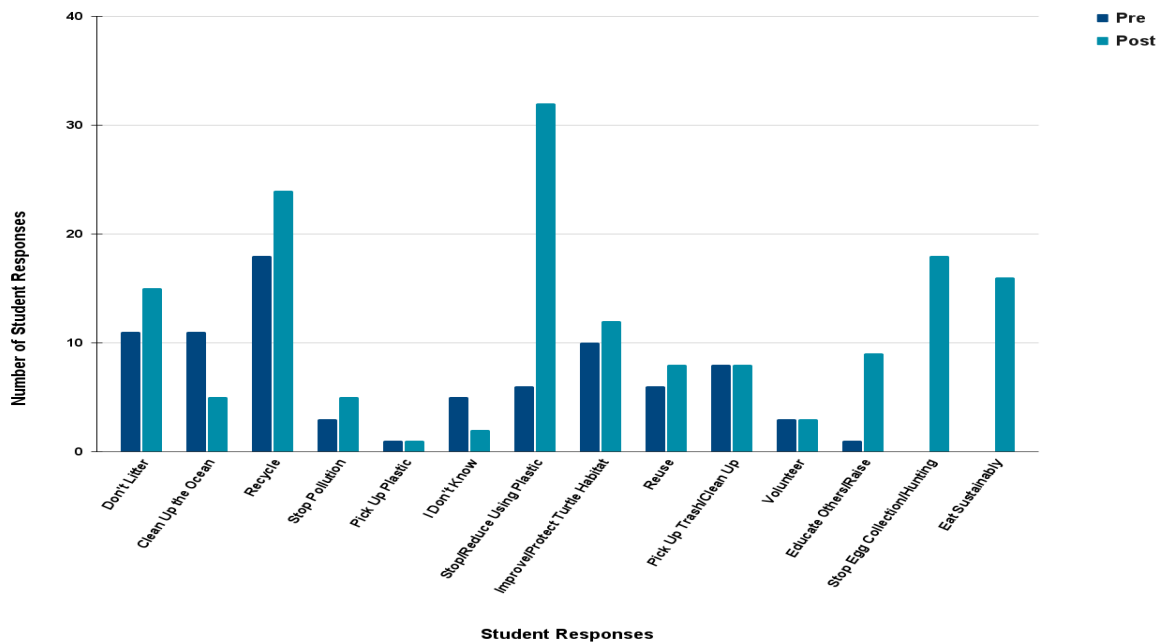


Education Indicators

Visitor Center Field Trips



At Your School Program



Status Description

Rated good/fair and improving

- Quality, diversity, and reach of education programs excellent
- Programs reached a wide range of socioeconomic status levels and ages
- Educational partnerships were strong
- The number of people served by various education programs was stable or increased

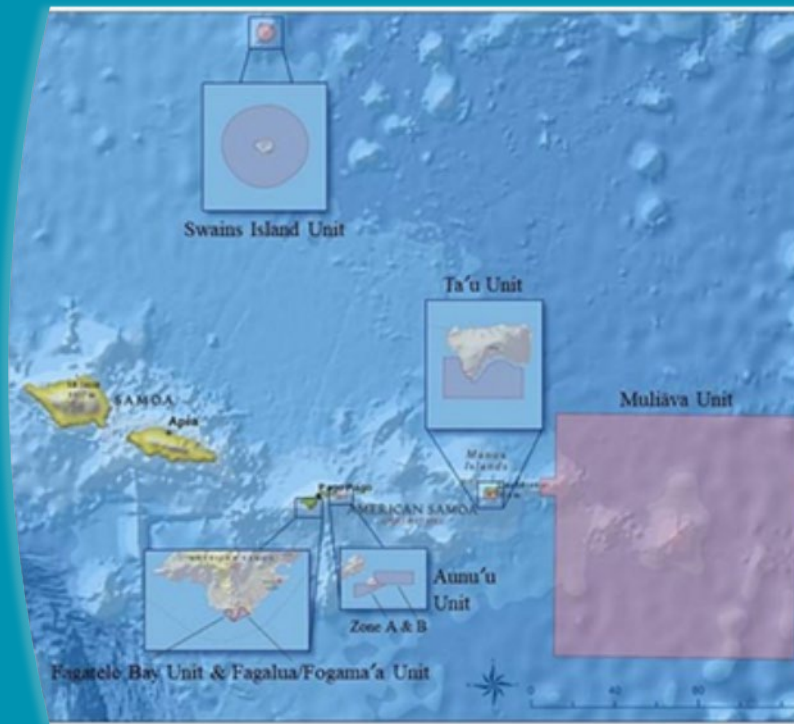
Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration
NATIONAL MARINE SANCTUARY OF AMERICAN SAMOA



CONDITION REPORT

2007–2020

AMERICAN SAMOA



Heritage

Recognition of historical and heritage legacy and cultural practices.



- WWII heritage trail
- Historic naval buildings
- Defensive gun emplacements
- Shoreline pillboxes
- Naval records and photographs



Heritage traditional practices

Cultural practices: 'le toga (Fine mat)



Culture & Tradition of Fautasi Racing



Status Description

Specific ratings were not assigned.

Measuring Heritage in the manner used to rate other services determined to be culturally inappropriate for American Samoa.

Key Messages



- **NOAA incorporates ecosystem services into condition reports by assessing the non-material benefits people receive from ecosystems.**
- **The cultural ecosystems include recreation opportunities, education and science values, sense of place and heritage.**
- **NOAA considers cultural ecosystem services alongside Indigenous and local metrics when evaluating a site's condition.**



Definitions and Rating Scheme for State of Ecosystem Services

