



Distributed governance of marine ecosystems -- Ideas from Hawaii

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PICES FUTURE
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Ecosystem approaches to natural resource conservation and management require an increased focus on ...

... human beings and society in their environments



Conceptual Framework

Governance

- Mediating the relationship between people and nature
 - Fisheries management is a highly complex system meshing natural systems and social problems that too frequently lead to inefficiency on multiple dimensions
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Types of Resource Regimes

- Open Access
- Common Property
- Private Ownership
- State (government) Assets

→ Relate these resource regimes to
Governance Options

Standard political approaches

- Laissez fair (open access)
 - Community or cooperative co-management
 - Government Regulation
 - Seasons, quotas, capacity limits
 - Rights-based (Privatization)
 - Individual transferable quotas; corporatism
 - State (government) ownership & operations
 - Or Shared authority (distributed governance)
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Advantages of Participation

Increase involvement of fishing industry and communities in decision-making and administration of the regulatory regime



Fishery management council meeting in Pago Pago, American Samoa

Levels of governance

- External relationships between government, industry and communities
- Internal relationships within industry and communities

Each has a different information content

Leveraging Capacities

Participants
(governments, fisheries,
communities)
**bring different skills,
capabilities, interests
& incentives to
management
problems**

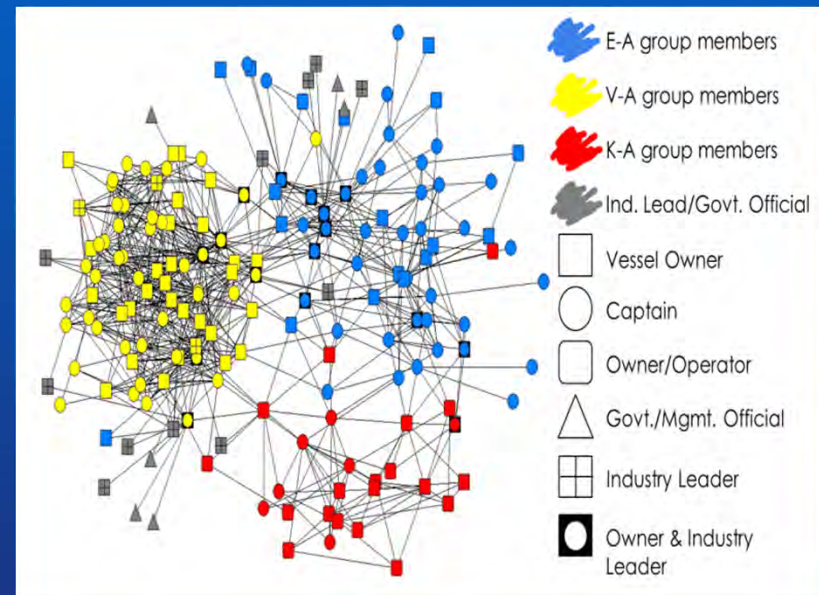


Industry Capacities

Extensive information on

- Resource spatial and seasonal distribution
- Harvest technologies
- Operational methodologies
- Fishery alliances and rivalries

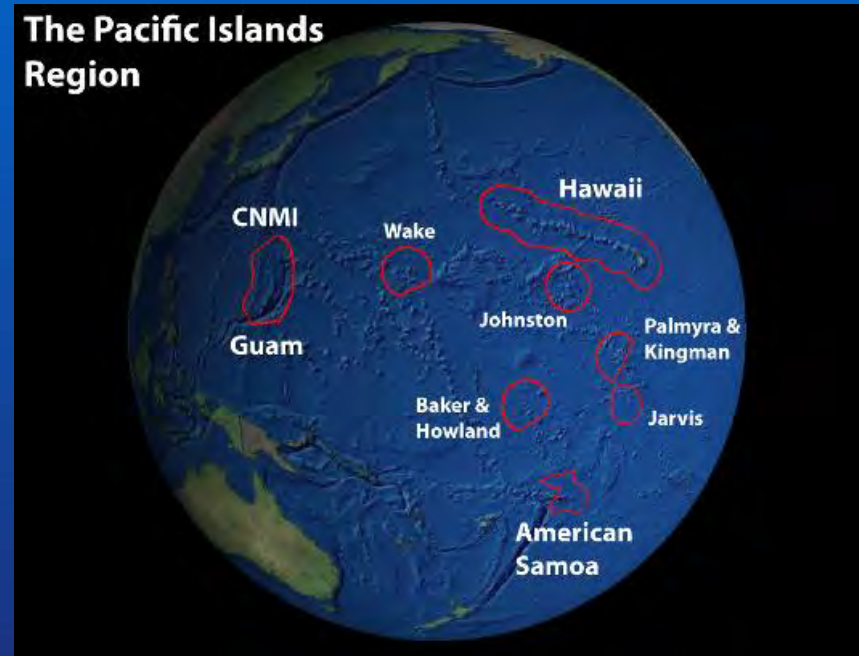
→ Advantages in designing & implementing rules



Hawaii's longline fishery information sharing networks, adapted from Barnes-Mauthe et al. 2013,

Government Interests

- **Extend beyond immediate local concerns**
 - Ecological dimensions
 - Shared stocks with other jurisdictions or other fisheries
- **Ability to enforce when local options fail**
 - No guarantee that local interests will be effective governance



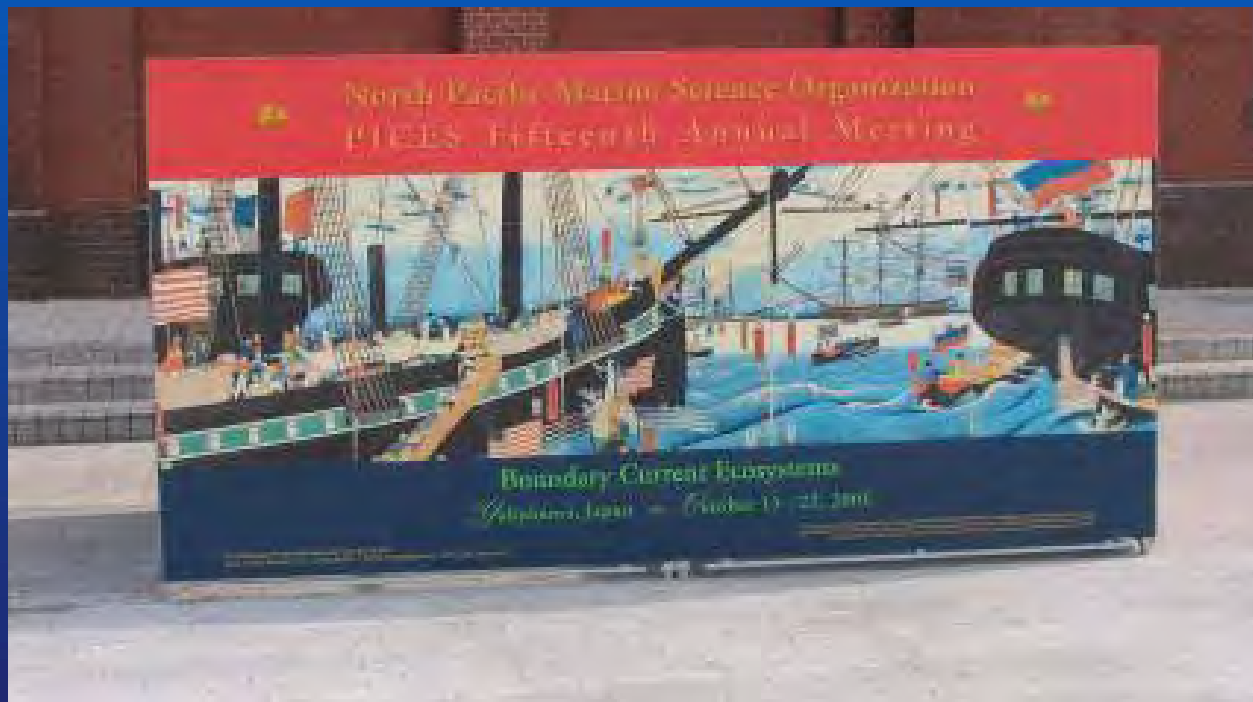
Nature of Distributed (Shared) Governance

Over-arching agreement on ...

- Scope of authority
 - Clearly defined rights & responsibilities at each level
 - Internalization of costs at appropriate scale for each
 - Setting the stage for self-organization at the local level
 - Devolving costs and control from central government
- Within a formal (or informal) agreement between government and industry/community
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Research Question

What is different for ecosystem research in an economic and social science research context?



Suggested Answers

- **Not different:** Economic and social research already exists within an ecosystem context and can contribute where appropriate
 - **Different:** Economic and social processes have profound short-term and long-term effects that make the independence of natural systems unlikely
 - Ecosystem-based management involves a broader range of participants, stakeholders, and jurisdictions [across a broader scale] and this requires the integration of ecosystem process understanding into socio-economic process.
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Expectation of Social Involvement in Ecosystem Management

Cultural diversity and indigenous links to "place" mean that community approaches to many ecosystem approaches to fisheries management issues are critical & expected.



Mahalo



Pagan Island, Northern Mariana Islands, 1984