Descriptive Assessment of Traditional and Small-Scale Fisheries and Prospective ACLs in the Western Pacific

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Overview of Presentation

• Rationale for new PFRP study of traditional and small-scale fleets and fisheries in the Western Pacific

• Project goals and objectives

• Research methods and work tasks

• Anticipated outcomes
Rationale

• Fisheries-specific data programs across the U.S. Pacific Islands have long focused primarily on the most productive fleets and sectors (e.g., commercial longline, troll, bottom, handline)

• Efforts seeking to better define the scope and extent of participation in recreational fishing activities are relatively new (e.g., HMRFS)

• Very little has been done to collect new information or to examine existing commercial or recreational fisheries data to enhance understanding of fishing activities that are not strictly commercial or recreational in nature
Rationale (continued)

PFRP has therefore funded a new study that would serve to:

(1) Better define “traditional and small-scale” fisheries and fleets and improve related data collection efforts in the region.

(2) Examine long-term trends in participation, catch, and effort across such fleets and fisheries, and

(3) Generate new information needed to assess: (a) the needs of such fisheries should sector-specific allowable catch limits (ACLs) or other allocation-based strategies be explored or established in the region, and (b) the potential effects of such actions for the fleets and participants in question.
**Rationale (continued)**

- At present, it does not appear likely that ACLs will be established for pelagic fisheries occurring in federal waters across the WP region since the reauthorized Magnuson Act stipulates that pelagic species addressed by international management entities are exempt from ACLs.
**Rationale (continued)**

However:
(a) Small-scale fleets certainly land non-pelagic species from federal, state, and territorial waters and these may eventually be subject to generalized or sector-specific ACLs; and

(a) In addition to satisfying ongoing management needs, the WP Council along with state, territorial, and commonwealth management agencies may obviously wish to **anticipate potential future international management measures** by more completely **documenting the historic and contemporary characteristics of each of its fleets and fisheries – large and small**
Rationale (continued)

- Attention to traditional and small-scale operations is in keeping with the WP Pelagic FMP, which calls for the “continuation of traditional fishing practices for non-market personal consumption and cultural benefits,” and

- Bottomfish and Seamount Groundfish FMPs which call for maintenance of “existing opportunities for rewarding experiences by small-scale commercial, recreational, and subsistence fishermen, including native Pacific Islanders,” and the new

- FEMPs, which call for continuation of funding venues intended to sustain traditional indigenous fishing practices
Rationale (continued)

• Although small-scale fleets produce a small fraction of landings & ex-vessel revenue generated by larger commercial fleets, artisanal fishing activity often involves costs and revenues that are highly significant in an absolute sense at island and community scales of analysis.

• Moreover, seafood landed by small-scale operators generates extensive non-market benefits in island societies, including opportunities for: a) consumption in extended family settings; b) use in community functions; c) reciprocal sharing; d) barter or customary trade; e) selling, where proceeds are often put back into the fishing operation, and f) altruistic or seasonal gifting.
Rationale (continued)

• Artisanal operations also provide employment for captains/crew members; and both artisanal and consumption-oriented operations provide a means for enacting what often is a locally valued way of life;

• The full value of such fisheries cannot therefore be adequately expressed solely in terms of landings and market value; value should rather be expressed as a composite of economic, dietary, and cultural benefits

• In sum, the collective societal benefits of small-scale and traditional fisheries are disproportionate to their level of production and the value of products in the marketplace
Flow of Pelagic Seafood from Network of Hale’iwa-Based Fishermen

- Part-time Commercial
- Commercial
- Charter
- Consumption-Recreation Oriented

Directional Flow
Flow of Pelagic Seafood from Network of Wai'anae-Based Fishermen

- Part-time Commercial
- Commercial
- Charter
- Consumption-Recreation Oriented

Directional Flow
Definitional Challenges

• Like Hospital et al., Allen’s review of the general literature on subsistence and artisanal fishing (2008) makes clear that such fisheries very often simultaneously involve some commercial sale and some consumption/non-market distribution of seafood – there often is no “clean” boundary between trip motives or outcomes.

• Allen also points out that subsistence- or consumption-oriented fisheries should be considered in the modern context: traditional fishing practices very typically involve modern technology, and such practices are conducted in societies and economies that are far more complex than those from whom traditional methods originally derived.
Project Goals and Objectives

• The straightforward goal of the new project is to generate a useful summary of region-specific literature, and descriptive analysis of archival and new primary source data regarding the nature, extent, and location of small-scale and traditional fleets and fisheries in each archipelago.

• The principal objective of the project is to enumerate, spatially represent, and describe and analyze, in qualitative and quantitative terms, variability of fishing operations and activities that may most logically be considered small-scale or traditional in nature.
Project Goals and Objectives (continued)

- Additional effort will be applied to collection of information that can assist in: (a) addressing catch & effort data gaps and other data problems, and (b) identifying new strategies for collecting valid and reliable data in the future.

- The project will aid in development of a typology and determination of the implications of ACLs or other measures; by providing a single-source document, database, and set of recommendations.

- Are we missing important categories of activity? Yes
- Is there room for improving precision and validity? Yes
Research Methods

• Data collection methods will involve a combination of archival research, key person interviewing methods, and basic field observation in Hawaii, American Samoa, Guam, and CNMI.

• Archival research here refers to compilation/review of relevant reports, commercial landings and permit/license data, vessel registry records, and other data sources indicative of the nature, extent, level of participation and production, and distribution of contemporary small-scale and traditional fishing activities across the region.
Research Methods (continued)

• Key person interviewing here refers to in-depth discussions with regional data managers to identify relevant fisheries data and ways to analytically isolate data indicating trends in:

(1) part-time small-scale commercial fishing activities that might be considered artisanal or consumption-oriented activities,

(2) recreational fishing activities involving some degree of sale and/or consumption of seafood, and

(3) Other boat-based fishing activities that are likely oriented toward consumption- or subsistence outcomes
Research Methods (continued)

• Key persons will also be asked to identify gaps in relevant databases, problematic data categories, and potential means for addressing data problems

• Additional interview work will be conducted with knowledgeable persons in local government and village leadership positions, fishing organizations, and other entities;

• These discussions will focus on the nature, extent, levels of participation and production, and distribution of small-scale and traditional fishing activities across the island/region of interest
Research Methods (continued)

• Finally, interviews will be conducted with key informants in the harvest and distribution sectors of the region’s small-scale and traditional fisheries

• Such persons will be asked to provide insight into: (a) the nature and extent of their own and others small-scale operations and related **definitional challenges**, (b) **perspectives on** problems associated with past and current **data collection programs**, and (c) prospects for **future data collection programs** that could serve to better document artisanal and consumption-oriented fishing activities
Research Methods (continued)

• Field observation here refers to a basic ethnographic approach for:

(a) validating questionable or uncertain archival data;

(b) enumerating and mapping the distribution of small-scale and traditional fishing operations where such efforts have not yet been undertaken; and

(c) generating information useful for improving the validity of any new or ongoing efforts to develop a typology of small-scale and traditional fishing operations in the region.
Research Methods (continued)

• Such work will involve: visits to centers of government and harbors to document (where interview data are deemed questionable) the number, type, and spatial distribution of vessels/fishing operations potentially classified as small-scale: (a) commercial, (b) artisanal, or (c) consumption-oriented

• Estimates will include counts from individual harbors, villages, CDPs, or other distinct geographic designations (as feasible), and a separate estimate for the number of small-scale operations that are not clearly associated with a specific or readily-identifiable geographic location (e.g. trailered vessels, canoes, kayaks, jet skis, etc.)
Project Outcomes

• Output will include:

(1) Descriptive assessment of contemporary artisanal and subsistence/consumption-oriented fishing fleets and activities in the region, including description of discernible trends in participation and production (as data allow);

(2) Description of how the fleets and activities vary in terms of:
(a) manner, purpose, and extent of involvement in the sale of seafood, (b) nature/extent of involvement in fishing primarily for consumptive purposes (where these include reciprocal sharing, giving, and other non-market outcomes), and (c) nature and extent of involvement in fishing for mixed commercial & non-commercial purposes
Project Outcomes (continued)

(3) Description of the contextual history of relevant data collection programs, including discussion of problems associated with reliability, validity, and geographic and temporal comparability of relevant data;

(4) Cartographic depiction of the distribution of the various fleets and activities in a Geographic Information System;

(5) Recommendations for ways in which data and data collection programs and procedures may be developed or improved to enhance monitoring and assessment of small-scale and traditional fisheries across the region.
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