Condition Reports
An Overview

NOAA Office of National Marine Sanctuaries

Leaders in Protecting America’s Natural and Cultural Heritage
The National Marine Sanctuary System
Condition Reports

Assessing the status and trends of sanctuary resources
Gulf of the Farallones
NMS Condition Report: 2010

Gulf of the Farallones National Marine Sanctuary
CONDITION REPORT 2010

August 2010
Purpose and Audience

- **Supporting Tool**
  - Management plan reviews
- **Inform & Educate**
  - Community and regional partners, stakeholders, interested members of the public
- **Reporting Mechanism**
  - NOAA and Congress re: resource protection and improvement goals
Framework

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

![Diagram showing the DPSER framework]

**Driving Forces**
- Global, regional, local political, demographic and economic circumstances and societal values

**Pressures**
- Near and far-field human activities and natural events and processes that threaten resources

**State**
- Condition of water, habitat, living resources, maritime archaeological resources and human dimensions

**Ecosystem Services**
- Cultural, provisioning and regulating outputs that benefit people

**Response**
- Actions to prevent, reduce and mitigate undesirable change
State of Resources

15 Questions

• Human Dimensions
• Water Quality
• Habitat

• Living Resources
• Maritime Heritage Resources

<table>
<thead>
<tr>
<th>Good</th>
<th>Good/Fair</th>
<th>Fair</th>
<th>Fair/Poor</th>
<th>Poor</th>
<th>Undetermined</th>
</tr>
</thead>
</table>

▲ = Improving  □ = Not Changing  ▼ = Worsening

? = Undetermined  N/A = Not Applicable
What are the levels of human activities that may adversely influence water quality and how are they changing?

What are the levels of human activities that may adversely influence habitats and how are they changing?

What are the levels of human activities that may adversely influence living resource quality and how are they changing?

What are the levels of human activities that may adversely influence maritime heritage resource quality and how are they changing?
Water Quality

What is the **eutrophic condition** of sanctuary waters and how is it changing?

Do sanctuary waters pose **risks to human health** and how are they changing?

Have recent changes in **climate** altered water conditions and how are they changing?

Are **other stressors**, individually or in combination, affecting water quality, and how are they changing?
What is the integrity of major habitat types and how is it changing?

What are contaminant concentrations in sanctuary habitats and how are they changing?
Living Resources

What is the status of **keystone** and foundation species and how is it changing?

What is the status of **other focal species** and how is it changing?

What is the status of **non-indigenous species** and how is it changing?

What is the status of **biodiversity** and how is it changing?
What is the condition of known maritime heritage resources and how is it changing?
Rating System

- **Good**
- **Good/Fair**
- **Fair**
- **Fair/Poor**
- **Poor**
- **Undetermined**

- ▲ = Improving
- ▼ = Worsening
- ? = Undetermined
- N/A = Not Applicable
### Description of Findings

Description of findings statement for a given status rating is specific to the question being asked.

#### WQ/Human Health

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>Water quality does not appear to have the potential to negatively affect human health.</td>
</tr>
<tr>
<td>Good/Fair</td>
<td>One or more water quality indicators suggest the potential for human health impacts, but human health impacts have not been reported.</td>
</tr>
<tr>
<td>Fair</td>
<td>Water quality problems have caused measurable human impacts, but effects are localized and not widespread or persistent.</td>
</tr>
<tr>
<td>Fair/Poor</td>
<td>Water quality problems have caused severe impacts that are either widespread or persistent.</td>
</tr>
<tr>
<td>Poor</td>
<td>Water quality problems have caused severe, persistent, and widespread human impacts.</td>
</tr>
</tbody>
</table>

#### Habitat/Integrity

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>Habitats are in near-pristine condition.</td>
</tr>
<tr>
<td>Good/Fair</td>
<td>Selected habitat loss or alteration is suspected and may degrade some attributes of ecological integrity, but has not yet caused measurable degradation.</td>
</tr>
<tr>
<td>Fair</td>
<td>Selected habitat loss or alteration has caused measurable, but not severe degradation in some attributes of ecological integrity.</td>
</tr>
<tr>
<td>Fair/Poor</td>
<td>Selected habitat loss or alteration has caused severe degradation in some, but not all attributes of ecological integrity.</td>
</tr>
<tr>
<td>Poor</td>
<td>Selected habitat loss or alteration has caused severe degradation in most, if not all attributes of ecological integrity.</td>
</tr>
</tbody>
</table>

The customized statements are available here: [https://sanctuaries.noaa.gov/science/condition/rating.html](https://sanctuaries.noaa.gov/science/condition/rating.html)
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
### Rating System for Ecosystem Services

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>The capacity to provide the ecosystem service has remained unaffected or has been restored.</td>
</tr>
<tr>
<td>Good/Fair</td>
<td>The capacity to provide the ecosystem service is compromised, but performance is acceptable.</td>
</tr>
<tr>
<td>Fair</td>
<td>The capacity to provide the ecosystem service is compromised, and existing management would require enhancement to enable acceptable performance.</td>
</tr>
<tr>
<td>Fair/Poor</td>
<td>The capacity to provide the ecosystem service is compromised, and substantial new or enhanced management is required to restore it.</td>
</tr>
<tr>
<td>Poor</td>
<td>The capacity to provide the ecosystem service is compromised, and it is doubtful that new or enhanced management would restore it.</td>
</tr>
</tbody>
</table>
Confidence Scores
Evidence + Agreement = Confidence

**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.

<table>
<thead>
<tr>
<th>Evidence Scores</th>
<th>Limited</th>
<th>Medium</th>
<th>Robust</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Limited</strong></td>
<td>Limited data or published information, and little or no substantive personal experience.</td>
<td>Data available, some peer reviewed published information, or direct personal experience.</td>
<td>Considerable data, extensive record of publication, or extensive personal experience.</td>
</tr>
</tbody>
</table>

**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.”

**Confidence Scale:**
- Very High
- High
- Medium
- Low
- Very Low

**EXAMPLE:**
This symbol indicates the condition was rated “fair” with “medium confidence” and a “worsening” trend with “very high confidence.”
### Process: Major Milestones and Approximate Timing

<table>
<thead>
<tr>
<th>Year</th>
<th>Season</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>Winter</td>
<td>Kick off</td>
</tr>
<tr>
<td>2021</td>
<td>Winter – Fall</td>
<td>Indicator development, data compilation</td>
</tr>
<tr>
<td>2021</td>
<td>Fall</td>
<td><em>Potential</em> indicator vetting workshop</td>
</tr>
<tr>
<td>2021 - 22</td>
<td>Winter - Spring</td>
<td>Preparation of indicators &amp; data</td>
</tr>
<tr>
<td>2022</td>
<td>Spring</td>
<td>Status &amp; Trends Workshop</td>
</tr>
<tr>
<td>2022</td>
<td>Spring - Fall</td>
<td>Report drafting</td>
</tr>
<tr>
<td>2022 - 23</td>
<td>Fall – Spring</td>
<td>2 Review Periods</td>
</tr>
<tr>
<td>2023</td>
<td>Summer</td>
<td>Finalize and release report</td>
</tr>
</tbody>
</table>
Process: Consultation With Experts

Fall 2021: Indicator & Data Development

Spring 2022: Status and Trends Workshop
Process: Two Reviews

1. Expert Review
2. Invited Review
3. Peer Review
National Marine Sanctuary offices and visitor centers closed to the public; waters remain open
NOAA's national marine sanctuary offices and visitor centers are closed to the public while the waters remain open for responsible use in accordance with CDC guidance and local regulations. More information on the response from NOAA's Office of National Marine Sanctuaries can be found on sanctuaries.noaa.gov/coronavirus/.

Condition Reports

The Office of National Marine Sanctuary Condition Reports provide a summary of resources in each sanctuary, pressures on those resources, the current condition and trends, and management responses to the pressures that threaten the integrity of the marine environment. Specifically, the reports include information on the status and trends of water quality, habitat, living resources and maritime archaeological resources and the human activities that affect them.

Links are provided below to access the National Condition Report and each sanctuary's condition report.

Frequently Asked Questions  
Rating Scheme for System-Wide Monitoring Questions  
Ecosystem Services and Methods to Determine Ratings

NATIONAL MARINE SANCTUARY SYSTEM 2013 CONDITION REPORT
In the National Marine Sanctuary System Condition Report the status and trends of resource condition are evaluated across the system. Among the many pressures on the natural and archaeological resources in the system, a number stand out: marine debris entanglement, trapping and ingestion, loss of biodiversity, wildlife disturbance, ship strikes and water quality, to name a few. In the face of these pressures, sanctuaries are
Questions?

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