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Strategic Plan for the  
Conservation and Management  
of Marine Resources in the  
Pacific Islands Region

**S U M M A R Y**



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# Strategic Plan for the Conservation and Management of Marine Resources in the Pacific Islands Region

## S U M M A R Y



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## Introduction



IN APRIL 2003, the National Marine Fisheries Service (NMFS, also known as NOAA Fisheries) transferred the responsibility for managing the marine resources in federal waters surrounding the US Pacific Islands from NOAA Fisheries' Southwest Region based in California to the newly defined Pacific Islands Region

(Region) based in Hawaii. The Pacific Islands Region was established with the explicit intent of employing regional expertise to provide improved customer service and stewardship of living marine resources within the expansive geographic region of the Western Pacific. The Region's area of jurisdiction includes both domestic (Exclusive Economic Zone) and international waters (see map) throughout the central and western Pacific ocean.

The work of the Region is conducted by three federal offices—the National Marine Fisheries Service's Pacific Islands Fisheries Science Center (PIFSC) and Pacific Islands Regional Office (PIRO), and the Western Pacific Regional Fishery Management Council (Council).

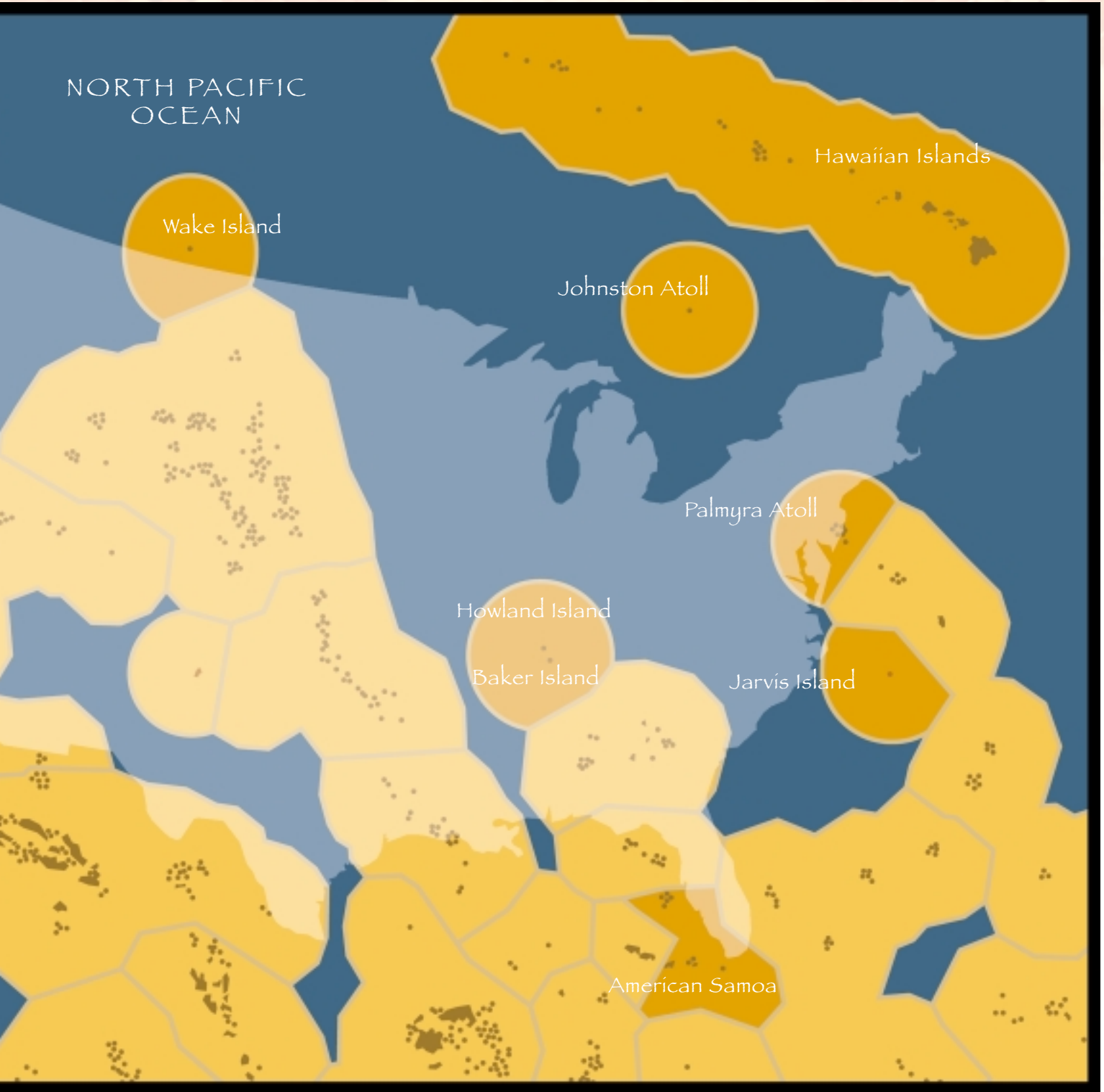
In the spring of 2003, the directors, administrator and staff members from these offices participated in three workshops to begin developing a Strategic Plan for the new Region. The purpose of this plan is to facilitate and expand the research, conservation, management and administration of the region's marine resources.

Based on a common agreement that outside stakeholder input and feedback should be included in the development of the Strategic Plan, an environmental consulting firm that specializes in strategic planning and collaborative decision-making conducted confidential interviews with 30 stakeholders in the region. These stakeholders represented a cross-section of environmental groups, natural resource management and enforcement agencies at the state, territorial, federal and international levels as well as fishing interests, including both commercial and recreational fishermen located throughout the region. The outcomes of both the staff workshops and the stakeholder interviews have been carefully considered in the formulation of the Strategic Plan.

The Strategic Plan provides an integrated overview of a science-based approach to living marine resource conservation and management in the Pacific Islands Region. The goals and objectives outlined here also generally reflect NOAA Fisheries' national goals, with appropriate acknowledgments of the unique cultural, historical, geographical and ecological features that characterize the people and living marine resources of this region.



## 200 Mile Exclusive Economic Zones (EEZ) of the Pacific Islands



## Introduction (continued)

This plan reflects the input of many people with many perspectives. It is a living document, and all readers are invited to provide ongoing input now and over the years. It articulates a vision of research and actions needed to conserve and manage the region's marine resources, as well as the human and financial



longline floats



requirements to accomplish those activities. It will be reviewed annually and amended as needed to meet the changing needs of the Pacific Islands Region.

This summary was developed to provide stakeholders and other interested parties with a timely synopsis of the contents of the Strategic Plan and to solicit

their input. The key components of this summary are a) a discussion of ten critical issues facing the Region along with a brief overview of how the three offices plan to address them, b) a budget overview, c) a conclusion and d) information on how to provide comments to be considered in the

Plan or obtain a copy of the full Strategic Plan. That document will include a detailed discussion of the Region's planned response to each critical issue described here, a series of "operating protocols" developed to coordinate operations among the three offices, and a further discussion of the human and fiscal requirements to address the critical issues facing the Region.

Bounded by the Hawaiian Archipelago to the north, American Samoa and US possessions to the south, and the Marianas Archipelago to the west, the new Pacific Islands Region is the largest in the US. The total area under the Region's jurisdiction is more than 1.5 million square nautical miles, equal to all EEZ waters around the entire continental US, including Alaska. This expansive area crosses both the Pacific dateline and the equator. Fisheries within this area range from nearshore artisanal fisheries to large-scale commercial fisheries in international waters. Catches are marketed worldwide as both high-quality fresh fish, and as canned, dried and frozen products.

Unlike most other regions, the Pacific Islands Region has little coastal shelf area and so the greatest volume of fisheries production comes from highly migratory pelagic fishes such as tunas and billfishes. Demersal fisheries are also of significant economic importance, especially in Hawaii



Council Members Frank McCoy (L) and Aitofele Sunia at the 117th Council Meeting, Commonwealth of the Northern Mariana Islands



Asian immigrants, who share with the islands' original Polynesian and Micronesian societies, a long fishing tradition and a strong dependence on fish for their protein needs. Annual fish consumption throughout the

sportsfishing is common in Hawaii but less prevalent in American Samoa, Guam and the Northern Mariana Islands where many consider such activities to be wasteful and unnecessarily harmful to marine organisms.

This plan represents an inaugural outlook for the new Pacific Islands Region. We are fully committed to meeting the public trust that defines our mission,

where small but productive fisheries for large snappers target the deep outer reef slopes, banks and seamounts. These species are of special value as large red fish are traditional Asian components of cultural celebrations. An economically important trap fishery targeting lobsters on reefs and banks in the Northwestern Hawaiian Islands (NWHI) is now inactive pending research results on best management practices. The balance of fishery production comes from nearshore fishing conducted in and around reefs, deep water precious coral harvests, and from small pelagic fisheries that occur in coastal waters.

The Pacific Islands Region is politically and culturally diverse, comprising one state, two territories, a commonwealth and eight small islands and atolls under US control. Fish and fishing have unique socio-cultural significance for the indigenous peoples of this Region. Today, the Region's population includes many East and Southeast

Region (about 90 pounds per person in Hawaii) is at least twice the national average, and fishery participation levels are high. The most recent data indicate that a quarter of Hawaii's population participates in some form of fishing at least once per year. In addition, a significant number of the 6.6 million tourists who visit Hawaii each year participate in sportsfishing during their stay. Catch and release recreational and



both in terms of the technical requirements for the science-based conservation and management of the area's marine resources, but also in terms of being responsive to the public. Our vision is one of healthy

marine ecosystems that support an abundant, diverse, and vibrant array of living resources and encourage a broad range of environmentally responsible human uses. This outlook informs the following assessment of where we are now, and what structures and activities we need to implement in order to get where we want to be.



Latte Stone structure of coral limestone from early Chamorro culture

# 1. Management Based on Ecosystem Principles

IN RECOGNITION OF the essential linkages between resources that comprise an ecosystem, fishery management is evolving from a focus on individual species to the consideration and management of all organisms within an ecosystem as an integrated unit. The Pacific Islands Region (Region) has been at the forefront of this movement with PIRO's implementation of the Council's Coral Reef Ecosystems Fishery Management Plan (FMP), the first ecosystem-based FMP in the United States. In addition, the Center's Coral Reef Ecosystem Research Division is conducting extensive baseline surveys of region's coral reef ecosystems and the PIRO integration of by-catch and protected species interactions – with our international tuna management responsibilities.



Ecosystem-based management provides regional resource managers, scientists and stakeholders with an integrated approach to resource management and conservation and is thus consistent with the NOAA Fisheries Strategic Plan. This approach ensures that managed species are provided with needed habitat and that conservation needs are addressed holistically. The success of this approach will be measured by the increased number of fisheries or areas that are managed in ways that prevent overfishing (on an ecosystem basis), habitat degradation, or adverse impacts to protected species.

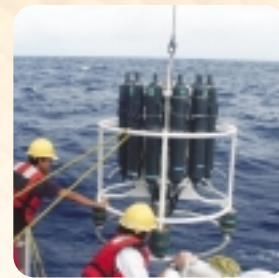
The Region's three offices are currently engaged in a variety of activities to support ecosystem-based management, and PIFSC has taken a leading role in research on ecosystem dynamics, including both insular and pelagic environments

of the central Pacific. One insular area of particular interest is the Northwestern Hawaiian Islands (NWHI), a chain of virtually uninhabited islands and atolls stretching more than one thousand miles to the north of the Main Hawaiian Islands. The NWHI comprise the majority of the coral reefs found in US federal waters and are home to a variety of endangered, threatened and protected species, including

the Hawaiian monk seal, the Hawaiian green sea turtle and 18 species of tropical seabirds including Laysan and black-footed albatrosses. Current NWHI activities include coral reef restoration and relocation; removal of marine debris that harm living coral reefs and protected species; emergency responses to mitigate oil spills by grounded vessels; and a variety of research and monitoring activities (e.g., stock assessment and critical habitat research, coral reef assessments, coral bleaching and oceanographic monitoring, and studies on Hawaiian monk seal ecology and foraging).

A second ecosystem of interest is the broad central Pacific pelagic ecosystem, which includes many important highly migratory species (e.g., tunas, billfishes, turtles, cetaceans and other marine mammals). Management and research initiatives underway for this area include pursuing international accords, reducing unwanted bycatch, assessing the status of protected species, and monitoring the effects of the region's domestic longline fleets.

In the coming years, the Region will further incorporate ecosystem-based management by enhancing its ability to



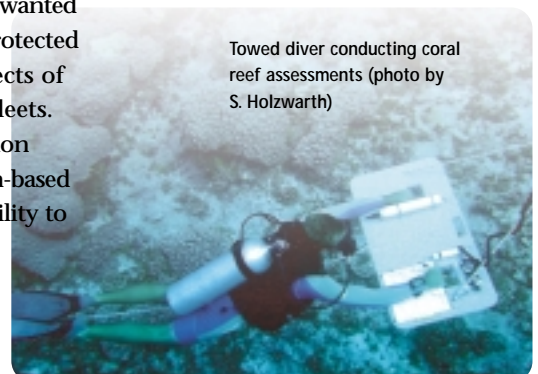
Retrieving the CTD  
(Photo by M. Seki)

monitor, research and manage regional marine eco-

systems. The continued development of effective tools for the collection and analysis of relevant data will allow scientists, managers and stakeholders to better understand the impacts of fisheries and management changes and thus ensure that the region's fisheries remain sustainable, and that its marine resources are appropriately protected and conserved.

Planned research, conservation and management activities to support this objective include:

- Consider the implementation of archipelagic ecosystem management plans for the region's demersal species
- Develop and implement appropriate management measures for the management of the multi-species and multi-gear fisheries active within each ecosystem
- Enhance the control and monitoring of alien species to protect ecosystems
- Continue and increase research, monitoring, data gathering and outreach efforts to provide additional information to fishery scientists, managers and stakeholders
- Continue the development and implementation of initiatives to reduce and mitigate bycatch, including finalization of a new draft regional bycatch plan



Towed diver conducting coral reef assessments (photo by S. Holzwarth)



## 2. Recovery and Management of Protected Species

A SECOND CRITICAL ISSUE is the recovery and conservation of protected marine species such that they remain healthy and functioning elements of their ecosystems. Protected species known to be present in the region include: Hawaiian monk seals (*Monachus schauinslandi*), humpback whales (*Megaptera novaeangliae*), sperm whales (*Physeter catadon*), pilot whales



consultations on proposed actions under the Endangered Species Act, the issuance of biological opinions and take permits for the region's fisheries; enforcement of CITES; assessment and management of incidental takes and harassment of marine mammals under the Marine Mammal Protection Act; production of public service announcements; and coordination with the US Coast Guard, the Northwestern Hawaiian Islands (NWHI) Reserve, the Hawaiian Islands Humpback Whale National

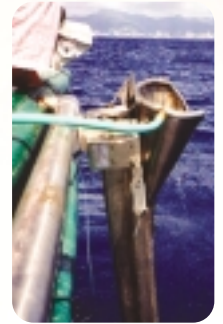
Marine Sanctuary, the U.S. Fish and Wildlife Service, State, Territorial, local governments and international management organizations to ensure that management is consistent and appropriate. Current efforts to recover protected species include responding to strandings, entanglements and oil spills; updating the Hawaiian monk seal recovery plan; outreach to ocean users about ways to minimize interactions with protected species, and implementation of regulations to reduce and mitigate fishery interactions including requiring attendance at annual protected species workshops, and the implementation of a suite of conservation measures to protect sea turtles at their nesting beaches and in coastal waters. Current research activities include the use of critter cams on Hawaiian monk seals, fatty acid and

prey competition studies; data collection for post-hooking mortality research and DNA analysis of sea turtles; studies on the fibropapilloma tumor that has infected Hawaii's green

sea turtles; research on sea turtle ecology and migratory patterns; and cetacean tissue sample collection for DNA analysis.

Further plans for the recovery, management and conservation of protected species include:

- Develop, update and implement Recovery Plans for all listed species
- Expand protected species management and response coordination with state and federal agencies and other stakeholders.
- Increase education and Outreach through partnerships, newsletters, workshops, websites, public service announcements and other means
- Apply increased resources to the monitoring, assessment, and management of monk seals in the Main Hawaiian Islands.
- Expand research and conservation activities for sea turtles to include terrestrial and nearshore life phases as well as pelagic phases.
- Enhance and apply Regional expertise and authority to the assessment and management of sea turtles, cetaceans and other marine mammals, and protected species found in the region.



Underwater setting chute

(*Globicephala melas*), false killer whales (*Pseudorca crassidens*), and other whales; dolphins; five species of sea turtles (loggerheads (*Caretta caretta*), leatherbacks (*Dermochelys coriacea*), green turtles (*Chelonia mydas*); hawksbills (*Eretmochelys imbricata*) and olive ridleys (*Lepidochelys olivacea*)) and several species of seabirds.

This objective is consistent with the NOAA's Strategic Plan to recover protected species and achievements in this area will be measured through the increased number of these protected species populations that are in a stable condition or exhibit an upward trend.

Current efforts to manage these species include conducting



Blue-dyed bait is less visible to seabirds



### 3. Successful Conservation and Management of Fisheries

THE FISHERIES UNDER THE Region’s jurisdiction range from small-scale artisanal fisheries within US waters to larger-scale commercial fisheries in international waters. In general these are mixed target fisheries, with primary species including pelagics (tunas, swordfish, etc.), bottomfish (snappers, groupers and jacks), reef fish, crustaceans (primarily spiny and slipper lobster) and precious corals. In total, about 40 million pounds of fish are landed annually by commercial fishermen in Hawaii, American Samoa, Guam and the Northern Mariana Islands. To ensure the long-term sustainability of these fisheries and promote healthy marine ecosystems that support them, the Region is focusing its efforts on science-based decisions that lead to appropriate and cost-effective management measures. What is needed to facilitate this objective is an institutional structure that is founded on high quality science and backed with sound funding support; transparent and open to public participation; able to act in a timely manner to address new issues; and inclusive of all stakeholder interests from the local to the international level.



Black coral

to facilitate this objective is an institutional structure that is founded on high quality science and backed with sound funding support; transparent and open to public participation; able to act in a timely manner to address new issues; and inclusive of all stakeholder interests from the local to the international level.

This goal is consistent with the NOAA Fisheries Strategic Plan in that it will provide stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems. The success of this goal can be measured in the increased number fisheries and related ecosystems managed at healthy and sustainable levels.

The Region conducts ongoing research and analysis of marine

resources and ecosystems, monitors, develops, implements, and enforces fishery management regimes, issues a variety of associated domestic, high seas and transshipping permits; and works with state, territorial and federal partners and non-governmental organizations to ensure effective and transparent management. Areas of current concern include the implementation of measures to reduce and mitigate bycatch, appropriate methodologies to assess regional fisheries under newly developed overfishing criteria, the need for new and expanded observer programs, and outreach to fishery participants on fishery regulations and guidelines.

Pending fisheries conservation and management needs in the region are considerable. Activities planned to address them include:

- Increase research on stock assessments, aquaculture, mariculture, deep sea ecology, fishing communities, habitat and bycatch.
- Implement a limited entry program for America Samoa’s longline fishery (including an observer program)
- Consider the use of additional marine protected areas as a management tool
- Implement observer programs for additional fisheries as necessary
- Implement a permitting system to allow Native Hawaiian communities to obtain permits for Hawaii’s Mau Zone bottomfish fishery under the Community Development Program

- Assist the State of Hawaii to restore main Hawaiian Islands bottomfish stocks
- Increase the collection and use of socio-economic data for management decisions
- Increase outreach especially in American Samoa, Guam and the Northern Mariana Islands
- Provide information on reducing fishery-related marine debris to international fisheries
- Develop and refine fishery regulations proposed for the NWHI sanctuary
- Implement programs to monitor recreational fisheries, particularly those in the main Hawaiian Islands



L-R: Kitty Simonds, Executive Director, Western Pacific Fishery Council; Donald Evans, Secretary of Commerce; VADM Conrad Lautenbacher, Undersecretary of Commerce for Oceans and Atmosphere and NOAA Administrator; Paul Bartram, Fishmonger

## 4. International Management Through International Cooperation

US FLEETS SHARE the high seas with fishing vessels from many other nations. Clearly successful management of these fisheries requires international cooperation and collaboration on monitoring, research and policy decisions.

The Region's strategy of working cooperatively with other fishing (and non-fishing) nations is consistent with the NOAA Fisheries Strategic Plan that aims to support and promote international policies and interest in ecosystem-based management, climate change, earth observation and weather forecasting. Success in this area will be measured by the collaborative development and use of Pacific-wide research and databases, as well as in continued progress towards the implementation of projects and international accords to appropriately manage shared marine resources.

Efforts currently underway include providing technical support for the recently established Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean as well as the South Pacific Tuna Treaty. Ongoing research includes participating in stock

assessments conducted by the Standing Committee on Tuna and Billfish and various collaborative projects with foreign partners. Issues concerning data collection, consolidation, confidentiality and distribution are being addressed through participation in the Interim Scientific Committee on Tuna and Tuna-like Species in the North Pacific (ISC) and several international working groups, forums and commissions. Similar work concerning sea turtles has led to the development of a Pacific-wide sea turtle tagging database that is now used as an information clearing house by a variety of researchers. Other projects include understanding climatic change in relation to stock fluctuations, support of foreign observer programs, the export of protected species workshops for longline vessel operators, and the implementation of conservation programs to monitor and protect sea turtles at their nesting beaches and coastal foraging areas.

As the new Region develops, responsibilities for other international fisheries in the central and western Pacific will grow.



Among the Region's planned activities to address international fishery issues are the following:

- Lead the US representation in Preparatory Conferences for the Establishment of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific
- Increase participation in international scientific forums and working groups that are becoming central to fisheries management decision-making
- Increase collaborative fishery monitoring and data reporting, including the use of observers, port samplers, logbooks, vessel registries and vessel monitoring systems where appropriate
- Increase the frequency of international stock assessments for key species
- Increase international outreach and collaboration concerning the reduction and mitigation of bycatch, especially bycatch of protected species
- Expand research on the impacts of natural and anthropogenic impacts on the pelagic ecosystem
- Lead U.S. representation in Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America (South Pacific Tuna Treaty)

## 5. Effective Data Gathering and Management

EFFECTIVE DATA COLLECTION and management are critical ingredients in the successful conservation and management of marine resources. As management issues become more complex, the Region's data programs must ensure that decision makers and resource users have timely access to comprehensive and high quality information.

This is consistent with NOAA Strategic Plan's goal to develop and implement sound policies, protocols, and program activities for management



Fisherman interviewed for Hawaii Marine Recreational Fisheries Survey

of data and information resources to maximize the quality and accessibility of data in support of ecosystem-based fisheries management and conservation.

Regional data collection currently encompasses a wide range of activities including fishery monitoring through both observers and logbooks, surveys of

fishery participants and marine resource assessment programs. Current data management activities may be grouped in four general strategic areas. *Data Resource Development* includes activities related to defining and meeting requirements for data management hardware and software, system administration, and data modeling, integration, security, integrity, and standards. *Data Collection Management* includes activities related to design of data collection forms, development of data collection and processing manuals,

protocols for data collection, data entry, quality control, and validation, and dataset documentation and metadata. *Data Maintenance* includes activities related to defining requirements for data storage, processes for data auditing, error detection, and change control, procedures for documenting edit histories, and applications testing. *Data Dissemination* includes activities related to the analysis and distribution of data and information products, data sharing, data access

and user support.

Achievement of the Region's data objectives will require careful strategic and operational planning, effective coordination and training, and adequate human and fiscal resources.

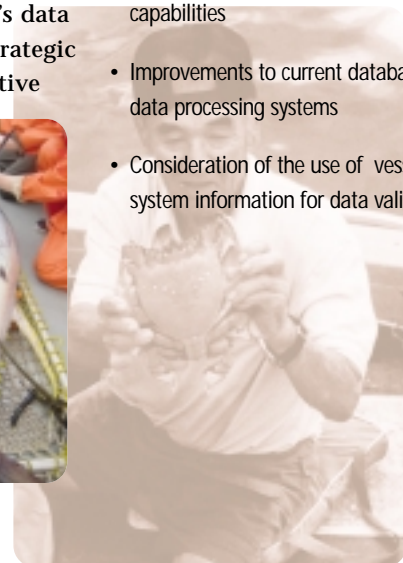
Attached pop-off archival tag on yellowfin tuna (Photo by D. Curran)



United Fishing Agency's fish auction in Honolulu

The Region's future data collection and management needs include:

- Improved coordination of data collection, management and accessibility to enhance data sharing
- Cost-effective improvements to the accuracy and precision of collected data
- Provision and use of improved metadata so that all users clearly understand the source, content and limitations of available data
- Development of automated data capture technologies including video observers
- Improved data reporting and analysis capabilities
- Improvements to current databases and data processing systems
- Consideration of the use of vessel monitoring system information for data validation



## 6. Understand and Consider Social, Economic and Cultural Factors

ALTHOUGH MOST PEOPLE in the US Pacific islands no longer need to fish to obtain food, fishing is still an extremely popular pastime and an important cultural link for the majority of the population. A critical component of the successful conservation and management of regional marine resources is an awareness of the social, cultural and economic characteristics and values of fishery participants, communities and other stakeholders. This requires a high level of interaction with, and understanding of, these groups and their attributes. Unlike other federal regions, the Pacific Islands Region also has a special mandate under the Magnuson and Stevens Fishery Conservation and Management Act to promote the sustained participation of indigenous communities. The Western Pacific Community Development Program provides a mechanism for indigenous communities to have access to fisheries under the Region's jurisdiction, and the Western Pacific Community Demonstration Project Program provides grants to indigenous communities to promote and foster their involvement in and stewardship of fisheries. These projects require an in-depth understanding of local conditions and values.

The NOAA Fisheries Strategic Plan envisions the American people enjoying the riches and benefits of healthy and diverse marine ecosystems. This is reflected in that plan's goal is to protect, restore and manage the use of coastal and ocean resources through ecosystem-



Photo: Bishop Museum

based management. Performance towards this goal will be measured by the increased number of impacted human communities for which we have sufficient data to analyze and understand the economic and social benefits, costs and impacts of management decisions. Success will also be measured by the increased number of ecosystems for which the linkages between human activities and ecological functions are well understood. Finally, success will be measured by the number of Community Development Programs and Demonstration Projects that are successfully completed.

The Region's three offices currently collect and present socio-economic information on fishery participants and related industries to decision makers so they understand the likely impacts of various management regimes and can incorporate this information into their deliberations. Current research projects include the construction of a sociological baseline of the Hawaii longline fishery; profiles of fishing communities and fishing ports; a compilation and analysis of historical fishing club and tournament records, studies concerning fishing capacity in Hawaii's commercial fisheries; an economic evaluation of fishing tournaments; and cost-earning studies for Hawaii fisheries.



Photo: Bishop Museum

To meet future information needs, the Region plans the following activities:

- Undertake a series of projects in Guam, American Samoa and the Northern Mariana Islands concerning fishery resource dependence, the cultural role of fish in formal and informal society, traditional fishery management



approaches and how they relate to resource management today, traditional fish names, and the uses and values of reefs

- Update cost-earning studies of Hawaii's small boat fisheries
- Examine the economic values and policy tradeoffs related to marine protected areas, as well as those related to the mitigation of fishery interactions with protected species
- Increase analysis and awareness of social impacts of fishery regulations on affected communities
- Increase interaction with indigenous communities to enhance fishery participation
- Evaluate the value and impacts of recreational fisheries.

Photo: Bishop Museum

## 7. Increase Education, Outreach and Communication Concerning Good Stewardship

THE IMPORTANCE OF EDUCATION, outreach and communication to successfully manage public resources is well known. The Region has established a multi-lingual environmental literacy and outreach program to provide educational information on the value of our marine resources and ways in which we can conserve and protect them.

This is consistent with NOAA Fisheries Strategic Plan which seeks to increase awareness of environmental stewardship practices and behaviors which all citizens can practice as individual stewards of the



nation's living marine resources. Efforts toward this goal should result in an increased percentage of community members that are aware of, and acting appropriately to minimize their impacts on marine resources and ecosystems.

The Region's work in this arena includes outreach and education targeting fishermen, the general public and international stakeholders. Current activities to provide information to fishery participants include annual workshop, informational meetings and hearings, participation in festivals, shows, tournaments and exhibits, and the

production of a wide range of guides, brochures, web pages, TV shows and public service announcements, videos, newsletters, placards, and news and magazine articles. Activities for the general public include marine mammal education for public school students, guest lecturing at local schools and colleges, production of ecotourism

guidelines, coordination and education of volunteers, and the production of signage, posters and briefings to promote safe practices around sea turtles, monk seals and whales. Most of this work has been undertaken in Hawaii, but activities are now increasingly taking place

in American Samoa, Guam and the Northern Mariana Islands as well.

International projects include outreach efforts in Papua New Guinea on methods to reduce and mitigate sea turtle bycatch and in the Marshall Islands to train observers in sea turtle handling and release techniques. A series of international conferences have brought together researchers, managers, policy makers and industry members to work together on issues ranging from reducing marine debris to mitigating interactions with seabirds and other protected species.



To address future needs, the following activities are planned:

- Develop targeted educational regional displays and exhibits for community events
- Develop wildlife watching guidelines, public service announcements, school curricula and training sessions for both domestic and international educators
- Conduct protected species workshops and other outreach activities in American Samoa, Guam, Hawaii and the Northern Mariana Islands
- Continue international workshops and projects with the Department of State to promote and conduct education across all fisheries, regions and nations
- Provide information and materials on the reduction and mitigation of bycatch to both domestic and foreign fishing fleets



## 8. Use Effective and Appropriate Enforcement Strategies

EFFECTIVE AND APPROPRIATE enforcement is required to ensure successful conservation and management of marine resources. The Region supports the continuing development of new strategies, methods and technologies to implement appropriate and cost-effective enforcement methods that achieve compliance as well as improving safety at sea. Particularly important is the development of strategies that promote voluntary compliance with management measures and controls.

This vision is consistent with the NOAA Fisheries Strategic Plan goal to modernize enforcement by substantially increasing investigative resources and supporting infrastructure; implementing new information management technologies; modernizing and expanding electronic vessel monitoring systems; and institutionalizing funding to support State enforcement of Federal fisheries regulations.



The Pacific Islands Region was the first in the nation to implement a vessel monitoring system (VMS) in US waters. This automated monitoring system is used to enforce exclusion zones for the Hawaii longline fleet by providing real-

time vessel positions to enforcement authorities. Standardized protocols have been developed to ensure and improve VMS data security and confidentiality and VMS requirements for foreign vessels

using US waters or visiting ports in the region are being explored. On a broader



level, interagency cooperation and participation in information and technology exchanges with other nations and regional organizations are being used to enhance and leverage individual efforts. Domestically, similar coordination is being achieved through the development of cooperative and joint enforcement agreements between NOAA Enforcement, the US Coast Guard and local island governments. In addition, on a day to day basis enforcement agencies are included in the development of new management measures and action strategies to ensure that these measures are cost-effective and enforceable.

Among the Region's planned activities are:

- Investigate the use of VMS in other domestic fisheries subject to area closures
- Develop and implement new systems to improve real time catch reporting, especially for fisheries subject to annual harvest guidelines or quotas
- Continue to support local enforcement of federal regulations
- Work with local agencies, non-governmental organizations and stakeholders to appropriately manage non-fishery interactions with marine mammals.
- Increase federal enforcement presence in American Samoa, Guam and the Northern Mariana Islands
- Increase enforcement capabilities to reduce foreign poaching in EEZ waters
- Continue to work with fishery participants to implement measures and strategies that promote voluntary compliance
- Clarify the role of federal observers concerning enforcement activities

## 9. Maintain compliance with the National Environmental Policy Act

THE NATIONAL ENVIRONMENTAL Policy Act (NEPA) has become an increasingly important part of successful resource management. The timely preparation and consideration of appropriate analytical documents provides both stakeholders and managers with a thorough understanding of the current science and likely impacts. As management needs become increasingly complex, and the range of actions to which NEPA requirements are applied has multiplied, these analyses have correspondingly expanded to the point that maintaining timely NEPA compliance has become a critical issue facing the Region.

Maintaining NEPA compliance is consistent with the NOAA Fisheries Strategic Plan which seeks to protect, restore and manage the use of coastal and ocean resources through ecosystem-based management. Success regarding NEPA compliance will be measured by the number of actions subject to NEPA review that are implemented on a timely basis.

There is presently a Regional NEPA Coordinator located at PIRO's office and a NEPA Specialist on the Council staff. NEPA documents for fishery management actions are normally

prepared as joint documents between the three offices, with much of the writing often contracted out. NEPA compliance is complicated by the fact that the Region includes four discrete island areas, with research and hearings often required in each one.

Planned activities to maintain compliance with increasing NEPA requirements include:

- Continue training of all appropriate staff to understand current NEPA requirements
- Increase funding for dedicated NEPA staff who can both coordinate and write NEPA analyses
- Conduct baseline surveys of fishery participants and communities in American Samoa, Guam, and the Northern Mariana Islands
- Create and maintain easily accessible databases with baseline and current information on environmental and resource conditions, fishery operations, fishery participants, their communities and cultural needs and practices and other relevant factors for use in NEPA analysis



Pago Pago Harbor, American Samoa



Tourists preparing to scuba dive in Piti Reserve, Guam



## 10. Increase and Coordinate Regional Administration, Information and Technical Services

AS A NEWLY FORMED REGION, the Pacific Islands Region is building its administrative and technical resources to effectively carry out its increased responsibilities. There is a critical need for increased human and fiscal resources to coordinate and carry out the personnel, budget, contracting, training, travel, communications, purchasing, facility and security maintenance, publishing, and information and technical services associated with the independence of becoming a new Region.

The NOAA Fisheries Strategic Plan calls for organizational excellence in leadership, human capital, facilities, information technology and administrative products and services. This is consistent with the Region's goal of meeting its needs in a timely and cost-effective manner.

Activities necessary for meeting this goal include:

- Obtain sufficient permanent funding to ensure that necessary administrative, communications, and information and technology staff and resources are available
- Provide appropriate staff training and career advancement opportunities regarding hanging needs and requirements, ensure that staff are kept informed and engaged in the development of the Region
- Support staff development through in-house and offsite training, mentoring programs, rotational assignments, and transitioning of contract and other non-NMFS staff into permanent positions
- Continue development of plans to relocate PIFSC and potentially PIRO to a new NOAA building
- Institute a management training program for all managers
- Develop orientation programs for all new hires
- Increase intra- and inter-office staff communication
- Consider new organizational structures to address issues relevant to staff morale, and to develop a shared vision for pursuing soft money
- Implement new technologies to ease administrative burdens such as computerized time sheets, electronic calendars and expanded use of intranet and websites
- Incorporate desktop publishing strategies where appropriate
- Expand and coordinate library facilities and materials
- Annually convene an inter-office Regional strategic planning meeting to review progress and revise plans



NOAA ship Oscar Elton Sette at Maug Island, CNMI (photo by R. Schroeder)



NMFS' PIFSC includes a staff of more than 160, most residing at 2570 Dole Street, Honolulu, HI 96822, near the University of Hawaii (UH Manoa) campus

## Resource Needs



IN DEVELOPING THE REGION'S strategic plan, key program staff from each office identified human and fiscal resources needed to support the new Region. The following table begins by summarizing existing resources, and then goes on to present future resource needs. It does not, however include specific timelines or schedules to meet these needs.

Instead, staff were asked to project the resource needs of a fully functional Region that is focused on addressing the critical issues discussed here.

As used here, labor includes the costs of all NOAA Fisheries, Council, the NOAA/University of Hawaii Joint Institute for Marine and Atmospheric Research (JIMAR) and other long-term contractual-type staff members engaged in research, management and administrative operations. It does not include temporary and contract employees,



(including contract observers) which need to be funded permanently. Dollar amounts associated with staff level projections include non-labor program operational costs such as funds for travel, equipment, and other items.

Projected labor costs include associated overhead and are based on standardized multipliers developed for each office that

include base salary, benefits, cost of living allowances, leave surcharges, NOAA overhead, training, and basic office equipment and supplies. Each office applied its multiplier (\$100K for PIFSC; \$150K for PIR; and \$75K for the Council) to the necessary number of staff positions for each critical issue to arrive at its projected labor cost.

The Science Center receives most of its operational funding through NOAA Fisheries from Congressional

appropriations. For 2004, Center administrative and management costs are covered by a combination of NOAA Fisheries' base salary and expense funds and an appropriation by Congress to facilitate the startup of the new Pacific Islands Region. Various appropriations provide the project funds that support the bulk of the Center's research related to fisheries science and monitoring and the recovery of protected resources. The Science Center also receives considerable funding from sources outside of NOAA Fisheries through the competitive proposal process including resources that support all Coral Reef ecosystem research and for studies on pelagic highly migratory species through the Pelagic Fisheries Research Program (PFRP).

The Council receives base operating funds annually from Congressional appropriations which are mainly through NOAA administrative cooperative agreement. In addition to this, funds are also appropriated by Congress or provided by NOAA to support work on pressing issues. In 2003, the Council managed funds received through eight awards covering the topics of coral reef, NEPA, sea turtle research, Community Demonstration Projects, seabird mitigation, environmental impact statement (EIS), fisheries data support and administration.

## Pacific Islands Region's Current Resources and Future Needs (In thousands of dollars US)

Pacific Islands Region's Current Resources and Future Needs	Current 2003 Resources								Total Future Needs	
	PIFSC		PIRO		Council		Total		Total	
	Staff	\$	Staff	\$	Staff	\$	Staff	\$	Staff	\$
Protected Species Recovery & Management	14.6	3137	3	1941	1.5	560.5	19.1	5638.5	37.6	10242
Education, Outreach, & Communication	2.4	32.1	1.1	193	1.85	160	5.35	385.1	10.49	936
Ecosystem-based Management	44.85	4068.8	4	299	0.5	332.7	49.35	4700.5	59.41	8361
Social/Economic/Community Program Area	6.35	408.6	1	149	3.15	122.05	10.5	679.65	21.05	1247
Data Management & Gathering	13.9	110.16	0	1	0.3	20	14.2	131.16	21.3	570
International Issues	2	78.28	1	96	0.5	33	3.5	207.28	26.71	2703
Fisheries Conservation & Management	21.3	566.4	15.3	2009.4	3.9	628	40.5	3203.8	60.34	7396
Admin, Information, & Technical Services	26.15	1042.25	6	120	2.65	578.5	34.8	1740.75	57.95	4874.5
NEPA	1.85	300	1	7	3.85	90	6.7	397	11	2445
Enforcement	0	0	0.45	0	0.2	14	0.65	14	1.55	70
<b>Staff and Non-Labor Totals</b>	<b>133.40</b>	<b>9,743.59</b>	<b>32.85</b>	<b>4,815.40</b>	<b>18.4</b>	<b>2,538.75</b>	<b>184.65</b>	<b>17,097.74</b>	<b>307.4</b>	<b>38,844.5</b>
	Staff * 100K		Staff * 150K		Staff * 75K					
Labor Costs in \$US	13340		5527.5		1380		20247.5		34174.5	
<b>Cost Grand Totals</b>	<b>23,083.59</b>		<b>10,342.90</b>		<b>3,918.75</b>		<b>37,345.24</b>		<b>73,019.00</b>	

## Conclusion

THIS SUMMARY PROVIDES an overview of critical issues facing the new Region and activities and resources needed to address these issues. Establishment of the Pacific Islands Region as an independent entity means not only additional authority but also additional responsibilities. Enhanced coordination and collaboration between the Council, PIRO, and PIFSC as well as with other agencies and stakeholders will be an essential component to meeting these responsibilities.

The three offices that comprise the Pacific Islands Region are fully committed to meeting the public trust that defines their mission, both in terms of the conservation management and science activities of their organizations and in terms of being responsive to the public. Special interest has been shown in increasing outreach to other agencies and stakeholders such that their interests and special expertise are fully integrated into the management process. Of particular concern is the inclusion of stakeholders located in American Samoa, Guam and the Northern Mariana Islands. Placing additional staff in these areas would facilitate improved communication with constituents and lead to increased participation in the management process.

Across all functions, the Region intends to train, recruit, and hire local residents to the extent possible rather than relying on the importation of staff from other areas. A related concern is ensuring that qualified scientists and managers are in place to carry out necessary analyses and decision making processes that formerly took place in Long Beach, LaJolla or at NMFS' headquarters in Silver Springs Maryland.

Staff at all three offices participated in a lengthy series of workshops, meetings, and writing tasks to prepare this summary and the complete Strategic Plan on which it is based. They have expressed enthusiasm for this collaborative approach and support its continuation as providing a platform for ongoing improvements to the conservation and management of marine resources in the Pacific Islands Region.



L-R: Charles Karnella and Samuel Pooley (PIRO); Kitty Simonds (Council); George Antonelis (PIFSC) at the 1st strategic planning meeting in April 2003



## Call for Comments

THIS STRATEGIC PLAN Summary for the NOAA Fisheries Pacific Islands Region is a living document. Each year the plan will be reviewed during the winter, and the comments of stakeholders and other interested parties will be considered.

Public comments on this inaugural issue of the Strategic Plan Summary will be sought during the 122nd Council Meeting, to be held in Honolulu on March 22-25, 2004 at the Hawaii Convention Center. For more details on this meeting, please visit the Council's website at [wpcouncil.org](http://wpcouncil.org); phone the Council at (808) 522-8220; or email [nmfs.piro.statplan@noaa.gov](mailto:nmfs.piro.statplan@noaa.gov).

Comments will also be sought on this Strategic Plan Summary from a variety of other stakeholders. Written comments can also be submitted by postal mail or by fax to the following:

Pacific Islands Fisheries  
Science Center  
2570 Dole Street  
Honolulu, HI 96822  
Fax: (808) 983-2902

Pacific Island Regional Office  
1601 Kapiolani Blvd.,  
Suite #1110  
Honolulu, HI 96814  
Fax: (808) 973-2941

Western Pacific Regional  
Fishery Management Council  
1164 Bishop Street, Suite 1400  
Honolulu, Hawaii 96813  
Fax: (808) 522-8226

Comments must be received by April 2, 2004.

Email comments can be sent to [info.wpcouncil@noaa.gov](mailto:info.wpcouncil@noaa.gov) and [nmfs.piro.statplan@noaa.gov](mailto:nmfs.piro.statplan@noaa.gov).

For a complete copy of the Strategic Plan Summary for the NOAA Fisheries Pacific Islands Region, please visit the Council's website at [wpcouncil.org](http://wpcouncil.org) or contact the Council by email at [info.wpcouncil@noaa.gov](mailto:info.wpcouncil@noaa.gov), phone (808) 522-8220 or send a fax to (808) 522-8226.

Your comments will help the Pacific Islands Region to improve the Strategic Plan and help conserve our living marine resources. We look forward to and appreciate your comments.







