

U.S. Commission on Ocean Policy

Public Hearing, Anchorage, Alaska 8/21/02

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Recommendations for U.S. Commission on Ocean Policy

1. Establish **Pacific Environment Council (PEC)** - authorize and finance U.S. leadership and participation in the establishment of a new, intergovernmental institution for ocean governance across the Pacific basin, composed the Environment and Maritime related Ministries of all 21 member nations/economies of Asia Pacific Economic Forum (APEC). The **PEC** should be a standing body, either as adjunct to APEC or separate organization, meet annually, and develop and implement a *Pacific Environment - Agenda 2010* to eliminate, to the extent possible, sources of environmental degradation in the Pacific ocean, including transboundary pollution, habitat degradation, and overexploitation of living resources.
2. Establish **U.S. Marine Fisheries Commission** - authorize and appropriate funds for the establishment of an independent, professional oversight body, similar to the Marine Mammal Commission, to oversee implementation of all federal fisheries legislation and administrative actions.
3. Establish **U.S. Seabird Commission** - authorize and appropriate funds for the establishment of an independent, professional oversight body, similar to the marine Mammal Commission, to oversee implementation of any and all federal legislation and administrative activity relating to the seabird management and conservation.
4. Establish **Regional Citizens Advisory Councils (RCACs)** in sensitive and vulnerable U.S. coastal areas - using the Prince William Sound RCAC in Alaska as a model for citizens oversight, other sensitive and vulnerable coastal areas in the U.S. EEZ should have similar capability of citizens oversight. The Oil Pollution Act of 1991 (OPA 90) authorizes the establishment of additional RCACs throughout the U.S., but to date none have been established. These citizens' organizations could receive funding from the existing Oil Spill Liability Trust Fund, and should be empowered to provide oversight of government and industry activities in coastal regions that may affect the health and sustainability of their local coastal and marine environment. They should be established in such areas as Puget Sound, San Francisco Bay, LA / Long Beach, the Gulf of Mexico, Chesapeake Bay, and so forth.

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5. Enact **legislation to reduce undersea noise** - undersea noise is deleterious to many acoustically sensitive organisms, particularly cetaceans. Legislation should mandate the incorporation of ship quieting technologies into the new construction of all merchant vessels, including such technologies as are available from the U.S. Navy.
6. Enact legislation to establish new and expanded **Marine Protected Areas (MPAs) and Ocean Wilderness** in U.S. waters - sensitive coastal and marine habitats in U.S. waters should be zoned for varying degrees of use/protection, from those available for commercial exploitation to those that are not. There exists a real need for true sanctuaries in marine ecosystems as in terrestrial systems.
7. Mandate **system redundancy on all new oil tankers** in U.S. waters - amend OPA 90 to provide, in addition to currently required double-hull phase-in provision, a requirement for redundant steering and propulsion systems and bow thrusters, as on the new Millennium Class tankers of Phillips Petroleum. And, advocate such a requirement for a phase-in of full system redundancy in oil tankers at the International Maritime Organization.
8. Enact **legislation to reduce U.S. carbon emissions** - perhaps the single greatest threat to sustainability of marine ecosystems in the U.S. EEZ is the cumulative effect of global warming together with other human-induced stressors. With presently existing technologies, the GNP of the U.S. could be produced with less than half of the energy currently used, with a consequent reduction in greenhouse gas emissions. Thus, legislation to double the energy efficiency of the U.S. economy should be enacted immediately.
9. Establish **Fishing Fleet Capacity Reduction Fund** - amend the Sustainable Fisheries Act to authorize and appropriate *sufficient* monies into a fund with which commercial fishing fleets in the U.S. EEZ can be retired and reduced to levels that are both economically and ecologically sustainable.

**Testimony to U.S. Commission on Ocean Policy
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Part 1

**A New Institution for Governance of the Pacific Ocean Environment –
*The Pacific Environment Council***

OVERVIEW

There are many causes of degradation in the Pacific Ocean environment - inputs of persistent organic pollutants, heavy metals, radioactive substances, oil, marine debris, excessive nutrients and sediment, sewage, introduced species, undersea noise, and such issues as coastal habitat destruction, climate change, and overexploitation of renewable resources. Such sources of degradation can act synergistically and cumulatively. The elimination of all such deleterious inputs should become a collective policy goal for Pacific-Rim nations, and to do so will apparently require a new institutional structure. It is proposed here that a new, multinational “Pacific Environment Council”, comprised of the Environment and Maritime related Ministries of all Pacific-Rim nations, be established to address the complex of issues involved. The Council should set for itself the goal of eliminating by the year 2010, to the extent possible, sources of all pollutants into the Pacific marine ecosystem. The Council could be administratively aligned with the Asia Pacific Economic Cooperation (APEC), as a body of equal stature and authority. It is essential that environment and economy be afforded equivalent priority by the Pacific-Rim community, and this institutional structure is a necessary step toward achieving such parity. The Council’s proposed structure, function, and financing are described, as is its integration with the UNEP Regional Seas Programs in the Pacific, and with the 21 participant countries/economies in the Asia Pacific Economic Cooperation (APEC).

INTRODUCTION

The Pacific Ocean covers over 1/3 of the entire Earth surface (180 million sq. km) and comprises about 1/2 of the global ocean. It is rich in biological and mineral resources, and provides a globally significant economic resource. Although the Pacific Ocean is the most expansive wilderness area on Earth, the many economic pressures - both onshore and offshore -throughout

the past century have introduced multiple ecological stressors, and the ecosystem has been degraded, seriously in many regions.

Particularly in coastal regions, population and development pressures have combined to degrade marine habitats. Almost half of the world's 6 billion people live within 100 miles of the seacoast, and most of the world's large cities are located on coasts. Five of the largest coastal urban areas of the world are located on the Pacific: Tokyo-Yokohama - 32 million, Los Angeles - 15 million, Shanghai -13 million, Beijing - 11 million, and Seoul - 11 million. Five of the ten largest ports in the world are on the Pacific - Singapore, Chiba, Hong Kong, Nagoya, Yokohama. And about 60% of the world's fish catch comes from the Pacific, and much of the oil and gas production.

The overarching causes of environmental degradation in the Pacific can be conceptually organized into three inter-related categories: undesirable inputs (pollution), habitat degradation, and unsustainable harvests (overexploitation). Direct causes of environmental degradation include inputs of persistent organic pollutants, heavy metals, radioactive substances, oil, nutrients, sedimentation, sewage, marine debris, introduced species, and undersea noise; and such things as coastal habitat destruction, climate change, and overexploitation of living resources.

The U.N. Group of Experts on Scientific Aspects of Marine Pollution (GESAMP, 1990) estimates that of the total amount of pollution entering the oceans, about 44% is from land-based sources (mainly through river runoff), 33% is atmospheric deposition (which also originates largely from land-based sources), 12% from marine transportation, 10% from deliberate ocean dumping, and 1% from offshore oil and gas activities. Thus, it is estimated that 77% of all the pollutants entering the oceans come from land-based sources. Point sources for much of the pollutants entering into the Pacific include shoreside industrial facilities, power plants, military activities, municipal wastewater discharge, coastal development, fisheries, and aquaculture facilities. Non-point sources include runoff from urban areas, agriculture and forestry operations, mining, landfills, and atmospheric deposition from transportation, power plants, incinerators, and industrial facilities on shore. And regarding marine resource harvests, recent estimates suggest that 70% of the world's fisheries are either overexploited, depleted, fully exploited or recovering.

Despite considerable attention to these issues in the past and some success, the overall condition of the Pacific ecosystems continues to degrade at alarming rates. It is the central thesis of this paper that as we begin the new millennium, we need to join together collectively to develop and implement an aggressive program of action to reduce and ultimately eliminate the degradation of the Pacific. This effort must be transnational, transpolitical, and transideological, as we all live on the shores of the same ocean. Action is necessary at the local, national, regional, and global level, but this discussion will focus on the Pacific regional level.

It is proposed here that an intergovernmental Pacific Environment Council (PEC) be established by governments of all Pacific Rim nations to develop and implement a Pacific Environment - Agenda 2010 over the first decade of the new millennium. The structure and function of this new institution is discussed below, and is intended to integrate and cooperate with other multi-national institutions, including UNEP Regional Seas Programs and Asia Pacific Economic Cooperation (APEC). The goal of the 10-year agenda should be *to eliminate, to the maximum*

extent possible, environmental degradation in the Pacific Ocean ecosystem. Reducing or eliminating pollutant inputs, habitat degradation, and overexploitation of living resources are the principal areas that should receive priority attention in Pacific Environment - Agenda 2010. Implicit in the Agenda is the aggressive move toward sustainable use of all Pacific marine and coastal ecosystems.

THE PACIFIC ENVIRONMENT COUNCIL

It is proposed here that a new mechanism of environmental governance be established for the Pacific Ocean bio-region - the Pacific Environment Council. As envisioned, the Council would consist of the Environment, Maritime, and Marine Resource related Ministries of all Pacific-Rim nations - north, south, east and west, and should meet annually. Advisory bodies to the Council would be three subsidiary bodies:

Industry Advisory Group - comprised of representatives of all significant industries using or affecting the Pacific - commercial fishing, oil and gas, shipping, coastal agriculture, aquaculture, onshore industrial interests, etc.

Public Advisory Group - non-governmental organizations focused on conservation and sustainable development of Pacific ecosystems and the general public, and

Scientific Advisory Committee - a standing group of experts to review and advise decisions before the Council, comprised of marine scientists, economists, political scientists, sociologists.

The principal charge of the Pacific Environment Council should be to develop and implement the Pacific Environment - Agenda 2010 as outlined below. It should incorporate and strengthen the activities of the other institutions with regard to marine environmental protection.

The Council should have a central Secretariat, staff, and sufficient financial commitment from Pacific Rim governments to carry out its charge. It should publish an annual report on the "State of the Pacific Environment" to be used by policy-makers and as an educational resource around the Pacific Rim. The report, modeled after Worldwatch Institute's "State of the World" and "Vital Signs", should include an update on environmental stressors in the Pacific basin and progress toward meeting the expressed objectives of Agenda 2010, incorporating progress in any of the Regional Seas Programs, APEC working groups, and other multi-national and member state Pacific Rim fora. The report should include a general synoptic assessment of both natural and anthropogenic influences each year in the Pacific (e.g. hazardous spills, harmful algal blooms, major storms), the status and changes in marine or land-based policies affecting the basin, peace and security issues affecting the environment, relevant economic and social issues, and the status of all relevant international treaties and conventions, including any enforcement actions and/or disputes.

The Council should also review the World Trade Organization's, APEC's, and all member governments' actions in relation to the growing imbalance between trade and sustainable development regimes in the Pacific; it should establish an extensive capability in information and technology transfer, and provide these services basin-wide as necessary; and it should recommend funding instruments that would increase the equitable distribution of costs of marine resource conservation, including the increase of capital flow for environmental assistance and

compliance from developed to developing Pacific nations, taxes, fines, revolving loan funds, multilateral development assistance, and so forth.

The overall goal for the Council would be to place environmental considerations on equal par to economic considerations in Pacific Rim policy development and implementation. The general objectives for the Pacific Environment Council should be as follows:

1. Conduct a comprehensive, cumulative environmental assessment of the Pacific that will identify and quantify all environmental stressors - inputs and withdrawals. This assessment should quantify the source, effects, affected areas and resources, and costs of each ecosystem stressor. This will necessarily include an identification of all significant human activity - industrial, military, agricultural - in the Pacific region.
2. Establish priorities for addressing identified ecosystem stressors, including relative importance of stressors in the context of coastal and marine environmental integrity, public health, food security, and cultural and aesthetic values. The assessment should identify critical habitats in need of protection, including coral reefs, wetlands, estuaries, mangrove systems, and offshore systems; all endangered and threatened species; and coastal watersheds.
3. Set goals, management objectives and strategies to solve priority problems, including specific targets and timetables to be met by industrial, agricultural, military, urban, government and other sectors. These objectives should include the incorporation of best available technology standards for clean production practices, population control, alternative product development, product substitution, reduction of material consumption, energy efficiency, water-use efficiency, recycling, waste recovery, etc. Strategies should include legal and enforcement options, financial mechanisms (including market incentives), precautionary management, technology transfer, capacity building, expansion of marine protected areas, and mechanisms for public participation. Strategies should also include a broad-based educational effort to help re-orient material, consumer belief paradigms to more sustainable ones.
4. Establish a monitoring program by which progress toward overall goal of eliminating environmental degradation can be measured. This should include regular assessments of progress in meeting management objectives, including environmental effectiveness, economic costs and benefits, new technologies and projects, and recommendations for improving effectiveness. Such monitoring should also provide the basis for the annual report "State of the Pacific Environment."

INTEGRATION WITH EXISTING INSTITUTIONS

The Pacific Environment Council should actively engage and coordinate with other International Governmental Organizations, including the FAO, UNEP, IMO, IWC, ASEAN, UNEP's Regional Seas Programs, APEC, the Pacific Economic Cooperation Council (PECC), Coordinating Body on the Seas of East Asia (COBSEA), the South Pacific Regional Environment Programme (SPREP), International Coral Reef Initiative (ICRI) etc. It should provide an umbrella organization for coordination of all environmental considerations across the Pacific Rim.

UNEP Regional Seas Programs

Four of the United Nations Environment Program's (UNEP) Regional Seas Programs are in the Pacific basin: East Asia, Northwest Pacific, South Pacific Islands, and the Southeast Pacific. The Regional Seas Program was initiated in 1974 as a regional approach to the management of marine and coastal resources and the control of pollution. There are 140 coastal states and territories involved, in thirteen regions globally. Each regional seas program has developed an Action Plan that generally includes the following components:

- environmental assessment: baseline studies, and research and monitoring of the quality of the marine environment
- environmental management: control of waste discharges, contingency planning for pollution emergencies, and ecosystem management
- environmental legislation: seeks legal commitments in the form of conventions, protocols, and other regional instruments institutional arrangements: administrative activities, program assessment, etc.
- financial arrangements: where UNEP provides seed financing, until national governments can meet financial obligations. The Northwest Pacific Regional Action Plan (NOWPAP) for China, Japan, Korea, and the Russian Federation was developed relatively recently (1994). The plan proposes four Regional Action Centers (RACs) to coordinate regional activities on focal areas of the plan, which include information management, monitoring and assessment, pollution preparedness and response, and biodiversity and protected areas.

One priority task for the Pacific Environment Council should be to review the status of development and implementation of the Action Plans for the four Regional Seas programs in the Pacific, and recommend improvements. It is of concern for instance, that NOWPAP is just now soliciting proposals to begin projects, and there is little in the way of additional funding outside normal national budgets. The UNEP Regional Seas Program, now in existence for over 25 years, seems to be a worthwhile endeavor that deserves our collective support. However, coastal ecosystems within its purview have continued to degrade significantly, giving rise to the concern that elements of the program may not be working as effectively or quickly as necessary. This issue deserves our honest and immediate reappraisal and assessment. Also, the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, or "GPA", was officially launched in 1995 by UNEP. The Pacific Environment Council should review and assess the status of implementation of the UNEP GPA in the entire Pacific ecosystem.

Asia Pacific Economic Cooperation - APEC

Asia Pacific Economic Cooperation, or APEC, was established in 1989 "to promote greater economic and trade cooperation in the Pacific Rim." It consists of 21 nations and/or economies as follows: Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong China, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Republic of the Philippines, Russia, Singapore, Chinese Taipei, Thailand, United States of America, and Viet Nam. Official APEC observing organizations are the Association of

South East Asian Nations (ASEAN), the Pacific Economic Cooperation Council (PECC), and the Pacific Islands Forum (PIF).

As described on the APEC web page, APEC has two standing committees – the Committee for Trade and Investment (CTI) and the Economic Committee (EC). It also has 10 established sectoral Working Groups – human resources development, industrial science & technology, regional energy cooperation, telecommunications, tourism, trade & investment data review, trade promotion, transportation, fisheries, and marine resource conservation. A “Summit of Leaders” meet annually, as do the APEC foreign and economic ministers. Senior Officials Meetings (SOMs) where much of the work is conducted, are held four times a year. APEC also established in 1995 an “APEC Business Advisory Council” (ABAC), which as a permanent body provides advice on trade liberalization and future work “to improve the regional business environment.” APEC constitutes a potentially effective regional structure within which to coordinate and organize environmental cooperation across the Pacific. However, it is important to underscore here that the primary objective for APEC is expanding economic development by securing free-trade and investment among its industrialized member economies by 2010 and by 2020 for its developing economies. Heretofore, environmental issues have been a relatively peripheral concern to APEC, to the extent that they have been considered at all.

APEC Environment Ministers have met twice before as a group – first in Vancouver, Canada in 1994, and then in Toronto, Canada in 1997. The first APEC Environment Ministers meeting produced a ‘Vision Statement and Framework of Principles’ on the integration of environmental and economic considerations in APEC affairs, and discussed sharing environmental technologies, policy tools, environmental education and information. There was some discussion at this first meeting on the notion of establishing an “Asia Pacific Round Table on the Environment and the Economy”, but as a result of the members’ agreement to not establish new APEC institutions, this concept was not adopted. Instead, the Ministers agreed “to follow-up and develop the concept of a regional roundtable”, but to the author’s knowledge, little, if any, progress has been made on this concept since the 1994 meeting. The 1996 APEC Ministerial Meeting in the Philippines identified three themes “to take action on: sustainable cities, cleaner production, and sustainability of the marine environment.” Further, the Ministers “underscored that their economies are united by their oceans and seas, and that the health of the marine environment is critical to their economic well-being.” And the APEC Leaders committed at the 1996 Subic Bay meeting “to achieve dramatic progress towards clean oceans and seas in the APEC region.”

In response to the Leaders’ charge, the APEC Marine Resource Conservation Working Group (MRC WG) developed in May, 1997 its “Action Plan for Sustainability of the Marine Environment” in the APEC region. The plan is laudable in its intent, but general in content. It identifies three broad objectives: integrated approaches to coastal management; prevention, reduction and control of marine pollution; and sustainable management of marine resources. And it identifies three central tools: research, exchange of information, technology and expertise; capacity building, training and education; and public and private sector participation and partnership.

The 1997 APEC Environment Ministers meeting in Toronto endorsed the MRC WG’s action plan. And regarding the marine environment, the 1997 APEC Environment Ministers concluded the following: “The health of the marine environment is crucial to the economic and social well-being of the people in the region. We commit to take action to protect this collective resource,

as we pursue our commitment to make dramatic progress toward clean oceans and seas in the APEC region.”

The APEC Leaders’ Declaration agreed to on November 16, 2000 in Brunei Darussalam launched an “Action Plan” to stimulate economic development, investment, trade, and commercial activity throughout the Pacific Rim, without mentioning environment as a consideration. APEC’s economic focus is clarified by the following statement found in the 2000 Leaders’ Declaration: “We continue to place the highest priority on facilitating the flow of goods and services and to reducing the cost of international transactions for the benefit of business and the consuming public.” It seems significant that the most recent APEC Leaders meeting conspicuously ignored the environment to the extent that it did. There are at present no APEC Environment Ministerial meetings scheduled, though there may be an Ocean-related Ministerial meeting in Korea next year.

In light of APEC’s government-to-government, Pacific Rim-wide forum, together with its previous acknowledgment of the importance of marine environmental integrity in the Pacific marine ecosystem, it would seem that APEC may be an appropriate structure within which to establish the Pacific Environment Council. However, considering APEC’s overriding commercial and economic focus, it is proposed here that a parallel institutional arrangement for the new Pacific Environment Council would be most appropriate structure. *The environment should be accorded equal stature to economy in Pacific Rim policy deliberations – not a subsidiary one.* It is possible that a Pacific Environment Council could be initiated as a full standing committee of APEC, but this would clearly be a less acceptable alternative to establishment as a parallel body. Either way, there should be more integration of environmental concerns into economic policies of all APEC economies. Establishment of the Pacific Environment Council would be a significant improvement in environmental governance in the Pacific.

Financing for the PEC should be substantial and stable. Initially, it could be funded by annual appropriations from the principal industrial nations of the Pacific Rim – USA, Japan, Canada. Additional financial instruments should be considered as well, including a region-wide assessment on all harvests of natural resources – which would also improve the collection of economic rent from natural resources. The present US administration should include in its next budget request to the Congress a seed appropriation request for the PEC of approximately \$20 million.

Recommended action of PEC by degradation source category

Persistent Organic Pollutants - objective: eliminate production, use, and discharge into the Pacific environment. Steps: develop preferable alternative products and practices, establish timetables and targets, inventory all uses and sources of inputs into environment; develop “polluter pays” policies; move quickly to ratify and implement the recently signed Stockholm treaty on the elimination of priority organic pollutants.

Heavy Metals - objective: reduce and/or eliminate anthropogenic discharge into Pacific environment. Steps: identify and inventory all sources for input of priority heavy metals, establish specific targets and timetables' apply technological solutions where possible including lead-free gasoline, stack filtration systems, improved solid waste and landfill management.

Radioactive substances - objective: eliminate production, use, and discharge into Pacific environment. Steps: identify sources; enforce existing international treaties regarding testing; implement best available technology removal, transportation, safe storage and/or disposal of nuclear materials and radioactive wastes; integrate IAEA standards. This should include ultimately the full and complete disarmament and elimination of all nuclear weapons.

Oil - objective: reduce and/or eliminate anthropogenic discharge into the Pacific environment. Steps: develop aggressive strategy for global energy efficiency, advance the phase-out of single-hull oil tankers by 2015 (consistent with U.S. OPA 90 standards), implement mid-deck design and/or hydrostatic balanced loading on single-hull tankers in interim, establish Pacific-wide monitoring and tracking of all shipping of hazardous cargo, implement clean production standards for power generation.

Nutrients - objective: reduce nutrient inputs to Pacific marine and coastal areas where nutrients may cause impacts. Steps: identify sources, types, and areas where nutrient inputs are causing or could cause deleterious impacts; develop regulations and incentives to reduce nutrient input from sewage outfall, agriculture, aquaculture, industrial operations, and atmospheric deposition.

Sedimentation objective: reduce excessive sediment inputs into coastal ecosystems of the Pacific. Steps: identify and quantify all local sediment input sources including forestry, agriculture, mining, construction, dredging, etc.; develop and implement land-use and watershed management plans to reduce sediment mobilization.

Sewage - objective: eliminate discharge of untreated sewage into the Pacific environment. Steps: develop stringent international guidelines on sewage discharge; develop timetable and targets; by 2005 all countries shall ensure that at least 50% of sewage and wastewaters are disposed of in conformity with international environmental and health guidelines; by 2025, 100% must conform; develop and encourage reuse of sewage sludge.

Marine Debris - objective: significantly reduce inputs into the Pacific environment. Steps: establish shore-side collection and disposal facilities for shipboard materials, including nets and other plastics; improve urban solid waste collection, disposal, and recycling services; reduce post-consumer waste; improve landfill management and control technologies.

Introduced Species - objective: eliminate the transport and discharge of non-indigenous species in the Pacific. Steps: develop and implement ballast-water alien species control technologies including mid-ocean ballast exchange, heat treatment, filtration systems and other sterilization methods, and/or prohibit the discharge of untreated ballast water into coastal environments.

Coastal Habitat Destruction objective: minimize further habitat degradation and restore degraded habitats in the Pacific. Steps: identify critical coastal habitats that have been or are being degraded, identify sources, reduce or eliminate sources of degradation, establish additional marine protected areas.

Undersea Noise - objective: reduce the transmission of damaging undersea noise into the Pacific. Steps: identify, quantify, and prioritize the most damaging sound sources and acoustic hot-spots in the Pacific including merchant shipping, oil exploration, military, and research; negotiate international legally binding instrument to reduce and minimize the input of damaging sound including requirements for the construction of quiet merchant ships (such as is done by the U.S.

Navy), re-routing shipping lanes around critical habitats, seasonal and geographical shipping restrictions, etc.

Climate Change - objective: reduce anthropogenic emissions of radiatively active gases into the atmosphere. Steps: immediately implement the FCCC Kyoto Protocol to reduce greenhouse gas emissions, strengthen Montreal CFC Protocol, launch aggressive global program to improve energy efficiency including technology development, incentives for energy efficiency, mass transportation development.

Overexploitation - objective: eliminate unsustainable exploitation of living resources in Pacific. Steps: assess status of all exploited living resources, identify priorities for international and national action; ban all destructive fishing techniques including dynamite fishing, sodium cyanide fishing, etc.; and develop and implement regulatory and marketbased incentives to encourage sustainable uses, including certification protocols. The newly formed Marine Stewardship Council (MSC, 1997) has developed a set of Principles and Criteria for Sustainable Fishing to be used in a voluntary, third-party, independent certification program. These principles and criteria were developed through an extensive, international consultative process, and recognize that sustainable harvests of living marine resources should maintain and re-establish healthy populations of target species, reduce or eliminate by-catch, maintain the integrity and productivity of marine ecosystems, and comply with all local, national, and international agreements and laws. Fisheries which conform with the standards for conservation and sustainable use of marine resources are eligible for certification by the MSC, allowing consumers to select products with assurance that come from certified sustainable, well-managed sources. Thus, a market-mechanism is provided to encourage conservation and sustainable use of marine resources. And although the principles focus on maintaining marine ecological integrity, they also embrace social and economic stability as components of certification. To qualify for the MSC certification a fishery must be one that:

- can be continued indefinitely at a reasonable level - no resource depletion, retains productivity, margins for error and uncertainty, restores long-term yield of depleted resources
- maintains the diversity, structure and function of the marine ecosystem on which it depends as well as the quality of its habitat, minimizing adverse effects it causes
- is managed and operated in a responsible manner, in conformity with local, national, and international laws and regulations - management must demonstrate long-term consistency with sustainable principles; be sensitive to subsistence and cultural needs and observe customary and traditional rights; incorporate adequate observation and monitoring mechanisms; recognize and provide economic and social stability; be able to adapt in a timely fashion to new information; limit and account for non-target catches and adverse effects on habitat maintains present and future economic and social options, stability, and benefits is conducted in a socially and economically fair, equitable, and responsible manner.

All harvests of living marine resources in the Pacific should be assessed by these criteria, and the results used to further improve management. Many fisheries in the Pacific do not meet these standards. These should be identified and corrected, or they should be closed by international agreement.

Cumulative Impacts - objective: reduce synergistic effects of environmental stressors in the Pacific. Steps: conduct regular, comprehensive monitoring of all stressors acting simultaneously, act to eliminate individual stressors as outlined above.

CONCLUSION - Part 1

It is not only possible to achieve a truly sustainable human-ecological relationship in the Pacific, it is perhaps inevitable. The question is when this will occur, and what state the ecosystem will be in when it does occur. The principal challenge before us is to catalyze sufficient motivation in government, industry, and public institutions throughout the Pacific basin to acknowledge and solve the problems outlined in the above discussion. To the extent that these are human-induced problems, they are strictly human-solvable problems.

While additional scientific assessment and monitoring is essential to this process, we already have sufficient information on which to take urgent action. We know, for instance, that certain organic pollutants are damaging marine ecosystems and that they should be eliminated. We know that marine debris causes serious ecological injury, and should be eliminated. We know that major oil spills can be devastating, and that we should increase efforts to ship oil as safely as possible. We know that many marine populations are being overexploited, and that these unsustainable harvests can lead to profound ecological imbalance and even extinction. We know that population and consumption levels are currently unsustainable and need to be controlled. We know that many governmental institutions at present seem to be incapable of recognizing and solving these multi-jurisdictional issues. Thus, reforming Pacific-basin environmental governance is essential.

The great challenge before us is to act on what we already know. It is necessary for our common sense to catch up to our scientific and technological knowledge. The establishment of the Pacific Environment Council is a necessary next step in protecting and restoring the Pacific environment. There is no better time than at the beginning of the new millennium to initiate this aggressive program of action to eliminate the degradation of the Pacific environment, and move toward a sustainable future.

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Part 2

***Establishment of a U.S. Marine Fisheries Commission and
U.S. Seabird Commission as independent oversight bodies***

To further improve our national commitment to the sustainability of our marine ecosystems, there is a need to establish both an independent U.S. Marine Fisheries Commission and a U.S. Seabird Commission to complement the work of the U.S. Marine Mammal Commission.

As background, Title II of the 1972 Marine Mammal Protection Act established the Marine Mammal Commission to oversee actions of various federal agencies with responsibility for marine mammal management. In the opinion of many marine scientists, the Marine Mammal Commission's work has been critical to marine mammal management and conservation and should provide a model for other important components of federal responsibility for marine resources.

In a June 1989 "Statement of Concerned Scientists on the Reauthorization of the Magnuson Fishery Conservation and Management Act", dozens of notable marine scientists from across the nation issued a plea for the establishment of a similar independent national commission to oversee federal implementation of the MFCMA. In the statement, the scientists observed that "the success of the MMPA is due in large part directly to the activities of the Commission." They further point out the following:

"the MFCMA has the same key features that required an independent board to oversee implementation of the MMPA. First, the responsibilities for carrying out the provisions of both laws are fragmented among several departments and agencies of the Executive Branch. Second, the appropriate use and allocation of the living resources is controversial and subjected to a variety of political pressures."

The implementation of the MFCMA and its reauthorized version - the 1996 Sustainable Fisheries Act - requires coordination between the U.S. Departments of Commerce, Transportation, State, and Defense, as well as OMB. The statement of concerned scientists referenced above cites competition for limited marine resources as a critical underlying problem leading to “extraordinary political pressures being brought to bear” on the various agencies involved. This is the principal reason they cite for the overexploitation of many of our nation’s fisheries.

Part of the solution to this problem would be the establishment of an independent oversight body. And although there is apparently no all-encompassing legislation pertaining to seabird conservation and management, there are several statutes that relate to seabird issues, and these deserve adequate oversight and implementation as well.

The scientist’s statement suggested that the fisheries act oversight board should be directed, as follows, to:

1. conduct ongoing reviews of the status of national fisheries, their data collection and research programs, their enforcement programs, and their management plans;
2. make recommendations to the Secretary of Commerce regarding the conservation, management, enforcement, research, and data collection programs and on fishery management plans;
3. make recommendations to the Secretary of State on appropriate policies for managing the international aspects of our national fisheries as well as for addressing high seas issues of importance (e.g. tuna fisheries, driftnet fisheries, etc.)
4. make recommendations to the Secretary of Transportation on appropriate enforcement policies and practices for the Coast Guard;
5. make recommendations to the Secretary of Interior on research programs and management of marine habitat;
6. make recommendations to the Secretary of Defense on measures to mitigate the effects of marine and estuarine habitats of projects undertaken by the Corps of Engineers;
7. make recommendations to the Director, Office of Management and Budget, on fiscal resources and administrative procedures;
8. submit an annual report to Congress;
9. maintain a separate staff and have an independently authorized and appropriated budget; and
10. make all reports and recommendations a matter of public record.

They further suggested that enabling legislation should provide that recommendations from the board be responded to within 90 days of their receipt and for those recommendations not followed or adopted in full, that the agency must provide a detailed explanation in writing as to why they were not.

I respectfully suggest that the U.S. Commission on Ocean Policy recommend the legislative establishment of independent oversight commissions both for fisheries and for seabirds, which together with the Marine Mammal Commission could perhaps be organized into a marine resource advisory panel to offer counsel on various marine resource issues in the future. I also made this recommendation in an April 24, 2000 letter to Alaska Senator Ted Stevens, previously provided to your Commission staff.

The appropriation to the Marine Mammal Commission, at just \$1.75 million for FY 99, is returned many times over by way of resource developments that are allowed to proceed without constraints of depleted marine mammal populations and other issues of concern. It would be a similar, wise investment of public funds to head off other such problems in our nation's marine resources before they arise. The establishment of the additional two independent bodies as proposed above would be an extremely positive leverage of public funds.