

# Ecosystem Approach

## to Fisheries Management in the Western Pacific Region

### 1 Principles

#### Incorporate Traditional Knowledge and Concepts

- Pacific island societies have survived for centuries by placing controls on resource use based on ecological thinking
- Mountain-to-sea resource management units (e.g. ahupua'a concept) enhanced resiliency of many island cultures

#### Emulate the Success of "Watershed Councils" in Terrestrial Ecosystem Management

- One size doesn't fit all
- Heterogeneity in approaches favored within a framework of "regional standards"
- Adaptive management based on learning from diverse experiences

#### Rely on Place-Based Collaborations

- Engage partners who care about a particular "place" and their natural resources
- Encourage collaborations on place-based natural resource management despite diverse interests and sometimes opposing perspectives
- Emphasize joint learning and problem solving at local scales
- Restore good citizenship and community responsibility for local health and productivity of natural resources
- Mobilize effective cooperation between government, non-government agencies and citizens for on-the-ground activities

### 2 Fishery Ecosystem Plans (FEPs)



Western Pacific Region

#### Transform Species-based FMPs to Archipelagic-based FEPs

- Marianas Archipelago
- Hawaiian Archipelago
- Samoa Archipelago
- Pacific Remote Island Areas

#### Transform Pelagics FMP to Pelagics FEP

- Limit entry to American Samoa and Hawaii longline fisheries
- Spread fishing mortality over many species

- Develop new gear techniques to reduce and mitigate sea turtle and seabird interactions
- Establish partnerships to develop and share new technologies with other fishing nations
- Increase partnerships for conservation of sea turtle nesting habitats
- Participate in international management of pelagic vessels through Western and Central Pacific Tuna Commission



#### Examples of Community-Based Fishery Ecosystem Strategies (FES) Being Developed by the Western Pacific Regional Fishery Management Council (Council):

1. A coastal community decides to take responsibility for managing an inshore area. A coastal community-based FES is prepared and implemented with partners.

*Council assists community efforts through the Western Pacific Community Development Program*

2. A boating community decides to take responsibility for managing a group of seamounts in the Exclusive Economic Zone (EEZ).

*Council and boating community co-manage, with federal rule-making if necessary*

### 3 The Future

#### Ecosystem Science and Management Workshop: April 2005

- Define and refine ecosystem indicators
- Increase understanding of multi-species linkages
- Utilize both science-based and local resource knowledge
- Discuss adaptive management approaches for FEPs in the context of biophysical cycles and human use patterns
- Discuss adaptive management approaches for FEP in context of oceanic regime shift

#### Regional Standards Guide Fishery Ecosystem Strategies

- Establish regional standards to facilitate consistency in approach among individual fishery ecosystem strategies under Archipelagic FEPs
- Provide for a high level of discretion for local managers in the details of their specific directions and actions

**REGIONAL STANDARD 1:** Identify areas of particular value or concern

**REGIONAL STANDARD 2:** Identify strongholds of high value for survival, maintenance, and recovery of key species

**REGIONAL STANDARD 3:** Utilize multi-scale analysis as a basis for integration and prioritization of conservation measures, especially in highly dynamic environments and for wide-ranging species

**REGIONAL STANDARD 4:** Integrate aquatic and terrestrial restoration priorities

**REGIONAL STANDARD 5:** Specify desired outcomes and conditions for resources

**REGIONAL STANDARD 6:** Focus ecosystem monitoring on key questions that inform decision making and allow adaptive management

